Health Visiting and the Elderly: An experimental study to evaluate the effects of focused health visitor intervention on elderly women living alone at home.

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Degree of Doctor of Philosophy
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1980
Declaration

This thesis is my own work and no part of it has been submitted for a degree at this or any other University.
ACKNOWLEDGEMENTS

A number of people have contributed to this study in various ways and it is not possible to mention them all by name.

Thanks are due to my main academic supervisor Dr Listeth Hockey, Director of the Nursing Research Unit for her sustained constructive criticism and encouragement throughout the study: and also to my other two academic supervisors, Mr Walter Lutz, Director of the Medical Computing and Statistics Unit, and Professor James Williamson, Head of the Department of Geriatric Medicine.

The technical assistance and advice of Sandra Brown and Gillian Raab, staff in the Medical Computing and Statistics Unit, is acknowledged.

A debt of gratitude is owed to Evelyn Allan who worked as research assistant because, without her unfailing support and meticulous data collection, this study would not have been possible.

The General Practitioners who allowed me access to the patients in their practice have not been named for the sake of anonymity but their support and the co-operation of the rest of the primary health care team is acknowledged.

A special vote of thanks is paid to the elderly respondents who gave freely of their time for almost a
year in the interests of research.

This study was funded by the Scottish Home and Health Department in the form of a Research Training Fellowship and a Grant from the Chief Scientist's Organisation.

Finally I would like to thank Muriel Armstrong for typing this thesis.
ABSTRACT

This study attempts to evaluate the effects of focused health visitor intervention, over a period of approximately one calendar year. A convenience sample of 120 elderly women who live alone at home was selected from the age sex register of one group of General Practitioners in Scotland.

The study framework was generated by Suchman's (1957) goal attainment approach to evaluation, the nursing process and King's (1971) theory of nursing. The study employs a two-group experimental design involving a crossover of subjects: 60 subjects were randomly allocated to both Group 1 (the first group to receive treatment) and Group 2 (the initial control group). The crossover in the research design allowed intergroup and intraperson comparisons to be made on the basis of pre and post test data.

The effects of 'treatment' (focused health visitor intervention once a month for four months) were measured in terms of three dependent variables namely: 1. A change in health problem status; 2. Life satisfaction as measured by the Life Satisfaction Index - A (Neugarten et al 1961); 3. Subjects' opinions about the effects of 'treatment'. In addition an attempt was made to relate the process of intervention to the outcome.

The findings indicate that focused health visitor intervention once a month for four months significantly increases the number of health problems which improve in elderly women. However, no significant difference was found in life
satisfaction after intervention. The subjects' comments suggest that the majority of the sample enjoyed the health visitor visits and most stated that they had benefited in some way. The implications of the findings for the practice of health visiting are discussed in detail and recommendations made for further research.
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Introduction to the Research Problem
Introduction
The impetus for this study was provided by the researcher's interest and concern about the health care of elderly people in the community and by her desire to find out more about the effectiveness of health visitor intervention. The association of health visitor effectiveness with the care of elderly people may seem out of place; since health statistics (SHHD 1978) indicate that health visitors make more home visits to families with young children than to the elderly and little work concerning the effectiveness of even this more dominant aspect of her work has been undertaken. However, the decision to study health visitor intervention in terms of the effectiveness of home visits to the elderly was made for reasons explained below.

Background to the research problem
Social change influences the need for evaluation and the increased longevity of the population reflected in the numbers of persons over the age of 85 years and by the proliferation of literature in the fields of gerontology and geriatrics can be said to represent one such change. Population projections (O.P.C.S. 1974) indicate that people aged 65 years and over constitute nearly 15 per cent of the total population in Great Britain. The people aged 75 years and over are increasing both in absolute numbers and as a proportion of the total
The Royal Commission on the National Health Service (D.H.S.S. 1979) highlights the fact that the number of women aged 45-60, the age group who usually provide the main source of support for the elderly in the community will decline from about 1980 onwards; whereas the number of elderly people 75 and over will continue to increase. There is a likelihood that with the decline in the number of lay carers greater demands may be placed on the state to care for the elderly in the community.

The Government is aware of the problems created by the increasing number of elderly people and their concern is reflected in discussion documents which address issues involved in caring for the elderly. The D.H.S.S. and Welsh Office (1978) publication 'A Happier Old Age' is devoted entirely to issues relevant to the well-being of the elderly. Other documents relating to priorities in the health service (D.H.S.S. 1976a, 1977, S.H.H.D. 1976) highlight the problem of providing adequate care to the increasing elderly sector of the population. The S.H.H.D. (1976) states that:

'...the growing number of elderly in the population will mean an inescapable increase in demand on the health service'... (p.18 para 4.10)

The D.H.S.S. (1976)^a put forward the general aim of Government policy as:

1. Williamson (1976) presented these population predictions graphically as they relate to Scotland (Appendix 1).
'to help the elderly maintain independent lives in their own homes for as long as possible'.
(P.38 para 5.3)

The Royal Commission on the National Health Service D.H.S.S. (1979)a endorsed the present aim of Government policy by commenting:

'Everything possible should be done to assist old people to remain independent, healthy and in their own homes. It is important to detect stress and practical problems and to ward off breakdown, for example by regular visiting of those who are identified through G.P. case registers as being at risk.'
(p.62 para 6.33)

It seems likely that with the increasing number of elderly people and an emphasis on primary care greater demands for health care services will be placed on the primary health care team.

The emphasis on primary care resulted in recommendations for extra money to be injected into the community services (D.H.S.S. 1976)a. It was suggested that domiciliary services, notably district nursing and health visiting, but also meals on wheels, home help services and general social work services, should be further developed. On a national basis it was suggested that district nursing and health visiting services should be increased by six per cent in an attempt to alleviate pressure on hospital and residential care (D.H.S.S. 1976).a The Government's willingness to increase the number of district nurses and health visitors, it is assumed, reflects amongst other things the contribution which it
considers they will make in caring for the elderly at home. It can be argued that district nurses make a positive contribution to the health care service in reducing the pressure on hospital beds by caring for the elderly sick at home. However, it is not as easy to identify the contribution which health visitors make. It is noteworthy that the Government considers that health visitors can make a difference to the health of the elderly in terms of assisting them to live independently at home and it is this assumption which is a key issue in the context of the study described here.

Statistics indicate that health visitors have increased their involvement with the elderly over the last decade (S.H.H.D. 1978) in terms of the number of persons visited and the number of visits to this age group. Table 1 indicates that in 1970 nine per cent of persons visited by the health visitor in Scotland were 65 years of age or over and by 1977 this percentage had increased to approximately 17 per cent. Table 2 indicates a similar trend in that the number of visits to persons over 65 years in 1970 were approximately 12 per cent of all health visitor visits and by 1977 this had risen to approximately 20 per cent. The reasons for the increase in health visitor involvement with this age group is not clear; but it is possible that it might reflect both the increase in the number of elderly in the population and the growing numbers of health visitors working from the case register of one or more General Practitioner.
### Table 1. Work of the Health Visitor by Primary Purpose of Visit. Number of persons visited in thousands (S.H.H.D. 1978)

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Clearly, statistics do not provide information about the outcome of health visitor intervention they simply provide information about the number of visits to client groups. At a time of economic recession answers to questions concerning effectiveness are particularly relevant. It can be argued that if health visitors do make a difference to the health of the elderly a further increase of health visitor involvement with this age group would be a justifiable expenditure. If, on the other hand, health visitors do not contribute to the maintenance of health of the elderly then it would leave open to question the Government recommendations to increase the health visiting service to this age group.

Because of the predicted increase in the numbers of elderly people in the population and continued competition for resources it would seem that the time is now right for the nursing profession to attempt research into an examination of its practice in terms of effectiveness. It is contended that evaluation of practice is essential if adequate nursing services are to be provided.

The Research Problem

The aim of this study is to attempt to answer the following questions: -

1. Is it possible to measure the outcome of focused health visitor intervention with elderly women by: -
   (a) identifying subjects' actual and potential health problems and estimating whether they improve, stay the same or deteriorate?
(b) using the Life Satisfaction Index A (LSI-A) (Neugarten, Havighurst and Tobin 1961) as a measure of life satisfaction?
(c) recording subjects' opinions about the effects of focused health visitor intervention?

2. Does focused health visitor intervention, directed at subjects' health problems favourably influence the lives of elderly women living alone?

3. Is it possible to develop a predictive model of health care for elderly women by relating the process of focused health visitor intervention to the outcome?

This study addresses the problem of measuring the effectiveness of focused health visitor intervention. It uses an experimental design and the health visitor intervention is planned to focus on specific health problems. Because the study is founded on the assumption that planned rather than unplanned intervention is more likely to be effective in terms of improving health problems the study does not claim to represent current health visiting practice.
Section 1

The Literature Review
CHAPTER 1

Evaluation
The aims of this chapter are to explore some of the general issues in evaluative research and to highlight the need for evaluation in the health care field. Evaluation as a component of the nursing process is discussed and approaches to the evaluation of nursing care outlined. Issues involved in the evaluation of health visiting practice have been examined in more detail and specific studies which have made a contribution in this area are cited.

Introduction to Evaluation

The term 'evaluation' is widely used and for the most part its meaning is taken for granted. Few attempts have been made to formulate a conceptually rigorous definition of evaluation or to analyse the main principles of its use. This lack of definition has resulted in the term being used interchangeably with other terms such as: "Assessment", "Appraisal" and "Judgment". Taking into account the common usage of the term "evaluation" Suchman (1967) makes a distinction between "evaluation" and "evaluative research". Evaluation when used in a general way is said to refer to the everyday occurrence of making judgments of worth. Although this interpretation implies some form of logical or rational thought it does not presuppose any systematic procedures of presenting objective evidence to support the judgment; "Evaluation" when used in this way refers only to the process of assessment or appraisal of worth. "Evaluative
"Research" on the other hand, implies the utilisation of scientific methods and techniques for the purpose of making an evaluation. Suchman (1967) states that:

"In this sense, 'evaluation' becomes an adjective specifying a type of research. The major emphasis is upon the noun 'research', and evaluative research refers to those procedures for collecting and analysing data which increase the possibility for 'proving' rather than 'asserting' the worth of some social activity." (pp. 7-8)

Inherent in the term "evaluative research" is an emphasis on the measurement of change. Riecken (1952) defines evaluation as:

"The measurement of desirable and undesirable consequences of an action that has been taken in order to forward some goal that we value."

Evaluative research may be described as applied research where the major aim is not the generation of new knowledge but rather the study of the application of existing knowledge. In the broadest terms evaluative research may be defined as any scientifically based activity undertaken to appraise the operation and impact of social action programmes (Bernstein and Freeman 1975).

When conducting evaluative research any research technique common to the social sciences may be used, such as qualitative case studies, cross sectional surveys or controlled experiments. Rossi and Wright (1977) comment that there is a crucial difference between evaluative research and other ways of judging the utility of public policy in that it draws upon the research techniques of the social sciences.
A distinctive feature of evaluative research is that it takes place in what has been called an 'action setting' (Weiss 1972). In this setting the researcher has only limited freedom in deciding how to conduct the research, how to design the study and what variables to consider. Instead, these research features are usually determined by the problem at issue and the limited intervention strategies that can be implemented. The demands of the research setting often pose a unique problem and may preclude the use of the soundest research method. Political and moral considerations may, for example, rule out randomised experiments or may prevent the use of a control group (Rossi and Wright 1977).

The constraints of evaluative research in an action setting does not change the basic methodological duties of the researcher namely those of making valid and reliable inferences about the effects of one set of variables on another. Rossi and Wright (1977) state:

"The logic of enquiry in evaluation research is not different from the logic underlying any other kind of research. Indeed, if anything, the methodological requirements are stricter: since more depends on the correctness of causal inferences, more rigorous designs are called for in applied social research than are customarily used in basic social research. The consequences of false inferences and misleading generalisations are more serious in applied social research. The need for greater certainty and precision also explains why evaluation researchers are so drawn to the classical randomised experiment as a research design: it presents the strongest case for internal validity and, when combined with appropriate sampling strategies, it is strong in external validity."

There is almost total agreement among evaluation researchers
that the randomised controlled experiment is the design of choice when contemplating an evaluative study since it is the most powerful way of determining if there is a relationship between two or more variables. Gouldsblom (1977) explains that for years social scientists have developed experimental techniques which have enabled them to elicit empirical answers to a number of questions. By way of physiology the controlled experiment entered the social sciences in psychology where it has been used for almost 100 years.

The essence of experimental design rests on the random assignment of subjects to two groups - an 'experimental' and 'control' group. Because of the random assignment it can be assumed that the two groups differ only by the operation of chance factors, and these differences behave according to well established laws of probability. The treatment or programme is then given to the experimental group, but not to the control group and both groups are compared over time in terms of the dependent variable(s). The differences which occur between the two groups can therefore be attributed to two possible causes - (1) chance factors, and (2) the effects of the treatment. If the first possibility is ruled out by statistical inference then a treatment effect remains the only feasible explanation of the difference (Campbell & Stanley 1966).

Social scientists encounter, apart from theoretical problems, many practical difficulties which limit the
credibility of the controlled experiment. It may be argued by purists that the true controlled experiment is not possible in the social sciences because the subjects are human and therefore with the exception of monozygote twins lack a double in terms of genes and environment. It is contended here that the difficulties inherent in using human subjects are not insurmountable and a compromise in design may usually be achieved.

**Evaluation in Health Care**

Health care has been described by Karhausen (1978) as:

"the set of actions which aim at the improvement of individual and collective health levels".

Clearly, health care can be seen to be the concern of a number of professional groups including nurses. It is submitted by Hockey (1977) that:

"Nursing makes a unique contribution which against the background of constant and rapid change is becoming more, rather than less, important. The claim for the uniqueness of nursing is made on two counts: the nurse in the hospital setting provides the only direct personal service for patients, that is, nurses are available for twenty-four hours a day, seven days a week to provide whatever care patients require. The nurse in the community has information about the patient as an individual in his home, about his family and his physical, social and economic circumstances. Such information enables her to make an assessment, to initiate and ensure continuity and co-ordination of care."

Three areas of concern for health care research have been highlighted by Brotherston (1982) and these areas are: (1) Need, (2) Availability and (3) Quality. The quality component of health care is said to relate to the
efficiency and effectiveness of the service.

The idea of evaluating health care is not new. Notably, Florence Nightingale is reported by Woodham-Smith (1951) to have been one of the first people to show how data could be used to evaluate the need for health care services. With the help of William Farr, whose mortality statistics illustrated inequalities of health throughout the United Kingdom, particularly in Lambeth and Southwark, Miss Nightingale collected information by means of questionnaire about the living accommodation of patients using the old St. Thomas's hospital in Southwark. Miss Nightingale's findings persuaded the Prince Regent and the Hospital Board of Governors that the new hospital should be sited in Lambeth in order to be of use to more people.

The greater emphasis now placed on the evaluation of health care services stems from the escalating costs brought about by the increased complexity of the service and the decreased purchasing power of money. The increased complexity of the service caused by medical and technical advances has resulted in a proliferation of paramedical staff. Moreover, the increase in paramedical staff has influenced the practice of other professional groups most notably nurses. The increasing trend towards specialisation initiated by medicine and mirrored in nursing has resulted in greater competition for limited resources. The uncertainty generated by demands exceeding supplies, in terms of finance, has meant that
doctors and nurses alike are forced to look for verifiable facts to assist them in establishing a convincing case worthy of continued or additional financial support.

The National Health Service came into being more than thirty years ago; it was anticipated then that there would be an inverse relationship between the health of the nation and health care demands – however this does not appear to have been the case. Instead, "health" had been redefined beyond that which is solely physical. Conditions such as alcoholism and obesity may now be considered as ill health states rather than the result of social preference and as such are thought to be amenable to medical intervention. The better educated and more sophisticated public now view health and the availability of "good" services as their collective right, not an individual privilege. Furthermore, continued technical and medical advances have given the consumers an added dimension to their expectations. The increased longevity of the population has meant and will continue to mean that more money is spent on caring for the elderly or assisting them to care for themselves (D.H.S.S. 1976a, 1977, 1979a, S.H.H.D. 1976). The provision of adequate health care facilities for the elderly will continue to be a challenge for some time. Answers to urgent questions concerning the prediction of outcome in health service policy decisions cannot be left exclusively to the economist. It is incumbent on professionals with a deeper understanding of the benefits to be accrued from "good" health care to
develop skills in the area of evaluative research and to attempt to direct policy decisions from an informed standpoint.

Reid and Holland (1978) state that:

"Until now, the majority of policy decisions in the health care field have simply followed a logical appraisal of the options and people involved in decision-making."

Thus, current decision making which may result in the expenditure of large amounts of public money is commonly based on the past experience of a collection of individuals and not on pertinent, factual data. In order to justify society's continued support and commitment to health care it is necessary to provide "proof" of effectiveness (Suchman 1967).

In conceptualising the various approaches to evaluative research, the goal attainment model stands out as being particularly suitable for use with an experimental design. Schulberg and Baker (1968) acknowledge that there is popular agreement among those concerned with evaluation that the most important and yet most difficult phase of the process is the clarification of objectives. The emphasis on objectives or goals stems from a conceptualisation of evaluation as measurement of the success or failure of an activity insofar as it reaches its predetermined objectives. Suchman (1967) subscribes to the goal attainment approach and describes one of the more important identifying features of evaluative research as:
"the presence of some goal or objective whose measure of attainment constitutes the main focus of the research." (p.37)

Suchman lists six steps which are essential for evaluation to take place, namely:

1. Identification of goals to be evaluated.
2. Analysis of the problem with which the activity must cope.
3. Description and standardisation of the activity.
4. Measurement of the degree of change which takes place.
5. Determination of whether the observed change is due to the activity or some other cause.
6. Some indication of the durability of effects." (p.31)

"The process of evaluating is highly complex and subjective. Inherently it involves a combination of basic assumptions underlying the activity being evaluated and of personal values on the part of those whose activities are being evaluated and those who are doing the evaluating." (Suchman 1967, p.11)

Hence, evaluation always starts with a recognition of values and these values may be either explicit or implicit. The evaluation process as described by Suchman is represented with slight modification in Figure 1.
McFarlane (1970) in a review of literature related to 'The nature of criteria' quotes Suchman (1967) and highlights the subjective nature of evaluation.

The Nursing Process

It would appear that the goal attainment approach towards evaluation is applicable to nursing since goal setting and evaluation are operationalised through the "nursing process". This is not to say that the nursing process constitutes evaluative research. However, it does have the potential to provide a framework for the collection of data which can be used retrospectively by researchers for the purpose of evaluative research.

The nursing process is fundamentally a problem solving approach to patient care. It is made up of a number of components: (1) data collection and problem identification, (2) goal setting and care planning, (3) intervention and (4) evaluation. Other analogous terms may be
found in the literature on the nursing process. Little and Carnevali (1976) use the terms: assessment, diagnosis, prescription, implementation and evaluation. Bower (1977) identifies three stages inherent in the nursing process, namely: (1) assessment, (2) formulating plans for nursing action, and (3) planning for evaluation. Mayers (1978) suggests five steps: (1) gathering data, (2) identifying problems, (3) defining expected outcomes (ongoing evaluation criteria), (4) prescribing best solutions (after considering options, constraints and resources) and (5) evaluating at periodic and end point intervals. The nursing process has been summarised by Yura and Walsh (1978) as:

"An orderly, systematic manner of determining the clients' problems, making plans to solve them, initiating the plan or assigning others to implement it; and evaluating the extent to which the plan was effective in resolving the problem identified."

It is noteworthy that the problem solving process is not unique to nursing but is used by most professional groups. It can be argued that problem solving is subjective and value laden in that nurses collect data and identify problems which they or the recipients of their care consider to be important. Hence the nursing process like evaluative research, begins with a recognition of values.
The evaluation component of the nursing process cannot be said to constitute evaluative research for two reasons:

Firstly, in evaluative research the main thrust of the activity is directed towards measuring how far intervention has achieved or not achieved its goals, whereas in the Nursing Process the measurement of the effectiveness of nursing care is subsidiary to the primary goal of giving care. Owing to the secondary purpose of evaluation in the nursing process, goal statements may not be recorded. However, nurses are involved in making judgments of worth about the care which they give whether they record it or not and many of these value judgments will be made on the basis of systematically collected data and experience, however, the evaluation criteria may vary between patients/clients.

Secondly, in evaluative research data are collected on a pre-determined target population and therefore, findings
may relate to more than one individual, whereas in the evaluative component of the Nursing Process the nurse evaluates the care she gives to each individual and is not in a position to determine her patients/clients in the same way as a researcher determines her subjects.

Evaluation may best be viewed as a continuum.

**Figure 3. The Continuum of Evaluation**

<table>
<thead>
<tr>
<th>Unsubstantiated judgment of worth (evaluation)</th>
<th>Substantiated judgment of worth on pre-selected groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsubstantiated individuals</td>
<td>Substantiated judgment of worth on unselected individuals</td>
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The evaluation component of the nursing process can be placed almost anywhere along this continuum depending upon the way the data are collected (systematic or otherwise) and recorded. Data which have been systematically collected and recorded during the execution of the Nursing Process may be used retrospectively by nurses for research purposes. The retrospective use of the material may be referred to as "evaluative research" because evaluation and not care giving has become the main thrust of the activity and the researcher is able to determine the population to be studied.

**Evaluation of Nursing Care**

Concern for the measurement of the quality of nursing care provided to patients/clients and attempts at evaluating care
are not new. However, the desire to develop measurements of quality is possibly a relatively recent development in nursing. It may be possible to get nurses to agree on the importance of the problem of evaluation but there is less agreement about what will be evaluated and how the evaluation should be done (Hagen 1972).

The North American literature on evaluation dates back to Derryberry (1939) who, in a report relating to a study of nursing accomplishments stated:

"In the past, evaluations of nursing services have been based upon volume and intensity of service .......

Evidence of the more elusive quality of service as expressed by the changing state of the patient has been sought in the present analysis."

Derryberry was a pioneer in the evaluation of nursing care in terms of the changing state of the patient more commonly referred to now as outcome evaluation. It is noteworthy that forty years after Derryberry made a stand for outcome evaluation in nursing we have not moved very far forward. However, today there is possibly a consensus amongst nurses that care should be evaluated using means other than volume and intensity of service. Lindeman (1976a, 1976b,) highlights three major components of the nursing care system which are related to the standard of nursing care a patient/client receives and these are:

"1. The setting in which the care is rendered.
2. The actual care given.
3. The patient outcome."
The decision to measure any component of the system will reflect values, beliefs, and assumptions held about nursing. The first step in evaluation has therefore been described by Lindeman as conceptualisation. Suchman (1967) stresses the importance of values being made explicit in any attempt at evaluation. Donabedian (1969), a pioneer in medical care evaluation, describes three approaches to evaluation, namely:

1. Structure
2. Process
3. Outcome

Donabedian's approach corresponds to that of Lindeman's, although the terminology is different.

Structure evaluation involves the study of factors in the organisational system such as facilities and equipment available, staffing levels, styles of management and characteristics of the caregivers. The assumption underlying this approach to evaluation is that if the facilities, staff and equipment reach specified standards then the nursing care will be "good" and patients/clients will benefit.

Process evaluation involves the appraisal of the care which nurses give patients/clients in terms of whether the care was appropriate and carried out in the correct way, the emphasis is on what the nurse does and also includes decision making. The nursing audit as described by Phaneuf (1966, 1973, 1976) is an example of process evaluation. The assumption underlying the approach is
that if care is provided to patients/clients according to predetermined guidelines, then the patient/client will benefit.

Outcome evaluation on the other hand refers to the end result of care in terms of its effect upon the patient/client, a judgment is made about the achievement of patient oriented objectives with no regard to the reason why the outcome occurred. The assumption underlying this approach to evaluation is that the care a patient receives is of secondary importance to its effect hence the emphasis is placed upon the patient/client and not the nurse.

When thinking about evaluation in terms of structure process and outcome it is possible to apply Suchman's goal attainment approach where, after the recognition of values, goals are identified which act as criteria against which care can later be evaluated. It is incumbent upon the evaluator to decide whether to use structure, process or outcome goals or a combination of two or more. In choosing an approach to evaluation certain assumptions must be made. If it were possible in terms of time and resources it may be advantageous to attempt an evaluation incorporating structure, process and outcome goals and it might be expected that there would be a positive correlation between the three approaches.

Bloch (1975) suggests a fourth approach to the evaluation of nursing care namely process-outcome evaluation; here the study of process is related to the study of outcome.
Bloch states:

"In process evaluation one examines and makes judgments about what is done by the care provider. In outcome evaluation one examines and makes a judgment about the achievement of patient-orientated objectives. The result of the latter, however, can be dangerously sterile, because when process is not also examined one cannot know what caused the favourable or unfavourable outcomes. Only evaluation which encompasses both process and outcome has the potential for great impact on the quality and care."

Bloch's approach to evaluation corresponds in part to Suchman's fifth step in a list of six essentials for evaluation to take place namely: "Determination of whether the observed change is due to the activity or some other cause".

Because nurses view the Patient/Client as the central figure in their work, there is a great temptation to focus on outcome evaluation and some work has been done in this area: (Berg 1974, Hilger 1974, Zimmer 1974). Bloch's process-outcome approach to evaluation has been used by researchers Given, Given and Simoni(1979) who examined relationships between process outcome components of patients with hypertension living at home.

Bloch suggests that process-outcome evaluation studies might be undertaken by collecting both process and outcome data for specific patient/client problems. The data may then be analysed in terms of the care given to those patients/clients who experienced a favourable outcome and the care given to those patients/clients who experienced an unfavourable outcome. It is thought that in this way the
interventions which most frequently produced a favourable outcome might be identified and subsequently used to replace those interventions which most frequently produced an unfavourable outcome. It is contended that such studies should be attempted in order to obtain information on how the care given to patients/clients might be improved.

Evaluating the Practice of Health Visiting

A fundamental question to be asked in evaluative research is how effective is a programme in meeting its goals? (Struening and Guttentag 1975). It is accepted that it is desirable to achieve the goals and that the programme has a realistic chance of attaining the goals. When seeking to evaluate health visiting practice there is a basic problem in that the goals of health visiting are broadly stated and as such cannot easily act as criteria against which the effectiveness of practice can be measured. The health visitors' work is said to have five main aspects:

"1. The prevention of mental, physical and emotional ill-health or the alleviation of its consequences.

2. Early detection of ill-health and surveillance of high risk groups.

3. Recognition and identification of need and mobilisation of appropriate resources where necessary.

4. Health teaching.

5. Provision of care; this will include support during periods of stress and guidance in cases of illness as well as in the care and management of children." (CETHV 1976)
The Council for the Education and Training of Health Visitors became aware that:

"The profession has reached a stage where, in order to develop further, it must spell out its implicit principles which ultimately predict and guide its practice." (CETHV 1977, p.7)

A working party was set up with the terms of reference to "examine the principles and practice of health visiting". A definition of health visiting was agreed:

"The professional practice of health visiting consists of planned activities aimed at the promotion of health and the prevention of ill-health". (CETHV 1977, p.8)

The overall goal of health visiting can therefore be said to be 'The promotion of Health and Prevention of Ill-Health'. However, this is too broad and unrealistic a goal to be considered as a single outcome criterion for health visiting practice.

Because health visiting places an emphasis on prevention it shares the problem inherent with the evaluation of all preventive techniques or programmes; namely, if something does not occur because it has been prevented how can it be measured? In a discussion on measuring the effects of prevention Lave and Lave (1977) state that the old adage "An ounce of prevention is worth a pound of cure" is not an acceptable guide to the allocation of resources in the community because effective preventive techniques are lacking and therefore the adage is misleading since it places into one category 'prevention' a wide variety of programmes and activities.
Some community health programmes such as sewage disposal or screening for phenylketonuria can be said to be highly effective or at least cost effective. Whereas other programmes such as screening for cervical cancer are controversial with respect to the target population and efficacy. Programmes which depend for their success on the compliance of the client may in some circumstances not be effective. Shapiro (1977) comments on the relationship between lifestyle and health status and suggests that there is a possibility that major improvements in health status might occur through alteration in health habits such as smoking, dietary intake and exercise. Health visitors are involved in health education at both a group and an individual level. Hobbs (1973) commented upon the lack of evidence regarding the effectiveness of one to one teaching undertaken by the health visitor. The successful outcome of the health visitor's work depends upon the co-operation or compliance of the client.

In the days of the sanitary missioner through primary prevention it was possible to lower the infectious disease mortality and morbidity rates. Today in the era of the generic family visitor we are in the position of choosing among interventions which have much lower levels of effectiveness. The apparent lack of dramatic opportunities to measure the effects of prevention say Lave and Lave (1977) is one estimate of how far we have come in community health.
The researcher in a paper (Luker 1978) commented that:

"Some health visitors believe that the effects of health visiting are too subtle, intangible or elusive to be realistically assessed. If this were so there would be little reason for health visitors to offer a service, since no one, including the client, would be aware of its effects. Intangible and elusive changes can hardly be worthwhile goals or a reason for continuing professional practice."

"Moreover in the context of the present economic climate it would seem urgent to assess the care given by health visitors in order to demonstrate its effectiveness and to justify the provision of the service."

Health visitors have been content to avoid studying the process of health visitor intervention in terms of its benefit to the client by dismissing it as methodologically impractical. Researchers have focused on describing health visiting in terms of what health visitors say they do (Clark 1973, Gilmore 1970, Gilmore et al 1974, Henderson, 1978, Jefferys 1965, Marris 1971, Poulton 1977).

In a review of literature on Primary Health Care, Hicks (1976) stated:

"No one can have any excuse for not trying to evaluate the work of health visitors, although the term 'support' is difficult to express in quantitative terms 'ensure' is more explicit and it should be possible to test the extent to which the health visitor succeeds when she is expected to ensure this and the other."

The preventive aspects of health visiting are difficult to measure because of the long-term nature of the work and the lack of data other than for specific programmes such as

1. Goal attainment: a possible model for assessing the work of the health visitor (Appendix 6).
as immunisation and developmental screening. However, it is contended that health visitors do deal with clients and families who have tangible problems which are amenable to short-term intervention. In attempting to solve short-term problems health visitors may affect the future health of the client or family in an unknown way since problems which are prevented from developing because of health visitor intervention cannot readily be assessed. Nevertheless it is thought that evaluation of health visitor intervention in terms of its effect upon the client might begin in the area of tangible problems.

Owing to the Government recommendations that health visitors should increase their involvement with the elderly (DHSS 1976a), it was thought that in the absence of concrete evidence of the effects of health visitor intervention with this age group an evaluative study would be timely. There were to methodological advantages in attempting to evaluate the effectiveness of health visitor intervention on an elderly population. Firstly, a knowledge of the sparseness of health visitor visits to this age group meant that it could be safely assumed that a sample of elderly people could be selected who would not have had recent contact with a health visitor. Secondly, if a controlled comparison was to be made it would not be necessary to actively deny the services of a health visitor to one group, instead, they could be allowed access to the usual service which in most cases they would not receive. These advantages would not apply if an attempt was made to
evaluate the effectiveness of health visitor visits to families with children under five years of age. It was thought that the methods employed in this study may have applicability in conceptual, if not in practical, terms to the evaluation of health visitor intervention with other age groups.

Previously no attempt has been made to evaluate the effectiveness of health visitor intervention; in fact little research effort in nursing generally has been directed at evaluation, possibly because of the difficulties involved in proving a cause and effect relationship. Ethical issues are often raised when considering designing a study to demonstrate a cause and effect relationship. The usual scientific approach has been to use an experimental method which may necessitate in the context of health visiting denying a control group access to the service. Health visitors have seemed reluctant to deny their service in the interest of scientific enquiry and this reluctance to evaluate practice in addition to the methodological and ethical problems raises the question: Can health visitor intervention be evaluated?

Attempts have been made in North America to evaluate the effects of 'Public Health Nurse' intervention. It is necessary to point out, however, that the 'public health nurse's' role in that part of the world is a combination of both the district nurse and health visitor function. The question of how effective public health nursing is was
asked by Roberts (1962), she commented that:

"The paucity of concrete evidence regarding the results of nursing services is a serious handicap to planning, evaluating and directing the total public health program as well as in the nursing aspects of that program".

Roberts highlighted the difficulties in caring for clients with long-term illnesses where the effects of the nursing unlike the more acute and infectious diseases are not really reflected in reports of morbidity and mortality.

The study which Roberts undertook focused on 'What' changes occurred in health status or behaviour of clients rather than on 'why' the changes took place and Roberts' study can therefore be categorised as one of outcome evaluation. In order to identify changes in each client's health status while he was under the care of the public health nurse it was thought necessary to know what the client's health problems were and how well he was coping with them at the time the service was initiated and again at the time the service was withdrawn or at the end of the study. The nurse made an initial assessment of the client's problems and listed the expected outcomes which were considered as the nursing prognosis. The evaluation took place at the time the client was discharged or at the end of the study, whichever was sooner. The nursing services provided were divided into four general categories: 1. direct care, 2. instruction and counselling, 3. evaluation and 4. supervision and referral. In this study each client provided his own baseline against which the evaluation was made. The findings from this study
indicated that nurse evaluations provided evidence of positive and negative changes in client health status. This work has made a significant contribution in terms of the development of a method for studying the effects of public health nursing.

Other nurses have been interested in developing a means for community nurses to assess the effects of their care upon the client. Mayers (1972) comments that community nurses have rationalised their resistance to evaluation by explaining that the desired outcomes for each client are 'individual' and 'special' and therefore dependent upon a wide variety of factors that it is difficult and even unwise to attempt to make generalisations. Mayers attempted to identify the criteria which nurses used to evaluate their work. She observed public health nurses at work and interviewed them informally. After each visit she asked the nurse whether she believed the client was doing well or poorly and why. The nurses most frequently seemed to use criteria related to the client's physical and mental condition, his ability to act independently, and to communicate effectively. This study has contributed to the method of studying the effectiveness of public health nurse intervention in terms of attempting to identify criteria which may be used against which to evaluate the outcome of intervention.

The problems of evaluating social case work are similar to the problems involved in evaluating health visiting and there is also a belief that the effects of social casework
are too subtle and intangible to be measured (Fischer 1977).

Social workers have been somewhat more adventurous than health visitors in using the experimental method. Goldberg et al (1970) attempted the first controlled field experiment in Britain in the complex and diffuse area known as social casework. The target population of her study were elderly and the study involved a comparison of the outcome of one group of clients who received the services of a trained social worker with another group who received the services of an untrained social worker. Goldberg et al addressed some of the key problems in evaluation which are shared by health visitors and other nurses, namely: 1. what constitutes success, 2. how might success be measured, 3. what is an improvement or deterioration and for whom the client or their family, 4. over what time scale should the effects of intervention be assessed, 5. whose judgment should be final the clients or the professionals.

Experimental studies involving public health nurses have been undertaken in North America. Sackett et al (1974) reported the findings from a randomised trial of nurse practitioners, where the attention was directed to the outcomes of clinical effectiveness and safety. These outcomes were expressed in terms of physical, emotional and social functioning of the client and were assessed by the use of interview schedules which could be applied objectively by 'non-clinicians' to the two groups of clients under study - clients in one group received conventional
care and clients in the other group received their care from nurse practitioners. The findings indicated that nurse practitioners were both safe and effective in their practice.

Further experimental studies have been conducted where the elderly are the target population. Blenker et al (1964) sought to assess the outcome of public health nurse intervention using a three group experimental design. Two groups were exposed to the experimental programme in deliberately varied length and intensity and the third group retained access to the usual services which were used as a standard against which to evaluate the experimental programmes. Effectiveness was measured in terms of incidence of health problems and level of adjustment. A noteworthy finding from this study was that the more intensive service was not demonstrably superior to the short-term service and on most indices used the short-term service was superior in terms of effectiveness. Schultz et al (1977) attempted to evaluate the effectiveness in terms of outcome of primary health care provided in two different ways to an elderly population. Group one received the services of a physician and group two received the services of a nurse practitioner and a physician who worked together as a team. The care the clients received was continuous including health maintaining activities during times when symptomatic illness was not present and treatment activities during illness episodes. A goal attainment scale was used which
was an ideographic measure that quantitatively assessed individual attainment of specified treatment goals. Five likely outcomes or goals were set by a committee for each client problem - the goals ranged from the most unfavourable outcome thought likely through to the most favourable outcome thought likely. Clients were allocated to their respective treatment groups after the goals had been set. The findings indicated that there was no statistical difference in outcome between the two groups based on a comparison of mean difference in goal attainment score. Flett (1975) used a two group experimental design to answer the question - Does public health nurse intervention improve the health of elderly people in subsidised high rise dwellings?. Health was defined in terms of level of moral, level of self care activities and the ability to carry out domestic duties. The experimental group had access to a public health nursing programme whereas the control group did not; the outcomes were compared in terms of levels of health state and the utilisation of health services and findings have not yet been reported.

It is apparent from the North American literature that it is feasible to attempt a controlled experiment using health visitor intervention as the independent variable. It seems that the ethical problems can be overcome by control group subjects retaining access to the usual services or by being exposed to a different type of service. The Goldberg et al (1970) experiment in social case work demonstrated that it is possible to plan and sustain over
the period of one year an experimental study with elderly British subjects.

There are obvious difficulties in attempting to evaluate the effects of health visitor intervention and these have been discussed. The main difficulty, however, of proving a cause and effect relationship can be overcome by using a randomised controlled experimental design. It is possible to narrow down the broad goals of health visiting to focus only on tangible problems with measurable outcomes. In attempting to evaluate health visiting practice in this way it is acknowledged that some aspects of the health visitor's work may not be represented. Nevertheless it is contended that an evaluation of this type is better than no evaluation at all and it may lay the foundations for further and more detailed work on the effectiveness of health visitor intervention.
CHAPTER 2

Screening of the Well Elderly in General Practice
CHAPTER 2

The aim of this chapter is to demonstrate that screening programmes have the potential to identify unmet socio-medical needs amongst the elderly who live at home. Traditionally screening programmes have been conducted within the framework of the medical model; in that disease conditions have been identified and subsequently treated with little or no reference to the effect the disease has upon the patient/client's daily life. The case is made here for the abandonment of the medical model in favour of an activities of daily living approach to screening the well elderly in general practice.

The growing numbers of elderly people are commonly viewed by society as a problem (Wilson 1973) and the health of the aged is one of the major concerns of the health service since large financial resources have to be devoted to their care. Moral issues are involved in devoting immense resources to the care of this age group especially when quality of life is open to question. The document "Prevention and Health Everybody's Business" (DHSS 1976b) adopts the moral approach but comes out in favour of early detection of disability amongst the elderly because it is thought to be cost effective. Few studies were conducted to ascertain the health, conditions and problems of the elderly until the late 1940's. Sheldon's (1948) pioneering work put the sociological study of old age on a firm basis and the study conducted by Townsend and Wedderburn (1965) gave the first national figures concerning
the welfare and living conditions of the aged. Findings of unmet socio-medical needs have subsequently been confirmed by other observers (Age Concern 1977, Barber and Wallis 1976, Barker 1974, Gardener 1975, Hiscock et al 1973, Milne et al 1972). In general terms, these studies indicate that elderly people fail to report changes in health status most often related to hearing, vision, mobility, incontinence and dementia to the general practitioner. It would seem that the present system of patient initiated consultation with the general practitioner coupled with the appointment system (Age Concern 1972) is not always in the best interests of the elderly as there is a tendency for them to view change in health status as 'just old age' (Brocklehurst 1975).

Physicians caring for the elderly have found that older people are commonly referred to them late on in their illness and have felt that more could have been done if they had sought help sooner (Anderson 1976). The alternative to patient initiated consultation is doctor initiated consultation which is commonly referred to as screening or case finding, the aim being to identify treatable conditions or diseases. A number of investigators have conducted screening surveys on elderly people living at home; these surveys have uncovered a high incidence of untreated disease and unsuspected disability. In their early work, Williamson et al (1964) showed in a random sample of 200 elderly men and women, taken from a list of three general practitioners, that the number of
disabilities in males was 3.26 of which 1.8 were unknown to the general practitioner and in females the figures were 3.42 and 2.03 respectively. From this study, it became apparent that the elderly may now know when they are unwell, hence an iceberg of unreported illness may be present in the community amongst this age group. Williamson et al suggested that since the self-reporting of illness fails to meet the needs of the elderly, periodic examination may be beneficial.

There have been many reports on screening programmes for the elderly in general practice (Burns 1969, Currie et al 1974, Lowther et al, 1970, Taylor 1971, Thomas 1968). Without exception these studies are founded on the assumption that elderly persons will benefit from treatment of previously unreported disease conditions or from referral to another agency. Very few studies have been traced which attempt to evaluate the effect of the screening programmes in terms of the benefit of the treatments on the patient/client. The assumption upon which most screening programmes are based is that which is inherent in the medical model; namely, if a person has a disease or condition for which there is a known treatment or cure when the treatment is given the patient/client will benefit and it is this assumption which is open to question.

Since there is evidence which suggests that prescribed medication taken by the elderly in itself may present a problem - studies indicate a high incidence of medication error in this age group. Atkinson et al (1977) states emphatically:
"it would appear essential that doctors treating elderly patients should face up to the fact that in practice their patients are very frequently not taking the drugs prescribed to them in the doses prescribed".

Anderson (1974) reported that 7.15 per cent of hospital admissions in the elderly were due to drug reactions, overdosage, underdosage or mixing of drugs.

Few investigations have been designed in such a way that allowed the effects of screening programmes in terms of their benefits to the patient to be evaluated. Barber and Wallis (1978) reported the difference in findings between two assessments on an elderly population. The interval between the first and second assessment varied from six months to one year. At the initial assessment patients socio medical problems were identified by a health visitor using a 'proforma'; each patient had an average of 6.4 problems. The reassessment occurred after treatment had been given and patients were found to have fewer problems; 4.8 problems or 3.8 problems per patient if new problems are ignored. The greatest improvements were found in problems which related to inadequate clothing, heating, dentition, diet, vision and hearing, and the least in such aspects as dependency, home hazards and problems with a caring relative. This study has shown that an improvement can be achieved in areas of need other than organic illness and that the general health and welfare of patients can be improved.

Williams (1974) also attempted to evaluate the effect of screening procedures in terms of benefit upon the elderly
by following up patients who were screened in an earlier study (Williams et al 1972). The aim of the follow-up was to dispel or confirm the criticism often levelled at screening programmes,

"that all this type of exercise achieves is a long list of diseases and a gloomy picture of old age". (Williams, 1974).

It has been said that such diseases may be 'normal' abnormalities in the elderly and that their treatment may be much more disturbing than their quiet unknown or tolerated presence. The aims of the initial study were threefold: 1. to assess by examination the medical and psychological health of the patient, 2. to take blood for tests for evidence of disease and compare results, and 3. to evaluate the role of the general practitioner as co-ordinator of the team caring for 'at risk' groups. Health visitors were used to interview the patients either at home or in the surgery. The health visitor collected the demographic data and took a medical history and a full medical examination was carried out by the doctor. The main finding of this study was that despite the presence of 450 disease conditions in the sample, many of the elderly people were active and enjoying life hence a concept of effective health was developed.

This study, although concerned with identifying socio-medical needs within a disease framework in the over 75s in general practice resulted in a definition of three functional groups into which each subject could be placed.
"Group 1. - Normal mobility; able to do cooking, housework and shopping, cheerful mental state, no incapacitating illness.

Group 2. - Movement restricted, housefast, unable to do shopping, able to do cooking, illness present but with which patient can cope.

Group 3. - Bedfast, unable to do cooking, etc., general restriction of movement, severe mental deterioration, incapacitating illness present."

(Williams et al 1972)

There were 60 per cent of the subjects in Group 1, 36 per cent in Group 2 and 4 per cent in Group 3 and these three functional groups were used in the follow-up survey to evaluate the effectiveness of treatment resulting from the screening programme. In the follow-up survey Williams (1974) sought to answer the question:

"Are the cause and outcome of the conditions found during this survey improved by the action taken or would they be just as well left alone? The answer to this question really determines whether "screening" the over 75s is worthwhile."

It was not possible to initiate an experimental selection with a control group. However, it was thought possible to see all the patients again after a year to assess if the survey treatment had improved their health and also whether action taken had been maintained. The health visitor saw as many of the original 297 patients as possible - in total 225 were seen. The overall picture
of health in the sample was much the same, however, by looking in detail at the patients there was 'considerable' movement between the groups. There were 20 patients who had moved up a health group and 24 patients who had moved down. Details of the patients who changed effective health groups were examined and probable reasons for the changes identified of the 297 patients initially examined, 27 per cent were thought to have improved.

The studies by Williams et al (1972) and Williams (1974) have been described in detail because they are thought to illustrate a change in emphasis. Initially, the traditional medical model was used to identify diseases in the elderly patient and 450 diseases were identified. During the course of the study, it became apparent that disease states were not as important as an elderly person's ability to carry on with his usual pattern of daily life. An illuminating finding was that despite the presence of many diseases, a considerable number of patients were coping adequately with their daily life. This realisation extended the medical model to incorporate a perspective based on performance of activities of daily living. Although screening in the traditional disease oriented sense was carried out in the first study, the concept of effective health in terms of patients/clients' individual ability in coping with activities of daily living grew out of it. It is, however, incongruous with the effective health theme when Williams (1974) states:
"it is then worth finding and treating undiagnosed and unreported disease among old people still living at home".

since this is not qualified by mentioning treating disease in so far as it affects performance in activities of daily living and enjoyment of life in general. It is contended here that screening by health visitors using a framework related to performance of activities of daily living may be a more useful way of screening elderly people; it seems that the traditional medical model may not be appropriate when dealing with this age group.

Many screening studies for the elderly have employed health visitors to collect data (Currie et al 1974, Gilmore 1975, Hodes 1971, Taylor 1971, Thomas 1968, Williams et al 1972, Williams 1974, Williamson et al 1964). Health visitors have also been mentioned in these studies as useful to carry out health surveillance or health screening on behalf of the general practitioner. Williamson et al (1964) in "A Study of Old People at Home: their unreported needs" found, out of a sample of 200, 26 men and 50 women whom it was thought would benefit from health visitor 'surveillance'. Health visitors involved in these studies as data collectors have worked to a disease oriented model and not from an explicit nursing framework. Although these studies suggest referral of patients to health visitors it is not clear how the health visitor is to carry out her duty of 'surveillance'. Much is written about what health visitors should do but little about how they should do it
(Hunt 1972). Williamson et al (1966) suggested that the health visitor could carry out periodic examination, i.e., screening, on behalf of the general practitioner.

"The health visitor could ascertain the degree of mobility of the old person, enquire into the cause of any deterioration. She could examine for oedema, or other evidence of heart failure and could inspect the patient's feet. It is also suggested that the health visitor could give advice about diet, budgeting and avoidance of accidents in the home."

Anderson (1955) suggested extending the role of the health visitor to include promotion and health maintenance with the aged. Anderson thought that the health visitor could play a part in improving the elderly person's morale; and in offering support during family crises. Since health visitors are trained to understand the biological, psychological and social effects of ageing in relation to the individual and his family it can be argued that they have something unique to offer as nurses in the care of well elderly (CETHV 1976).

It would appear that only a small number of health visitors have written on the subject or conducted research in this field: (Heath and Fitton 1975, Hoadley 1975, Kneer 1975, Loveland and Hillman 1971, Luker 1979a, Moore 1973).

Hence the literature pertinent to health visiting and the well elderly tends to focus on the health visitor's dependent function, that of assisting the doctor in screening programmes based on the traditional medical model rather than on the independent aspect of health visiting

1. Health visiting and the elderly, published paper (Appendix 6).
namely 'surveillance'. Therefore, little is known about what takes place after an elderly person is referred from a screening programme to the health visitor.

In summary it appears that there are unmet socio-medical needs amongst the elderly living at home and health visitors are involved in the identification of these needs through screening programmes usually initiated by the general practitioner. It is contended that health visitors may serve the elderly more effectively if they abandoned the traditional medical model and develop screening programmes based on an activities of daily living framework.
CHAPTER 3

A Nursing Frame of Reference
CHAPTER 3

The aim of this chapter is to discuss theory development in nursing and to highlight the need to conduct nursing practice and nursing research within a conceptual framework. It is assumed that the term 'nursing practice' incorporates the practice of health visiting; therefore, the development of principles of health visiting are discussed in relation to theory building and King's (1971) theory of nursing is put forward as the nursing frame of reference for this study.

The basis of nursing practice is planned nursing care.

"Clarity of purpose and an explicit philosophy lend consistency to what the nurse does, and make the difference between a chance kindly act and professional service."

(Wiedenbach 1964)

Little and Carnevali (1976) explain that a nursing philosophy should concern itself with three elements:
1. the nature of the patient/client, 2. the nature of the nurse and 3. the nature of the interaction between them.

An explicit philosophy offers advantages in planning patient/client care by helping the nurse to recognise the frame of reference from which she is viewing and interacting with the patient/client. It also forms a foundation of known dimensions upon which to structure objective and subsequent nursing care. The nurse cares for the patient/client within a definable frame of reference. A nursing assessment resulting in planned care can be derived from different frameworks for example a body
systems framework, a disease or needs framework or an activities of daily living framework.

Theory development is essential to the growth of any profession, a theory is defined by Stevens (1979) as:

"A statement that purports to account for or characterise some phenomenon." (p.1)

A nursing theory, therefore, attempts to describe or explain the phenomenon called nursing. Theory may be classified in many different ways. The classification system put forward by Stevens divides theories into those that describe and those that explain phenomena.

Descriptive theory represents the primary level of work in theory development, it states what is and determines what the subject matter will be. Explanatory theory is the next step, in theory development it attempts to explain how and why the given components of a theory relate to each other. Explanatory theory may be tested to see if it holds true as a prediction of future events, some authors refer to this level of theory development as 'predictive theory' (Dickoff and James 1968).

Stevens highlights the difference between theory development in nursing and theory development in other disciplines such as Sociology and it is claimed that the difference lies in the locus of the subject matter. The sociologist generates theory by studying the real world and identifying major elements and events although this is a valid approach to the development of nursing theory it is seldom used. Instead the locus of the subject matter in
nursing is usually found in a mental construct "ought to be". This difference in approach to subject matter is probably the reason why the question of values creeps into most discussions of nursing since:

"If the source of nursing is the 'ought to be' rather than the 'is' then the values represented in the 'ought' are inseparable from nursing." (Stevens 1979, p.6)

Hence nursing for most theorists is a mentally constructed world rather than the real world of nursing practice.

The complexity involved in stating a clear definition of a concept such as 'theory' is commented upon by Berthold (1967) who explains that for some nurses who are reluctant to classify a specific position as a theory the terms "theoretical formulation" "model" or "empirical generalisation" are available and it is clear that within nursing there is no uniformity in the use of these terms. Hence it is incumbent upon nurses to try to understand each others use of terms such as 'theory' or 'model' so that we do not become confused by semantic difference that we cannot extract the substance of various positions (Berthold 1967).

Conceptual Models have contributed to the development of all fields of scientific enquiry. Doctors traditionally utilise one model which they learn in medical school.

"The disease orientated model and the problem-solving method are not only a part of the medical school curriculum and medical practice, they are also used in research. A great advantage of having one model that is used by all physicians is that communication of new knowledge is facilitated." (Riehl and Roy 1974)
Nurses have not emulated the unified approach employed by doctors regarding the selection of a theoretical framework for their practice, they have maintained that one model is not sufficient to represent all fields of nursing.

Florence Nightingale, in her writings during the nineteenth century, marks the beginnings of the development of theoretical models in nursing practice. Nightingale (1859) described the goal of nursing as:

"To put the patient in the best condition for nature to act upon him."

During this era the procedure and framework for nursing interventions consisted mainly of environmental manipulation. Early nursing books were procedure manuals, these texts gave no clear goal of nursing; gradually books based on the medical model were developed.

Few nurses would disagree that nursing involves contact or interaction with a patient/client. An early attempt to analyse nursing action using an interpersonal theoretical framework was made by Peplau (1952). She defined nursing as:

"A significant therapeutic interpersonal process which functions co-operatively with other human processes that make health possible for individuals in communities."

Orlando (1961) and Henderson (1966) also developed the interpersonal process as a concept of nursing. Henderson's definition of nursing is probably one of the most widely known:
"The unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to a peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge and to do this in such a way as to help him gain independence as rapidly as possible."

During the last decade there has been an increase in the development and study of nursing models and theories; nurses are gradually becoming more aware of the need for conceptual frameworks on which to base their practice. Books explaining specific theoretical frameworks have begun to appear (King 1971, Orem 1971, Riehl and Roy 1974, Rogers 1970). These books have their origins in North America but the concepts are relevant to nursing practice anywhere.

In order to give individualised nursing care it is necessary to make an assessment of the patient/client; this involves the systematic collection of data and it is from this data base that care can be planned and evaluated. The data can be collected from a variety of sources, e.g., the patient/client, family, friends and medical and nursing records. The usual methods of data collection are by observation, interview, search and consultation of records. The difficulty arises in deciding which information to collect and for this reason, it is useful to have an explicit framework within which to work. Ideally one would like to know everything about the patient's/client's past, present and future life situation but this is not realistic. There are a number of theoretical or
conceptual frameworks on which to base nursing practice and some have already been mentioned. As a nurse it is possible to find something appealing in each of the conceptual frames of reference, however when seeking a frame of reference on which to base nursing practice it would seem appropriate for the nurse to choose one which most closely matches her own beliefs and values about what nursing 'is' or 'ought to be'.

The Principles of Health Visiting

The Education Committee of the Council for the Education and Training of Health Visitors (CETHV) set up a working group in 1975 to: "examine the principles and practice of health visiting" and this can be interpreted as a movement towards theory development in health visiting. A principle has been defined by Stevens (1979) as a key or premise which is essential for stating or explaining theory and it is usual for a theory to attempt to differentiate directly or by implication nursing in this case health visiting from other disciplines and activities. Hence the task of formulating new principles began with a definition of health visiting (p. 25). In order that agreement should be reached among members of the working group the definition was of necessity broad and pointed to a general arena of goal directed activites called 'health visiting'. Health visiting practice was viewed from the standpoint of what 'ought to be' rather than what 'is' because it was believed that the 'ideal' would provide a comparison for
ordering reality in an attempt to achieve the best possible outcome (CETHV 1977). The principles were formulated on a belief in man's intrinsic worth and a belief in the value of health. Health was conceptualised as a measurable entity and as a subjective state of well being. The four principles identified were said to be of equal importance in reflecting the process of health visiting and are listed:

1. The search for Health Needs,
2. The stimulation of awareness of health needs.
3. The influence on policies affecting health.
4. The facilitation of health-enhancing activities.” (CETHV 1977, p.9.)

The principles all relate in some way to health, however a definition of health (the goal to which the health visitor works) is never made explicit. Health is discussed as a value and a number of definitions of health are quoted, however there is no indication of which definition, if any, health visitors 'ought to' formulate the goals of their practice around. The absence of a definition of health is highlighted by Connolly (1978) who comments that if 'search' is a principle of health visiting then health visitors must know what they are looking for in relation to health. Further comments are made by Capel (1979) who makes a plea for an exploration of what lies behind health visiting in terms of beliefs and values, she states:

"If we believe in the value of health we must spell out in some detail what we mean by health."
Capel goes on to say that the goal of health visiting (promotion of health) is no longer adequate unless it is put in some context. If health visitors can state their aim in terms of intended achievement then they will be much clearer about what they are trying to do.

In line with most theory development in nursing a case is made which explains the uniqueness of the health visitor:

"Health visitors are unique in the health team because of their contact with the 'well' population and of their ability to visit families on their own initiative in the absence of crisis." (CETHV 1977, p.23)

The principles underlying any theory of nursing are not really open to discussion. The adequacy of a theory in relation to its principles has to do with whether or not its basic premises are accepted or rejected by the reader and there is little likelihood that all readers will agree upon whether or not a set of premises is or is not adequate.

It is perhaps unfair in some respects to attempt to appraise the document "An Investigation into the Principles of Health Visiting" according to the criteria used to evaluate the usefulness of theory in general since the document does not claim any more than its title suggests. However, it provides the basis from which theory might be developed and in its present form it could be said to constitute partial theory development in that it outlines the process of health visiting.

It may be difficult for some nurses to regard the process
of health visiting as anything other than the 'nursing process' and a criticism of this document (CETHV 1977) is that it attempts to identify the differences between health visiting and other aspects of nursing but succeeds instead in highlighting the similarities in terms of process. The discussion on the principle of 'search' lacks clarity because it seems to refer on the one hand to the identification of clients and on the other hand to the identification of clients' health needs. The claim is made that 'One cannot assess and treat until one has found and identified'. The confusion arises in that no explanation is given as to whether finding (search) and identifying are associated with clients or their needs.

It is contended with the possible exception of the first principle that the principles (page 53) do not relate to health visiting alone but relate to nursing in general. There is no doubt that the clients with whom the health visitor works differ from those of some other nurses in terms of health however defined but the processes they employ in their work are shared by most nurses. One of the differences between a health visitor's assessment and that of a hospital or district nurse lies in the theoretical framework upon which she structures her work and this in turn determines the problems she identifies and hence the goals of her practice. In the context of health visiting both depend on a definition of health which the document "An Investigation into the Principles of Health Visiting" regrettably does not provide. Hence for
the purposes of research these principles alone do not provide an adequate background from which data might be collected and interpreted.

A Relevant Frame of Reference

It is contended that King's (1971) theory of nursing provides a useful frame of reference for this study in that it provides a basis on which to structure a nursing assessment and a framework within which findings might be interpreted. The framework centres on man and identifies three systems within which man operates: 1. 'Personal systems' relate to individuals in which a basic concept is 'perception'. 2. 'Interpersonal systems' relate to groups in which a fundamental concept is 'interpersonal relations'. 3. 'Social systems' describe society where individuals form groups to continue activities essential to maintain life and health. The internal and external environment of man and his ability to adapt to environmental change are essential features in King's theory. The assumption is made that nurses in the course of their work are capable of influencing and controlling (to an extent) the environment. The nursing situation is said to be:

"the immediate environment, spatial and temporal reality, in which nurse and client establish a relationship to cope with health states and adapt to changes in activities of daily living if the situation demands adjustment."

(King 1971, p.24)

This conceptualisation of the nursing situation relates to health visiting since there is an emphasis on 'relationship'
and 'health' and an acknowledgement that variables are situationally defined.

The relevance of King's theory centres on the definition of health since that is inherent in the goal of nursing. Health is defined as:

"a dynamic state in the life cycle of an organism which implies continuous adaptation to stresses in the internal and external environment through optimum use of one's resources to achieve a maximum potential for daily living. Health relates to the way an individual deals with stresses of growth and development while functioning within the cultural pattern in which he was born and attempts to conform."

(p.24)

Corresponding to this definition of health the goal of nursing may be described as assisting the patient/client to adapt to achieve maximum potential for daily living.

The nursing process is described by King as a series of acts which signify 'action', 'reaction' and 'interaction'. 'Transaction' occurs when a reciprocal relationship is established by nurse and patient/client in which both participate in determining goals to be achieved in specific nursing situations. This description of the nursing process applies to most nursing situations. The reciprocal relationship is perhaps more feasible in the health visiting situation and could be said to be unrealistic in some circumstances where the client is unable because of his physical or mental condition to participate and assist in determining his own goals.

Nursing is defined by King as:
"a process of action, reaction, interaction and transaction, whereby nurses assist individuals of any age and socio-economic group to meet their basic needs in performing activities of daily living and to cope with health and illness at some particular point in the life cycle." (p.25)

It is thought that this definition of nursing applies to health visiting in that it encompasses a developmental perspective which health visitors tend to favour (Luker 1978). The acceptability of this definition of nursing to health visitors rather depends on how broad an interpretation is placed on the phrase 'basic needs in performing activities of daily living' since this can be taken to include the provision of information related to health promotion which might improve functioning in aspects of daily life such as work. This definition of nursing describes nursing as an activity provided for individuals and this is a basic inconsistency in King's framework. Initially King identifies three systems namely: personal, interpersonal and society, however the group and community aspects of nursing are not apparent in the definition of nursing. Stevens (1979) highlights what she terms 'sloganism' in the work of nurse theorists where statements are made which are popular sentiments amongst nurses generally and these statements are then not incorporated into the nursing framework or developed further and King can be said to be guilty of this. Defining nursing as an activity undertaken with individuals can only partially account for the work of the health visitors even if a family is taken to be two or more individuals. However, for the purposes of this study a
definition of nursing relating to individuals is acceptable.

The conceptual frame of reference presented by King constitutes descriptive theory and nursing is conceptualised as it 'ought to be' rather than as it 'is'. This frame of reference has the potential of being used by researchers to identify variables which may exert an influence on the outcome or effectiveness of nursing care and McFarlane (1970) comments that King's model is possibly a useful way of approaching nursing. Figure 4 suggests types of variables which may generate hypotheses to be tested in nursing situations.

The identification of measures or criteria to determine the effectiveness of nursing care has been a problem in nursing. King suggests that nursing care might be evaluated with individuals by assessing health status on the basis of goals to be achieved in the limited time spent with each person. It is suggested that knowledge about health maintenance, adjustment to health problems and performance in activities of daily living might be the focus for the development of criterion measures in nursing.

The framework for this study is provided by the goal attainment approach to evaluation (Suchman 1967) and by the four stages of the nursing process. Because this study seeks to evaluate nursing practice namely health visiting there is a need for a conceptual frame of
Figure 4. Types of variables in nursing situations

Type I Variables  Type II Variables  Type III Variables  Type IV Variables
Potential Predictors  Dependent Factors  Situational Behaviors  Criteria of Effectiveness

Nurse Variables
- Perception
- Goals
- Values
- Needs
- Expectations

Education and Experience Factors
- Knowledge and skills
- Past achievement
- Present performance
- Future goals

Patient Variables
- Perception
- Goals
- Values
- Needs
- Expectations
- Abilities

Nurse Behaviors
- Communication
- Interpersonal relationships
- Application of knowledge
- Promotion of health
- Care given in illness

Situational Variables
- Social Institutions
  - Structure
  - Goals
  - Groups
  - Functions
  - Physical resources
  - Economic resources
  - Climate

Changes in Health Status
- Knowledge about health maintenance
- Adjustment to health problem
- Performance of activities of daily living

Feedback

(King 1971 p.36)
reference which relates to nursing. It is contended that King's (1971) nursing frame of reference will determine to an extent the content of the nursing assessment and the goal of nursing practice. It will also provide the boundaries within which findings might be interpreted.
SECTION II
The Research Design and Methods
CHAPTER 4

Exploratory Study
CHAPTER 4

Introduction
A good deal of the health visitors' work is carried out inside the client's home and as such is invisible to others. Dingwall (1977) observed that there were strong boundaries between the work of individual health visitors which were sanctioned by the concept of privacy and allowed for individual variation in practice; the only public area of a health visitor's work being her records. Because health visitors practice in relative isolation they may be deprived of the opportunity to witness colleagues at work in the home and may therefore run the risk of becoming entrenched in their own practice. In an attempt to learn from the practice of other health visitors and to foster inspiration for the main study the researcher decided to undertake a small exploratory study.  

Aims of the exploratory study
The aims of the exploratory study were:

1. To explore the possibility of using non-participant observation to identify the goal content of health visiting.

2. To attempt to determine the criteria by which health visitors evaluate their work.

3. To observe how the elderly fit into the case load of the health visitor and how she perceives her work.

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1. Observations from this exploratory study were published in the nursing press (Appendix 5) under the title of 'Goal Attainment: A possible model for assessing the work of the health visitor'.
with this age group.

4. To make the researcher more familiar with health visiting in Scotland.

A study area was sought which would meet the following four criteria:

1. A willingness to be involved in research.
2. Travelling distance from the researcher's base.
3. An urban area with General Practitioner attachment schemes.
4. Health visitors were to be involved in visiting the elderly.

Access to the area was gained through the Divisional Nursing Officer (Community). It was explained that the researcher was interested in finding out more about health visiting in Scotland and would like the opportunity to talk with health visitors to find out their views concerning such matters as health visiting the elderly. It was emphasised that the health visitors would not be expected to complete forms and that their part in the research would be to take the researcher on home visits and to explain the nature of their work as they might to a student. A meeting was arranged with the health visitors in the area to explain the study and to ask for volunteers. The health visitors were interested in assisting in the study and asked the researcher to plan her visits not to coincide with the fieldwork of student health visitors and student nurses on community secondment. The researcher's visits were planned over a two week
period from 16th January 1978 until 27th January 1978. In total seven days observation were made and the health visitors who volunteered to take the researcher out were asked to include at least two elderly persons in their visiting schedules and no other requests were made.

A number of factors can be said to influence the practice of health visiting such as the age structure of the population, the attachment of health visitors to General Practice, local policy and the personal preferences of individual health visitors (Luker 1979a). The study area differed in one respect from other areas known to the researcher in that it was involved in using a computer based child screening programme. Health visitors were required to complete computer cards for each child at the following six intervals: (1) ten days, (2) six months, (3) one year, (4) two years, (5) three years, (6) four years. It was expected that each computer card would be returned to the central office by the end of the calendar month in which the child was, e.g., six months or one year. If the card was not returned by the appointed time reminder letters were sent to the health visitors concerned. If a child failed to attain three developmental mile stones then an 'at risk' card was sent to alert the health visitor to the delay. This system determined to a certain extent the minimum interval between visits to families with children under five years of age.

Footnote. 1. Published paper Health visiting and the elderly (Appendix 6).
It has been a subject of some discussion, that the work of the health visitor cannot be realistically observed. It is claimed that the presence of a third person would distort or inhibit health visitor/client interaction and hence the content of the home visit. Clark (1973) in her study of health visitors in Berkshire stated that non-participant observation was not used in her study because of the element of distortion. However, in this small study, clients and health visitors appeared to be unperturbed by the presence of an observer and this may be accounted for in several ways:

1. Health visitors and clients are now used to the presence of students on home visits, since the community is being used as a training area for student nurses.
2. Health visitors may have chosen to visit clients whom they felt would be uninhibited by the presence of a third person.
3. Health visitors may have avoided topics which were known to cause embarrassment to clients.

During the seven days' observation a wide variety of home visits were observed; topics discussed varied immensely. Some topics which one might expect to be inhibiting to discuss in the presence of a stranger, for example, sexual or drink problems, were sometimes introduced into the conversation by the client and other times by the health visitor and family planning was frequently discussed.
A noteworthy observation was the way in which the researcher was introduced or not introduced to the client. The common patterns of introductions were:

'I have a colleague out with me today.'
'There are two of us today.'
'This is Miss _____, another health visitor.'

On some occasions the researcher was not introduced at all and the visit seemed to be conducted as though she was not present. In a few situations where the researcher had not been introduced the client took the lead and asked the health visitor if she was leaving. In these cases it was thought that the researcher was being introduced to the area to take over when the health visitor left.

Once inside the house the researcher when asked to sit down selected a seat which, if possible, did not afford direct eye contact with the client. On some occasions the health visitor or client tried to include the researcher in their conversation. If the health visitor or client sought professional advice or an opinion from the researcher she tried where possible to say what the health visitor had already said but using different words. If the health visitor went out of the room for any reason the researcher tried to make conversation with the client on everyday topics such as the weather. This was done in order to avoid an awkward silence which may have inhibited the client. When children approached the researcher and asked questions or wanted to play she spoke to them and
played with them in a spontaneous way.

Table 3. Breakdown of visits observed

<table>
<thead>
<tr>
<th>Day</th>
<th>Infants and children under 5</th>
<th>Persons 6-59</th>
<th>Elderly 60+</th>
<th>Other</th>
<th>No access</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>6</td>
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<td>3</td>
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<td>2</td>
<td>1</td>
<td>1</td>
<td>5</td>
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<td>4</td>
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</tr>
<tr>
<td>6</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>1</td>
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<tr>
<td>7</td>
<td>9</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Total</td>
<td>34</td>
<td>14</td>
<td>21</td>
<td>8</td>
<td>23</td>
</tr>
</tbody>
</table>

Column 5 'other' refers to visits health visitors made to doctors' surgeries, nursery schools, childminders, etc. 'No access' visits refer to visits where the health visitor failed to gain entry to the house, or if the person she called to see was not at home.

Content of home visits

Before each home visit, either in the clinic or car, the health visitors were asked the purpose of the visit and this was recorded.

'Can you tell me why we are going to see this child/family today.'

No notes were taken in the home, any important points were recorded in the car between visits.

The visits to families with children under six months were highly structured. They usually centred around feeding/
diet, weight, immunisation and development. Once in the home the health visitor directed the conversation around the topics she had come to discuss. The mother was always given opportunity to talk about the child and her related problems or current worries. It was apparent that health visitors gave advice from a knowledge base. In the case of feeding, the government recommendations (DHSS 1974) on infant feeding were often quoted and the pros and cons of pertussis vaccination were discussed from an informed viewpoint. The health visitors usually enquired about the sleeping pattern of the babies; the sleep pattern seemed to serve as an outcome criterion of successful feeding and if a baby slept well then it was thought that he was satisfied and happy.

Mothers who were clinic attenders were spoken of in favourable terms. Clinic attendance it seemed was viewed as positive feedback from a home visit, for example, if a mother was asked to bring a baby to clinic and did, this was interpreted as accepting the health visitor's advice.

For children six months and over the main focus of the health visit was development. When asked the purpose of the home visit the common reply was:

'To complete the computer card.'

or 'Routine.'

Toddlers were visited in between developmental screening if there was a known health problem, for example, eczema. Health visitors seemed to look for feedback that their
previous advice had been taken, with the toddlers and pre-
school children the focus was often on suitable play
materials. Health visitors often suggested ways in
which parents might stimulate their children. However,
the home visit did not seem as focused as it was with
children under six months.

The persons visited in the 6 to 59 age group were usually
referred from the hospital or general practitioner.
Unfortunately it was not possible to observe a first
visit. Follow up visits were carried out to find out
how clients had 'got on at the hospital' or in the case of
young diabetics 'How the families were managing with the
diet and urine analysis' and these visits did not appear
to be very structured. The health visitor played the
visit by ear and worked more to the client's agenda
rather than having one of her own.

Twenty-one visits to the elderly were observed and two
of these were first visits. One visit was made at the
request of a General Practitioner to an elderly man with
carcinoma who had recently been discharged from hospital.
The other first visit was instigated by an elderly
neighbour who was concerned about her friend's health.

The remaining 19 visits to elderly persons were described
as 'Follow-up visits'. The purpose of the visit was
usually explained as 'to see how he/she is getting on' or
'to see how he/she is'. Once in the house the health
visitor usually allowed the old person to dominate the
interview, by giving an opening such as 'How are you these days?', 'How are you keeping' or 'How do you feel'. The main content of the visits to the elderly with a few exceptions appeared to the observer to be social chit chat; a subsidiary trend in these visits was for the health visitor to focus on social benefits or services. The health visitors gave the impression they thought that they had to give the old person something, i.e., meals on wheels, bath aids, home help, etc. Very little health advice was given - in several cases the client mentioned health matters, but these were not always picked up by the health visitor, for example:

An elderly man with a colostomy mentioned that he was no longer able to go out because his legs were weak. This was accepted by the health visitor who did not ask the man to demonstrate his walking ability. This elderly man also said that he was having difficulty with his colostomy bag. The manufacturers had changed the glue used on the flange and it was now very difficult to peel off the backing paper. He showed the health visitor the bag and said he had written six weeks previously to the manufacturers complaining. She agreed that the bag was difficult to use and suggested that if he had not heard from the manufacturers in two weeks he was to 'phone her!

In another case:

A lady complained of urinary incontinence and
breathlessness when out shopping. The breathlessness was picked up and it became apparent that the lady had been investigated for her chest trouble and no pathology was detected. However, the incontinence was ignored probably because the lady in question was thought to be a hypochondriac by the health visitor.

In two instances while visiting elderly clients they requested the health visitor to visit another old person and one elderly lady approached the health visitor herself.

In the visits to the elderly there seemed to be very little focus on health, the main aim of the visit was to see if 'they were alright'.

Health visitors opinions on visiting the elderly

During the course of the day and over lunch it was possible to discuss in an informal manner each health visitor's views on visiting the elderly. The health visitors were also asked how they saw their role in relation to the elderly.

The health visitors were unanimous in their view that the elderly were an 'at risk' group and should receive some priority. They drew attention to the government recommendations (SHHD 1976) that health visitors should visit elderly persons, but maintained that if this was to materialise then they needed more health visitors or at the very least more registered nurses to visit the elderly.
The health visitors did not seem to regard the elderly as part of their care load in the same way as they did the children and one health visitor kept her records relating to the elderly at the doctor's surgery and not at her clinic base. It was mentioned that during school holidays, the school nurses were employed in visiting the elderly. Some health visitors were in favour of this and others did not like the arrangement, feeling that in the long run it made them more work, because the nurses had a tendency to promise services and then the health visitor would have to visit anyway to assess the situation. The health visitors all felt that without good 'back up services', for example: meals on wheels, chiropody, etc., then visiting the elderly was 'a waste of time'.

The current policy was to visit elderly people after a crisis in health had occurred therefore the referral usually came from the general practitioner. One health visitor commented that she had visited more elderly people prior to the introduction of computerised child records. She said that although she enjoyed visiting the elderly she could not award them the same priority as she did the children, because if she did not keep up to date with her 'computer cards' she would be 'in trouble with management'.

The health visitors were asked to elaborate on how they saw their role in relation to the elderly, given that they had the time to visit. Several of them saw their role as
'Seeing the elderly get what they are entitled to'
or visiting
'to see if they are alright'
and giving them opportunity to talk. The others saw the
role of the health visitor as an identifier of pathology
and thought they could be involved in screening for
diabetes, high blood pressure, anaemia and other
conditions, these categories were not mutually exclusive.
When asked about the feasibility of a geriatric health
visitor, the health visitors were unanimous in thinking
that it would be a very depressing job and it would be
difficult to find a health visitor willing to do it.
They stated that if everyone over 75 years of age was to
be visited, on a regular basis, then a considerable number
of such specialised health visitors would be needed,
because visits to the elderly took longer. The comment
by one health visitor
'You just can't get away'
summed it all up.

Dingwall (1977) in his study of the social organisation of
health visitor's training commented that health visitor
students did not like visiting the elderly because it took
too long. Dingwall hypothesised that the reason they
could not terminate the visit was because it had no
structure. They were not in control, to use his own
words the health visitors 'did not have an agenda'; and
hence the client took over.
Kratz (1974) in her study of care of the long-term sick in the community with particular reference to stroke patients, observed that district nurses gave different types of care to patients with the same underlying chronic condition and she identified four categories of care: (Figure 5).

**Figure 5.** The continuum of care - Kratz (1974)

<table>
<thead>
<tr>
<th>Seriously ill</th>
<th>Waiting to go into hospital</th>
<th>Really getting better</th>
<th>Not getting better</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care known and valued</td>
<td>Care known within limits and valued within limits</td>
<td>Care thought to be known and valued accordingly</td>
<td>Care not known and not valued</td>
</tr>
<tr>
<td>Focused Care — Semi-focused Care</td>
<td>Semi-diffuse Care</td>
<td>Diffuse Care</td>
<td>Aimless</td>
</tr>
</tbody>
</table>
| Aim known | Limited aim known | Aim invented | }

The district nurses Kratz observed appeared to work to a medical model, the patients who were seriously ill received the most focused care whereas the patients who were not getting better received the most diffuse care. Kratz thought that the reason district nurses gave focused care to patients who were seriously ill was because they knew what care to give and valued the care which they were giving. The patients who were not getting better received diffuse care and Kratz thought the reason for this was that the district nurses did not know what care to give and therefore could not value it. The theory arising out of Kratz's work is that district nurses will meet the observed needs of patients so long as they know why they do so and how to do it.
The continuum of care model is with modification applicable to the health visiting (Figure 6). From observation it was apparent that health visitors did not work to a medical model but instead to a developmental model which was related to chronological age. Infants aged six months and under seemed to receive the most structured visits and to use Kratz's term the most 'focused'; whereas the elderly seemed to receive the most unstructured or diffuse visits and the other age groups fall somewhere in between. The developmental needs of the elderly have not been well defined or documented therefore if health visitors are working to a developmental model the care required by the elderly may not be known to them and hence cannot be valued by them. When working with the elderly health visitors may be denied the opportunity of working from their usual frame reference and more often than not may be required to draw upon their past nursing experience which may or may not be appropriate when dealing with the well elderly.

Figure 6. The continuum of intervention

<table>
<thead>
<tr>
<th>Infants up to Six months</th>
<th>Seven months to Five years</th>
<th>Six years to 59 years</th>
<th>60+ Elderly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aim of intervention</td>
<td>Aim of intervention</td>
<td>Aim of intervention</td>
<td></td>
</tr>
<tr>
<td>known and highly valued</td>
<td>known and valued within</td>
<td>thought to be</td>
<td></td>
</tr>
<tr>
<td></td>
<td>limits</td>
<td>known and valued</td>
<td></td>
</tr>
<tr>
<td>Focused intervention</td>
<td>Semi-focused intervention</td>
<td>accordingly</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Semi-diffuse intervention</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diffuse intervention</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
This was a small exploratory study consisting of seven days' observation of health visitors at work. Three of the four aims appear to have been met. Non-participant observation is a feasible method of obtaining first hand information regarding the context of home visits and it is a means of identifying the goal content of health visiting. It was possible to determine the place of the elderly in the health visitors' case load and to identify how health visitors perceived their work with this age group. The study served to broaden the researcher's perspective on health visiting and to familiarise her with health visiting in Scotland.

The second aim 'to attempt to determine criteria by which health visitors evaluate their work' was not met. Health visitors did appear to be sensitive to behavioural cues. However, changes in client behaviour cannot be identified by a once off investigation. It is submitted that changes in client behaviour are perhaps the key to the evaluation process. In the context of the main study the observation that health visitor visits to the elderly were unstructured and aimless was noteworthy in that it directed the researcher away from a descriptive study of current health visiting practice with the elderly. Instead it was decided that the main study should be based on an experimental design using focused health visitor intervention as the independent variable and in a controlled situation it was hoped that the effects of health visitor intervention could be measured.
CHAPTER 5

The Study Aims, Hypotheses and Design
CHAPTER 5

The Study Aims

The study aims are stated in the introduction but for the sake of clarity and completeness they are repeated here. This study attempts to answer the following questions:

1. Is it possible to measure the outcome of focused health visitor intervention with elderly women by:
   (a) identifying subjects' actual and potential health problems and estimating whether they improve, stay the same or deteriorate?
   (b) using the Life Satisfaction Index - A (Neugarten et al 1961) as a measure of life satisfaction?
   (c) recording subjects' opinions about the effects of focused health visitor intervention?

2. Does focused health visitor intervention, directed at subjects' health problems favourably influence the lives of elderly women living alone?

3. Is it possible to develop a predictive model of health care for elderly women by relating the process of focused health visitor intervention to the outcome?

Hypotheses

The null hypothesis ($H_0$) is a statement of no differences and it is usually stated for the sole purpose of being rejected in favour of an alternative hypothesis ($H_1$). The
alternative hypothesis is an operational statement of the investigators research hypothesis. When it is necessary to make a decision about differences $H_0$ is tested against $H_1$ and $H_1$ constitutes the statement that is accepted if $H_0$ is rejected (Siegel 1956) (Appendix 2).

There are two null and two alternative hypotheses relevant to this study:

1. $H_0$ That there is no significant difference in the number of health problems which improve in elderly women aged 70 years and over who live alone at home after focused health visitor intervention once monthly for four months.

2. $H_1$ That there is a significant difference in the number of health problems which improve in elderly women aged 70 years and over who live alone at home after focused health visitor intervention once monthly for four months.

3. $H_0$ That there is no significant difference in the life satisfaction score on the LSI-A in women aged 70 years and over who live alone at home after focused health visitor intervention once monthly for four months.

4. $H_1$ That there is a significant difference in the life satisfaction score on the LSI-A in women aged 70 years and over who live alone at home after focused health visitor intervention once monthly for four months.
Introduction to the Research Design

The study described here is an experiment in an area related to social science namely nursing, which required a number of compromises in design. It is acknowledged that any deviation from the classic experimental design may have implications for internal and external validity. Factors which endanger the validity of experimental designs are discussed by Campbell and Stanley (1966) and a distinction is made between internal and external validity. Internal validity is described as:

"the basic minimum without which any experiment is uninterpretable" (Campbell and Stanley 1966 p.5)

Internal validity questions the issues involved in deciding whether or not the independent variable had an effect in a particular setting. External validity on the other hand addresses the question of generalisability:

"To what populations, settings, treatment variables and measurement variables can this effect be generalised." (Campbell and Stanley 1966 p.5)

Both types of validity are important although they are often at odds with each other, factors increasing one may decrease the other. It is stressed that wherever possible a research design should be strong in both types of validity. If extraneous variables are not controlled they may affect the internal validity of the experiment by producing effects confounded with the effects of the independent variable.
The main study was planned using a two group experimental design involving a crossover. The design is represented diagrammatically in Figure 7. The number of subjects to be included in the sample was based on available resources. The calculation centred around the number of subjects which could reasonably be visited in one day by one person. This information was provided by the pilot study and it can be seen as the first compromise affecting external validity. Random sampling techniques and random assignment of subjects to control and treatment groups can be seen as the basis of experimental research. Randomisation is said to be a distinguishing feature in the social sciences between experimental and quasi-experimental research. Random sampling and random assignment of subjects affords an assurance that the extraneous variables are distributed indiscriminately between the two groups and this allows the assumption to be made that the groups are comparable. Random sampling was not used in this study but subjects were randomly allocated to the two groups hence maintaining the internal validity of the experiment, but leaving open to question the generalisability of findings beyond that of the study population.

Figure 7/
Figure 7. The Study Design

Sample approx. 200 subjects, randomly allocated

Group 1: 60 subjects
Focused HV intervention by Research Assistant once monthly 4/12
Pre test
1st post test 2/12

Group 2: 60 subjects
Focused HV intervention by Research Assistant once monthly 4/12
Pre test
1st post test 2/12

Phase 1: 60 subjects access to usual nursing services
No focused programme 4/12

Phase 2: 60 subjects access to usual nursing services
No focused programme 4/12

Group 1: 60 subjects
Control Group access to usual nursing
Services 4/12

Group 2: 60 subjects
Control Group access to usual nursing
Services 4/12

2nd post test 2/12

Figure 7.
In an attempt to control extraneous variables a rigid inclusion criteria were incorporated into the research design. Since there were no firm guidelines relevant to the variables which predispose towards positive or negative responses to health visitor intervention, the researcher selected variables which she considered to be relevant. The criteria and the reasons for their selection are indicated below:

**Inclusion Criteria**

On the basis of the following six criteria, subjects were considered eligible for inclusion into the study. All subjects should:

1. Be registered with one group of General Practitioners.
   It was thought that this would limit to a certain extent the geographical spread of the subjects and may also act as a crude control for social class. It was anticipated that if the subjects shared the same General Practitioners then the medical care which each received could be assumed to be controlled.

2. Be female.
   It was thought that if subjects were the same sex it would obviate the variable of gender determined responses and females were selected because women appear in larger numbers in our society after the age of sixty.

3. Be aged seventy years of age and over.
   This age group was selected because it was thought that the practice list would contain enough subjects
of this age range who would fulfil the rest of the inclusion criteria.

4. Be living alone
   It was anticipated that there might be a difference between elderly people who live alone and elderly people who live with family or friends, firstly in terms of the problems they experience and secondly, in their responses to health visitor intervention. Therefore in order to obviate this variable it was thought appropriate to include as subjects only those elderly people who live alone.

5. Show no sign of mental impairment according to the Isaacs Walkey Mental Impairment Measure.
   It was thought that subjects would need fairly good short term memory recall in order to understand the part which they were to play in the study and to act upon the health visitors' advice.

6. Be not in receipt of health visiting services for the twelve months preceding the start of the study or in receipt of district nursing services more than once monthly.
   It was thought that the experiment should avoid as far as possible inconveniencing the existing community nursing services. This arrangement was found to be acceptable to the nurses working in the research area.

Subjects were selected from the age sex register who were thought to fulfil the inclusion criteria. They were then
randomly allocated to either Group 1 (the first group to be exposed to the independent variable) or Group 2. The random allocation of subjects took place before the pre-test and this could be said to be a short-coming since the researcher was aware at all times of the group to which each subject belonged which may have introduced an unknown bias. This compromise in design was made at the cost of internal validity in order to give, as a concession to age, a clear explanation of the part subjects were to play if they agreed to become involved in the study. Informed consent was thought to be a more important consideration. Since, even if steps had been taken to make the study 'blind' it was inevitable that subjects might at the post-tests indicate either knowingly or unknowingly which groups they were in.

As an attempt to maximise the internal validity of the experiment a crossover of subjects was introduced into the design. The crossover meant that each subject was, by the end of the study, exposed to the independent variable (focused health visitor intervention) and this implied that all subjects were in the 'treatment group' it was thought that this might control to an extent the 'Hawthorne effect' (Roethlisberger and Dickson 1939). In addition the crossover afforded an intraperson comparison in Group 2 (Figure 7) and this ensured that the strongest comparison was made when each subject was used as his own control. Similarly an intraperson comparison of a different kind was made with subjects in Group 1 to
ascertain the duration of the effect of the independent variable.

The population to which the findings of this study might be generalised to is confounded by the use of a pre-test interview because the reactive effects of the pre-test on subjects is unknown; hence this may be interpreted as a threat to external validity. Nevertheless it is argued that through using a crossover design the integrity of the experiment in terms of overall validity has been maintained.

**Variables Underpinning the Study**

A brief description is given firstly of the independent variable and secondly of the dependent variables. It is essential in experimental research that the dependent variables are valid and reliable measures of the effects of the independent variable hence rigorous testing of measuring instruments or techniques are crucial.

**Independent Variable**

The independent or treatment variable was exposure to focused health visitor intervention once monthly for four months. Once monthly was chosen as the frequency of the visits because it was thought that this would appear realistic to practising health visitors and it was also feasible in terms of the resources allocated to the study. Four months was the treatment period and was decided upon for no other reason than the constraints of time, twelve months had been allocated to fieldwork.
The focus of the health visitor visits was generated by the subject's actual and potential health problems as defined by the researcher at the time of the pre-test interview.

The focused health visitor intervention was provided by a part-time research assistant who worked thirty hours a week. She had sixteen years experience as a health visitor and an honours degree in psychology. The personality and past experience of the health visitor should be viewed as an integral part of the experimental treatment. While it might be confounded with the experimental treatment it does not invalidate the causal influence of a connection between independent and dependent variables. The random allocation of subjects to groups, whether 'blind' or otherwise, means that personalities and past experience of the subjects are a random source of variation and this is taken into account in any statistical calculation (Wooldridge et al 1978).

**Dependent variables**

The three dependent variables were:

1. Life satisfaction as measured on the Life Satisfaction Index - A (Neugarten et al 1961).
2. A change in the status of actual and potential health problems, as identified by the researcher at the pre-test interview and rated on a three point scale.
3. Subject's opinions about the effects of focused health visitor intervention.
The pilot work for this study centred mainly on the refinement and operationalisation of these dependent variables. It is therefore appropriate that these variables be discussed more fully under that heading.
CHAPTER 6

Pilot Work
CHAPTER 6

Introduction

It is accepted when conducting a research based investigation, wherever possible, to pilot in detail all aspects of the main study. Pilot work in the traditional sense of a miniature main study was not undertaken. Instead, the pilot work centred around refinement and testing of the dependent variables. Throughout this work it was possible to simulate most aspects of the main study. This chapter is divided into three parts and each part deals with one of the three dependent variables.

I. Life Satisfaction

It is the intention here, before discussing the piloting of the Life Satisfaction Index - A (L.S.I.-A), to explain the reasons for choosing to measure life satisfaction and to explore the origins of the L.S.I.-A and its potential for use as an outcome criterion measure of health visitor intervention with the elderly.

A concept which lends itself readily to the study of nursing is Adaptation. Nursing practice is based on an understanding of man from conception to old age both in sickness and in health. Much of what we claim to know about man and his environment can be explained and understood within the framework of adaptation theory. An exploration of the theory of adaptation in relation to the individual and his environment gives consideration to the needs of man and to the resource within or available to man. The individual is viewed as an integral part of his environment and cannot with
ease be examined in isolation. It is possible to define health embodying the concept of adaptation (p.57).

The original meaning of adaptation is adjustment (adaptare - to adjust). Old age may be interpreted with reference to adaptation. Havighurst (1968) describes old age as:

"An adaptation to changes in the structure and function of the human body and changes in the environment."

The layman is naturally unconcerned with the diverse concepts associated with the term adaptation. For him to be well adapted simply means to be able to function effectively, happily and as long as possible in a particular environment.

During later life the facilities for adaptation are greatly reduced. In old age one may be required to adjust to far reaching changes of a physical, social and psychological nature. Based on the assumption that elderly persons have a reduced capacity for adaptation, the role of the health visitor can be interpreted as that of facilitator of adaptation, with adaptation being understood in the layman's sense of the word. Hence, the health visitor may assist elderly persons to function effectively and happily for as long as possible in their own environment.

In order to evaluate the effects of health visitor intervention, it is necessary to have a valid, reliable, appropriate and discriminating outcome measure. The assumption is made that an elderly woman's level of adaptation would best be reflected in her subjective feelings often referred to as life satisfaction, morale, well-being and happiness. Although it may be argued that
criterion measures related to psychological variables are approximate rather than precise, this does not necessarily negate their use as reliable outcome criteria. It is of importance when working with the elderly to give some thought to the quality of life which they experience and to date this has been a much-neglected area of study, probably because measurements are thought to be imprecise.

It was decided, because of the researcher's lack of expertise in the area, not to attempt to develop an instrument to measure life satisfaction, but instead to search the literature for an appropriate measure.

The essential pre-requisites of any measuring instrument are validity, reliability and sensitivity, and it is an advantage for comparative purposes if the instrument has been widely used. In addition to these requirements it was thought that the life satisfaction instrument chosen should be short and easily administered, which would facilitate its use on an elderly population. An instrument was sought which was not based upon either the activity or disengagement theories of ageing (Cumming and Henry 1961, Cumming 1975, Knapp 1976, 1977, Kutner et al 1956, Lawton 1972, 1975, Lemon et al 1972); the independence of the instrument would mean that elderly subjects who enjoyed solitary pursuits would be as likely to score highly as those who enjoyed interactive pursuits.

There have been various attempts to define and measure psychological wellbeing in elderly people, with the purpose
of using such a measurement as an operational definition of successful ageing. A number of scales have been developed with the primary aim of testing the activity and disengagement theories of ageing and Cavan et al (1949) were the first to introduce an attitude scale as a measure of adjustment in old age. Instruments not based on either the activity or disengagement theories have subsequently been developed. The most widely used instrument for the measurement of life satisfaction in the elderly during the last decade has been the L.S.I.-A developed by Neugarten et al (1961).

In order to establish the validity and reliability of the instrument it is necessary to discuss its development. The L.S.I.-A was developed from 'Life Satisfaction Ratings' hereafter referred to as L.S.Rs. The L.S.Rs were the product of an extensive five year study of a relatively healthy middle class urban population in Kansas City aged 50-90 years. The data were collected over five years by means of lengthy and repeated interviews covering many aspects of the respondents' life pattern, attitudes and values. Analyses of the extensive data was difficult and the investigators began by analysing the concept of psychological wellbeing into a number of components to represent its complexity. Working with post-graduate students they began firstly by examining the measures of adjustment and morale that had been used in other studies and secondly by defining distinguishable components. Definitions were tried against case material and independent
judgments of the cases were compared, the concepts were redefined and so on until finally operational definitions of the five components were obtained as:

1. Zest for life
2. Resolution and fortitude
3. Congruence between desired and achieved goals
4. Positive self concept
5. Mood tone

"An individual was regarded as being at the positive end of the continuum of psychological wellbeing to the extent that he (a) takes pleasure from the round of activities that constitute everyday life, (b) regards his life as meaningful and accepts resolutely that which life has been, (c) feels he has succeeded in achieving major goals, (d) holds a positive self image, (e) maintains a happy and optimistic mood tone." (Neugarten et al 1961)

The ratings were not based on the subject's direct self report of satisfaction, although some questions of this type were included in the interview, but in the inferences drawn by the raters from all the information available.

Ratings were made in every case by two judges working independently: in all, fourteen judges rated 177 cases and the correlation co-efficient between the ratings for 177 cases was .78.

The L.S.Rs. depended on scoring by judges who had read all the recorded interview material, but who had not themselves interviewed the subjects. An outside criterion was established by which these ratings could be validated. An experienced clinical psychologist interviewed the subjects and made his own ratings of life satisfaction, for various
reasons this was not done until 18-20 months after the last interview. Nevertheless, over three months, eighty respondents were interviewed.

Using the average of the two judges ratings in the L.S.Rs. the correlation between the L.S.Rs. and the psychologists' ratings for the eighty cases was .64. This was interpreted as providing a satisfactory degree of validation for the L.S.Rs. It is noteworthy in the context of this study that the correlation co-efficient between the L.S.Rs. and the psychologists' rating was higher for the older members of the sample, for the thirty cases age seventy and over \( r = .70 \). For the fifty persons aged 69 and below, the correlation was \( r = .53 \). It may be that the older respondents were more consistent in their interviews.

Using L.S.Rs. as the validating criterion, Neugarten et al (1961) devised a self report instrument which would take only a few minutes to administer and called this L.S.I.-A. From the larger group on whom L.S.R. scores were available, a sample of sixty cases was chosen who fully represented the total sample on variables of age, sex and social class. Of these sixty cases the high scorers and the low scorers were used as criterion groups. A long list of items and open ended questions from the interviews were studied to select those items that differentiated the high and low scorers. In addition certain new items were included which reflected each of the five components of life satisfaction. Hence the L.S.I.-A emerged from the L.S.Rs.
The L.S.I.-A consisted of 25 items and an agree, disagree, uncertain response was required. After administration, the instrument was further refined and five items of the L.S.I.-A were omitted. The final form of L.S.I.-A correlated at .55 with the original L.S.R.

On examination of the L.S.I.-A, several of the statements seem ambiguous.

**ORIGINAL LIFE SATISFACTION - Index A**


*(KEY: Score 1 point for each response marked X)*

<table>
<thead>
<tr>
<th></th>
<th>AGREE</th>
<th>DISAGREE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>As I grow older, things seem better than I thought they would be.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I have gotten more of the breaks in life than most of the people I know.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>This is the dreariest time of my life.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>4.</td>
<td>I am just as happy as when I was younger.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>My life could be happier than it is now.</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>6.</td>
<td>These are the best years of my life.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Most of the things I do are boring or monotonous</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>8.</td>
<td>I expect some interesting and pleasant things to happen to me in the future.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>The things I do today are as interesting to me as they ever were.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I feel old and somewhat tired.</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
11. I feel my age but it does not bother me. | AGREE | DISAGREE | ?
--- | --- | ---
X | - | -

12. As I look back on my life, I am fairly well satisfied. | AGREE | DISAGREE | ?
--- | --- | ---
X | - | -

13. I would not change my past life even if I could. | AGREE | DISAGREE | ?
--- | --- | ---
X | - | -

14. Compared to other people my age, I've made a lot of foolish decisions in my life. | AGREE | DISAGREE | ?
--- | --- | ---
- | X | -

15. Compared to other people my age, I make a good appearance. | AGREE | DISAGREE | ?
--- | --- | ---
X | - | -

16. I have made plans for things I'll be doing a month or a year from now. | AGREE | DISAGREE | ?
--- | --- | ---
X | - | -

17. When I think back over my life I didn't get most of the important things I wanted. | AGREE | DISAGREE | ?
--- | --- | ---
- | X | -

18. Compared to other people I get down in the dumps too often. | AGREE | DISAGREE | ?
--- | --- | ---
- | X | -

19. I've gotten pretty much what I expected out of life. | AGREE | DISAGREE | ?
--- | --- | ---
X | - | -

20. In spite of what people say, the lost of the average man is getting worse not better. | AGREE | DISAGREE | ?
--- | --- | ---
- | X | -

When the L.S.I.-A was administered to a low income black population in Knoxville, Tennessee, many of the subjects interpreted the question 18 literally and indicated that they had no reason to visit the dumps (Lohmann 1977). This is a reminder that the index was developed for use on a middle class white population in the United States of
America. If the instrument is to be used on any other population then it maybe necessary to modify the language and to attempt to re-establish the instrument's reliability and validity.

Adams (1969) used the L.S.I.-A and submitted it to factor analysis. It was found that the L.S.I.-A provided a fair estimate of life satisfaction for a small town elderly population, as it does for the urban and rural samples on which it had been previously tested. The method of scoring was found to be adequate and fault was found with two items.

Question 11: "I feel my age but it doesn't bother me."

Question 14: "Compared to other people my age I have made a lot of foolish mistakes."

Adams (1969) recommended that these two questions be omitted from the index (Page 95.). It was decided for the purpose of this study to use the Adams' amended version of the L.S.I.-A. Some question was raised in Adams' analysis concerning the representativeness of the five components said to provide the basis for the scale. It was recommended that further research would be necessary to re-examine the five components.

A thorough search of the literature did not identify any instances where the L.S.I.-A had been used as a criterion measure. However, Wylie (1970) used the Life Satisfaction Index Z which is a shortened version of the L.S.I.-A, as an impact criterion for examining the effect of a three year demonstration programme upon the lives of
an elderly population. The L.S.I.-A contains questions related to present and past life and it is therefore assumed that current events, such as health visitor intervention, have the potential to change a person's view of present life; however, the relationship between current events and past life cannot be reasonably assumed. Since the L.S.I.-Z demonstrated its ability to register positive and negative changes, it seems reasonable to remain optimistic regarding the ability of the L.S.I.-A (Adams' amended version) to measure change after focused health visitor intervention on an elderly female population.

In order to use the L.S.I.-A in Scotland it was necessary to change the wording of some items in an attempt to keep the intent of each item meaningful. It was thought that if previous studies had changed the wording from American English to English it may have been possible to use the already modified version. After an extensive search of the literature three studies were located which had used the L.S.I.-A (Abrams 1978, Bigot 1974, Coleman 1972); however, these studies did not attempt to modify the wording of the items.

It was thought that since an elderly population was to be used, a postal questionnaire or self-administered questionnaire would not be appropriate. It was decided to administer the L.S.I.-A in a short interview. Because many people of advanced years are troubled with hearing defects, statements were typed in large print on cards
5" x 3", the intention was to present the subject with the card and ask them if they agreed, disagreed or were uncertain about the statement. In the instances where subjects were partially sighted or blind the questions were read out and the appropriate answer recorded. The language of questions 2, 15, 19 and 20 were changed to make the items more meaningful to a Scottish population.

Original item 2: 'I have gotten more breaks in life than most of the people I know' was modified to 'I have had more luck in life than most of the people I know.'

Original item 15: 'Compared to other people my age I make a good appearance' was modified to 'Compared to other people my age I look smart when I am dressed to go out'.

Original item 19: 'I've gotten pretty much what I expected out of life' was modified to 'I've had just about what I expected out of life'.

Original item 20: 'In spite of what people say the lot of the average man is getting worse not better' was modified to 'In spite of what people say the life of the average man is getting worse not better'.

AIMS OF THE PILOT STUDY

1. To try out the new method of administering the L.S.I.-A.
2. To test the appropriateness of the word changes.

1. This pilot study has been published 'Measuring Life Satisfaction in an elderly female population (Appendix 6).
3. To test the reliability of the instrument.

4. To validate the instrument against an external criterion.

5. To give the researcher experience in administering L.S.I.-A.

Population
Elderly women aged 70 years and older living in an old persons' home or sheltered housing in a city in Scotland.

Sample
A convenience sample consisting of 21 subjects 70-92 years of age was recruited from either an old people's home or sheltered housing.

Method
The purpose of the visit was explained to all subjects and it was made clear that it would be necessary to interview each subject a second time after an interval of one month. There were two interviewers and each interviewer saw the same respondent at the second interview. It was thought that this would give the subject some continuity and since it was the respondent's answer and not the interviewer's interpretation which was recorded it was felt unnecessary to check for interviewer reliability.

After the instrument had been administered to the subjects the warden and matron of the home or sheltered housing, respectively, were asked to estimate each subject's life satisfaction. Life satisfaction was defined as happiness or contentment with life in general. A 5" x 3"
card was used with a 9 cm. line divided into 18 points called a life satisfaction ladder.

![Life satisfaction ladder]

The warden and matron were asked to put a mark on the line at the point which they thought the individual subject should come. The original intention was to have each subject rated twice; once at the first interview and once at the second, and to take the mean of the two scores. For various reasons this was not possible and each subject was rated only once at either the first or second interview.

RESULTS OF THE PILOT STUDY

The primary aims of the pilot study were to try out the new method of administering the instrument and to test the revised wording of the items. The card method was used where the items were typed on a card and the subjects were asked whether they agreed, disagreed or were uncertain about the statement. This seemed to be a most satisfactory and efficient way of administering the index. In three cases the method could not be used because the subjects were blind or partially sighted. Here the instrument was administered verbally, the statements were read and then the subject’s response was recorded in the usual manner. The main disadvantage of reading the questions out, in the home, was that others could overhear and this may have proved inhibiting to the subject.
The word alterations were not entirely successful; there still seemed to be ambiguities. For example, Item 2 (original) 'I have gotten more breaks in life...' changed to 'I have had more luck in life...' was not successful since one or two respondents did not agree that there was such a concept as luck. The wording was modified further to read 'I have had more chances in life...' and at subsequent testing this modification was found to be acceptable.

Item 15 after modification proved to be difficult for some subjects to answer: 'Compared to other people my age, I look smart when I'm dressed to go out'. The difficulty arose because some subjects said that they did not go out and others were reluctant to say whether or not they thought they looked smart. The wording was further changed to read: 'I like to take an interest in my appearance', and at subsequent testing this modification was found to be acceptable.

Item 19 was modified to read 'I've had just about what I expected out of life'. This item seemed in some way to presuppose a low expectation and subjects said they had had more than they had expected out of life, therefore the item was changed again to resemble the original to read 'I've got pretty much what I expected out of life.' and at subsequent testing this change was found to be acceptable.

Item 20 was modified to read: 'In spite of what people say the life of the average man is getting worse not better'.
This item differed from the original in that the word 'life' was used instead of 'lot'. However this item was found to be confusing to older women since the concept of the 'common man' was not understood by all and a number of subjects commented that they did not have much to do with men. This item was further modified to read 'In spite of what people say the life of the average person is getting worse not better', and at subsequent testing was found to be acceptable.

The third aim of the study was to test the reliability of the L.S.I.-A over time. The highest possible score using the Adams amended version of the index is 18 and the lowest 0. The Spearman correlation co-efficient of the scores is \( r_s = .87 \) and this is interpreted as a satisfactory level of reliability (Appendix 2).

The fourth aim of the study was to test the validity of the L.S.I.-A against an external validator. The warden's and matron's rating of the subject's level of life satisfaction was used for this purpose. The scores the subjects' obtained on the day they were rated by the warden or matron correlated with the rated score \( r_s = .63 \) and this was interpreted as an acceptable level of validity.

The aims of this pilot study appear to have been met. It was necessary to make further modifications to some items but at subsequent testings these modifications were found to be acceptable. The study was undertaken on a small sample and the data seem to indicate that the modified
L.S.I.-A is a reliable and valid instrument for the measurement of life satisfaction with elderly women. The data do not give any firm indication of the instrument's sensitivity to changes in level of satisfaction over longer time periods than one month. The data suggest that the instrument is discriminating in that it measured a range of scores between 4-17. It has, been decided, for the purpose of the main study to use the L.S.I.-A with the specified modifications as one of three outcome measures of health visitor intervention. It is hoped that the L.S.I.-A may tap the more elusive aspects of health visiting.

II. Measuring Changes in Health Problem Status
An attempt is made to explain what is meant by the term 'health problem' and to discuss the framework within which health problems were identified. An account is given of the testing of the interview schedule and of the introduction of a recording system for the main study.

From King's (1971) definition of health (page 57) it is possible to interpret health as a maximum potential for daily living at a set point on the life cycle. The assumption is made here that elderly women are only concerned about their health when it negatively affects their ability to carry out personal, social and domestic tasks and hence inconveniences their normal pattern of daily life. Mitchell and Atwood (1975) describe a problem of nursing focus as being primarily related to coping with daily living, whereas a problem of medical focus is said to
be related to diagnosis and treatment of disease or pathology. Berni and Readey (1974) use a broad definition of a problem:

"... something that concerns the patient/nurse."

For the purposes of this study a health problem has been interpreted as anything related to daily life which causes concern to the researcher, subject or both about the subject's current or future health.

Health visitors are sometimes reluctant to adopt a problem orientated approach to their work because they think of themselves more in terms of preventing problems occurring. In an attempt to keep the preventive aspect of the health visitor's work in mind, problems have been divided into two categories: (1) actual and (2) potential. The term actual problem has been used to refer to problems identified at the pre-test which were inconveniencing the subject's current pattern of daily life. The term potential problem has been used where indicators are present which suggest that if left untreated an actual problem would almost certainly develop. Mayers (1978) uses the categories: 'actual', 'potential' and 'possible' problems. Because of the anticipated difficulty of differentiating between 'potential' and 'possible' problems it was thought appropriate to omit the category 'possible problem'.

Nurses are involved during the course of their everyday work in identifying and attempting to solve patients' or clients' health problems. This problem solving element in the work of the nurse has been referred to as the 'nursing process',
and is discussed in Chapter 1. When using a nursing process framework for the purpose of research it is necessary to adopt a more formal approach to the process. In an attempt to ensure that the same baseline information was collected from each subject, an assessment instrument in the form of an interview schedule was devised. The interview schedule was designed so that data could be punched directly onto cards and stored in the computer.

The purpose of the interview schedule was to provide a structure for the health assessment and to establish a data base from which subjects' actual and potential health problems could be identified. The researcher was mindful, in designing the interview schedule, of the known common problems concerning the health of the elderly as highlighted in some studies (Barber and Wallis 1975, 1978, Heath and Fitton 1975, Williams et al 1972, Williamson et al 1964). As old age is socially as well as biologically determined (Rosow 1967, Sheldon 1948, Townsend and Wedderburn 1965) any health assessment of the elderly should take account of psychosocial as well as physical factors.

It is assumed that the functional and social activities which elderly people carry out are similar to the activities which they performed in their middle years. However, because of inevitable degenerative and social changes and the increased likelihood of episodes of ill health (Agate 1979), it will almost certainly become more difficult for the elderly to follow their usual pattern of life.
Incorporated into the interview schedule are the L.S.I.-A and the Isaacs Walkey (1964) mental impairment measure. Most of the questions contained in the interview schedule are self-explanatory and where considered necessary an interpretive note is included on a definition sheet (Appendix 3). The instrument in the area of 'mobility' and 'provision of meals' draws upon the work of Aktar et al (1973) who used rating scales to assess the disability and dependence of an elderly population, sixty five years and over living at home.

THE PILOT STUDY
This pilot study centred firstly, on the appropriateness of the interview schedule as an aid to the identification of subjects' health problems. Secondly, upon setting behavioural goals which would act as criteria against which a change of problem status could be measured and thirdly, upon the operationalisation of a problem oriented recording format for use in the main study. Twelve subjects representing a convenience sample were interviewed.

RESULTS OF THE PILOT STUDY
The results are cited insofar as they have implications for the main study:

1. In total 27 visits were made in order to complete 12 interviews.
This discrepancy was due to a high number of no access visits and this was taken into account when planning the data collection phase of the main study.
2. The interview schedule was in the main appropriate for its purpose.

It was necessary to make a few word changes in an attempt to make questions more meaningful. Several questions were omitted because it was considered that the data would not be used. The interview schedule after modification was retested and is included in its final format in Appendix 3.

3. Problems were identified and divided into two categories (1) actual and (2) potential.

Client perception is a key concept in King's (1971) theory of nursing and in line with this approach an attempt was made to confirm the existence of problems with each subject. In practice it was sometimes difficult to confirm the presence of a problem with a subject. Initially it had been the researcher's intention to consider a problem as such, only if it was perceived as a problem by the subject. However, the pilot study highlighted the shortcomings of this approach. On one occasion a subject with a profound hearing loss denied having any difficulty in hearing what the researcher said despite evidence to the contrary. Another subject who was partially sighted was thought to be incontinent, the toilet was at the bottom of the garden and the subject's clothing and household furnishings suggested that she had been incontinent of both urine and faeces. However, the subject denied having any problem related to her bowels or bladder. Both subjects appeared to be unconcerned or
unaware of their problems although the problems could readily be detected by a visitor to either house. It was thought that if the problems described were ignored because they were not acknowledged to be problems by the subject that this would militate against the preventive aspect of the health visitor's work since further problems such as loneliness or social isolation may occur as a result of the socially unacceptable nature of either of the problems described. Hence the need to confirm the existence of a problem with a subject before taking action was reluctantly abandoned.

Some difficulty was experienced in both describing the problem and in some cases in deciding whether or not it should be described as actual or potential. For example, a subject may be at risk from falling because of poor vision, and an uneven floor surface. This has been regarded as a potential problem 'at risk of falling'; it could instead have been classified as an actual problem 'difficulty seeing', or it could be regarded as two problems. It is anticipated that there may always be some degree of ambiguity in this respect. It is likely that a health visitor will identify and label problems which she can treat even if treatment is by referral. It is contended that as long as the person responsible for identifying and labelling the problem is consistent (in this case the researcher) then any weaknesses in the method would be minimised and the assumption is made that any inconsistencies would be randomly distributed between the two groups.
It has been suggested by King (1971) that it is possible to evaluate nursing care by setting patient/client goals. It is considered that the goals are desirable outcomes and they can therefore be used as criteria against which to measure the success of nursing care. An attempt was made in this pilot study to set behavioural goals appropriate to the problems identified. For some problems goal setting seemed relatively straightforward and an example is given:

Problem: 'Subject does not know how to obtain new hearing aid batteries."

Goal: 'Subject will demonstrate that she understands how to obtain new batteries by getting next month's supply herself."

For other problems it was not quite as easy to set behavioural goals and some question arose as to whether the attainment of the goal actually indicated an improvement in the problem or not. An example is given:

Problem: 'Uncomfortable dentures."

Goal: 'The subject will visit the dentist with a view to having her dentures replaced."

If the subject achieved the goal and obtained new dentures then this might be interpreted as a positive outcome when in fact the new teeth may be as uncomfortable or indeed more uncomfortable than the old pair. It seemed that the researcher was attempting to set goals which could be verified by objective evidence, i.e., new dentures, when it might have been more appropriate in this case to have a goal which implied that 'dentures would be more comfortable
or less uncomfortable'.

Schultz et al (1977) set five goals or likely outcomes for each subject's problems, spanning from the most favourable outcome thought likely, through to the most unfavourable outcome thought likely. When this approach was tried in relation to this study it was difficult and in some cases almost impossible to think of five likely alternative outcomes in relation to one problem such as 'Discomfort from urinary incontinence'.

It was thought that the goal attainment approach (where the goal becomes the criterion against which progress is measured) increased the margin of error not least because of the researcher's ineptness at setting goals. In using the behavioural goal attainment approach it is considered that there is an increased likelihood of error since the criterion is at least one removed from the problem and nursing lacks the body of knowledge to predict with any degree of certainty the probability of a favourable outcome occurring in relation to specific nursing interventions.

It was therefore decided for the purpose of the main study to focus on the problem and in particular on what the subject said about the problem and what the researcher and research assistant observed about the problem. In this way each subject's problem would act as its own criterion and problems could then be rated on a three point scale as the same, better, or worse than they were at the pre-test interview.
Any instrument used in research should be both valid and reliable. Validity refers to the instrument's ability to obtain the necessary data relevant to the problem in question and reliability is said to reflect the instrument's accuracy in terms of stability and repeatability in collecting data (Notter 1978). The interview schedule in question has, in the opinion of the researcher, face validity; however, it is acknowledged that face validity is highly subjective and although it is preferable to no validity at all, it is not acceptable where other reasonable methods for establishing validity exist (Treece and Treece 1973). With this in mind, an attempt was made to establish content validity. Content validity is less subjective than face validity and commonly involves a group of people deemed to be experienced in the field under study, judging whether or not the instrument is appropriate to its stated purpose.

It was thought that experienced health visitors could be considered as 'experts' in the field and 37 health visitors, undertaking the fieldwork teacher's course at a college in Scotland, were contacted at the college. Each health visitor was given a copy of the interview schedule and an explanatory letter (Appendix 4) and was asked to complete the interview schedule starting on page four (omitting the L.S.I.-A and Isaacs Walkey 1964 mental impairment Measure) with an elderly woman aged seventy years of age or over who lived alone at home. The health visitors were asked to comment on the appropriateness of the questions in terms of
wording and on the usefulness or otherwise of the instrument to health visiting practice. Six weeks was the deadline for the return of the interview schedule and to encourage frank comments health visitors were assured that they would remain anonymous and no code was used.

At the end of the six weeks only 13 replies had been received out of a possible 37. A reminder letter was sent out (Appendix 4) and a further six replies were received, making a total of 19 - a response rate of 51 per cent. Eight respondents made no comments and this was interpreted as indicating that they thought the content appropriate. Two respondents thought the interview schedule was too long but did not make any suggestions as to possible omissions. Six respondents made positive comments about the usefulness of the instrument in helping to identify problem areas. Three respondents made negative comments and these related to the L.S.I.-A, however these comments were disregarded since opinions were not sought on this.

Because of the low response rate the researcher was reluctant to interpret the health visitors' opinions as indicative of high content validity and a further attempt was made to establish the validity of the instrument. This time the assumption was made that the instrument's validity would be reflected in the number and type of health problems identified by the researcher. An independent criterion was provided in an alternative type of assessment procedure which was carried out in a formal
way by a General Practitioner/Health Visitor team (G.P./H.V.) A convenience sample of 11 subjects who had previously been visited by the G.P./H.V. team, not more than six months previously, was obtained. The purpose of the interview was to complete the interview schedule and to identify the subjects' health problems so that they could then be compared with the health problems identified by the G.P./H.V. team.

In total, 26 problems were identified in the 11 subjects by the researcher and of these 26 problems, 15 had previously been identified by the G.P./H.V. team and no problems known to the G.P./H.V. team were omitted by the researcher. Excluding the problems which may have been subject to variation over time such as those related to sleep, weight maintenance and elimination, three problems were left which it was thought were present at the time of the G.P./H.V. assessment and these problems are described briefly. One subject could not read newspaper size print. It transpired she had been wearing her husband's glasses for 25 years and had never visited an optician or had a pair of prescription glasses of her own. A second subject had worn dentures which were uncomfortable and the third had been prescribed a hearing aid which she was unable to use because she could not put it into her ear and in order to convince the hearing aid clinic that she was wearing the aid she left it switched on in the kitchen drawer and collected her batteries regularly.
Agreement was reached between the researcher and G.P./H.V. team that the afore-mentioned problems had probably been present but not identified at the first assessment. It is thought that the results of this small validity study indicate that the interview schedule as administered by the researcher appears to be a valid means of identifying subjects' health problems in that it obtained the necessary data from which problems were identified.

The reliability of a research instrument is defined by Treece and Treece (1973) as:

"The proportion of accuracy to inaccuracy in measurement." (p.179)

In the case of this instrument the accuracy is also said to be reflected in the number and type of health problems identified. There are usually two sources of inaccuracy in an instrument, one is inherent in the instrument itself where there is a deficiency and the other is related to inconsistency between observers. Since it was only the researcher who used this instrument the matter of inconsistency between observers has not been explored.

There are a number of ways of testing the reliability of any data collecting technique and one such way is the test retest method as used in testing the reliability of the L.S.I.-A (page102). Another widely used method is the equivalent test technique, an approximation of this approach was used. It has been described under the heading of validity (page112) as an alternative type
assessment procedure. While it is acknowledged by the researcher that reliability and validity are different concepts they are related in that:

"If a technique is inaccurate (unreliable) and its measurements are inconsistent, then it is not valid." (Treece and Treece 1973, p.180)

It is the interrelationship between reliability and validity which permitted the inferences drawn from the alternative test procedure to have implications for both validity and reliability in this instance.

It is acknowledged that systematic bias may be made when using any instrument, however, it is thought because the researcher managed to identify all the subjects' health problems which were known to the G.P./H.V. team no known systematic bias was operating and it is therefore concluded that this instrument when used by the researcher has a satisfactory level of reliability.

**Problem Oriented Recording**


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1. Published paper "A framework for the nursing process problem-oriented recording (Appendix 6)."
intervention was to be generated by the subjects' health problems this means of recording seemed an obvious choice. A doctor of medicine named Weed, developed the concept of problem oriented medical records as a means of logically organising information about the patient around the patient's medical problem. Weed (1969) viewed the patient's record as a tool which facilitated the accomplishment of goals for and with the patient. In Weed's problem oriented recording system, the mnemonic S.O.A.P. represented **Subjective** and **Objective** information about the patient's problem, **Assessment** and **Planning**. To make this recording format more applicable to nursing and hence to this study, **Subjective** information was taken to mean what the subject said about the problem. The word **Objective** was replaced with the word **Observations** and these observations were simply what the researcher or research assistant observed or managed to find out about the problem. The word **Assessment** was replaced with the word **Analysis** since it was thought that Assessment might be confused with the first stage of the nursing process where the problems were initially identified. Analysis of the subjective and observational data was written in such a way that it indicated the progress of the problem. The **P** represents **Planning** as it does in Weed's system and here the plan of intervention is written. It was not possible to fully operationalise this recording system in the pilot work since the independent variable was not introduced hence the analysis section was not used other than to reiterate the problem statement. Hypothetical plans were
made but obviously not implemented. Nevertheless it has been concluded that this approach to the systematic recording of information about each subject's health problems is appropriate as a means of communicating the care plan to the research assistant and as a comprehensive way of recording the progress of subjects' problems.

III. Subjects' Opinions about the effects ofFocused Health Visitor Intervention

For the sake of completeness a brief introduction is given to the use of 'Subjects' opinion' as a dependent variable; even though this aspect of the study was not piloted.

In the past, little emphasis in health care has been placed on what is currently termed 'consumer opinion'. It is usually contended that patients/clients in most cases do not have the necessary knowledge to assess the appropriateness of the care which they receive from doctors and nurses. However, evaluation of health care services from the patient/client point of view becomes more pertinent when the implications of perception theory are considered (Risser 1975). In Kings (1971) theory of nursing, perception is a key concept and is described as the link between the stimulus and the environment and a person's response to the environment. Donnabedian (1969) points out that the patient/client and the provider of health care services may differ significantly in their opinion about the efficacy of care.
The studies which attempt to assess patient's/client's opinions about the care which they received have shown that they are reluctant to make negative comments possibly because they fear victimisation (Nehring and Greach 1973). It is suggested by Lebow (1974) that if a study is internally initiated then the patient/client may wish to present his doctor or nurse in a favourable light. Therefore the extent to which patient/client opinion actually reflects the care given is open to question.

British studies involving patient/client opinions about care tend to centre on the hospital world. The Royal Commission on the National Health Service (D.H.S.S. 1979b) research paper on 'Patients Attitudes to the Hospital Service and a study by Raphael (1977) both revealed that most patients were satisfied with their hospital stay and complaints were in relation to: early waking, unpalatable food, washing facilities, noise and lack of information about ward routine and treatment. Klein (1979) commented on the relationship between age and satisfaction in the Royal Commission Report. It was found that younger patients were more likely to complain than the elderly. Klein tenders two plausible explanations for this age related effect. Firstly, it may be that increasing satisfaction is a product of the ageing process and that people become more passive and less critical as they grow older. Secondly the difference could be due to a generational effect in that the people who grew up in the pre-National Health Service era may have lower expectations than the next
generation because they are more aware of the improvements brought about by the National Health Service and less conscious of its shortcomings. In contrast to the evidence that elderly people are less likely to complain Pike (1975) in a survey of discharged elderly patients found that no-one in her survey 'had a good word to say about being in hospital'. This finding indicates that elderly people at home may be more willing to share negative as well as positive views about hospital life.

Few studies were found which had attempted to gather patient/client opinions about primary health care or more specifically nursing care in the community. The Royal Commission on the National Health Service Research Paper: 'Access to Primary Care' (D.H.S.S. 1979C) centred as its title suggests on access to services and not satisfaction with the service, however nursing was not included in the study. Kinacey et al (1975) conducted a survey to find out if patients were satisfied with the communication they received from their General Practitioner and whether or not they followed the advice they were given. The results of the study indicated a 'high degree' of patient satisfaction. A study by Peach and Pathy (1977) attempted to evaluate elderly patients' satisfaction with a day hospital. Questions were asked in relation to whether they enjoyed visiting the day hospital and whether or not they had been helped by the visit, the results indicated that most patients were satisfied.

Two studies were traced which sought clients' views on
health visiting: Disabled Living Foundation (1979) and Orr (1977), however both studies centred on parents with young children and not the elderly.

It is thought that with the advent of the 'professional consumer' in the form of Community Health Councils\(^1\) (Ackroyd 1978) 'consumer opinion' is an essential component in any attempt to evaluate nursing care. It is apparent that many factors may influence patient/client perception of care such as: age, sex, marital status, social class, previous experience of the service and the mood at the time of interview or questioning (Lebow 1974).

There are inherent weaknesses in this form of evaluation, the main shortcoming when using this approach with the elderly is in encouraging them to discuss their negative as well as positive feelings about the care which they received. Nevertheless the researcher thought that it was important to try and discover how the elderly people in her study perceived the 'focused health visitor intervention'. The aim was to encourage comment on how the health visitor visits had affected them. Most studies seeking patient/client opinions about health care tend to use questionnaires but some favour an interview as a more sensitive means of eliciting valid responses (Pascoe et al 1978).

In the context of this study it was thought that questions seeking opinions about the effects of health visitor intervention should be included in the post-test interviews.

Five open-ended questions were used which it was thought would guide discussion (Appendix 3). These questions were not piloted because the subjects used in the pilot studies were not exposed to the independent variable (focused health visitor intervention). However it was thought that if this approach failed to elicit pertinent information then it would be possible to modify the questions or the technique after post-test 1 in time for post-test 2.
CHAPTER 7
The Main Study
CHAPTER 7

The population and sample
The population was all the female patients registered with one group of General Practitioners in Scotland; aged 70 years and over living alone, with no known history of senile dementia, who do not receive visits from a health visitor and who are not visited by a district nurse more than once a month. A convenience sample of 120 subjects with the population characteristics was selected.

Study Area
The study was conducted in a predominantly working class area in a city in Scotland. Contact was made initially by letter to the senior partner of the Group Practice and arrangements were subsequently made to meet and discuss the proposed research with him and the other members of the primary health care team. After agreement had been reached that the study could be conducted, the divisional nursing officer (community) of the Health District in which the Practice was situated was contacted. The proposed study was discussed and it was emphasised that it would not encroach upon the present work of either the district nurses or health visitors attached to the practice. However, it was indicated that they might be required to accept referrals during and after the study. The study was consented to by the district nursing officer and provisions were made for the researcher and research assistant to have direct access to nursing aids and equipment.
Reasons for Selecting the Study Area

There were five reasons for selecting the study area:

1. The General Practitioners were willing to allow the researcher access to the patients on their age sex register and were also prepared to accept referrals from the researcher for the duration of the study.

2. The practice age sex register contained approximately 7,000 patients and of these 740 were female and over seventy years of age. It was therefore anticipated that it would be possible to obtain the sample exclusively from this register.

3. The District Nursing and Health Visiting service and the Social Services Department were willing to accept referrals from the researcher throughout the study if the need arose and were also prepared to take on cases at the end of the study.

4. The majority of patients registered with the practice lived in a fairly well defined geographical area. This had advantages in that it controlled in a crude way for housing and social class and also meant that travelling time between visits would be minimal.

5. The study area was a reasonable travelling distance from the researcher's base.

Method

The names of all the subjects whom it was thought would fulfil the inclusion criteria inherent in the population characteristics were taken from the age sex register. The age sex register did not indicate whether or not subjects
lived alone so the practice register was examined to see if persons with the same surname as the subjects lived at the same address. A list of the remaining subjects and their names and addresses were shown to the doctors and nurses at the Practice and subjects were excluded if they were known not to meet the inclusion criteria. In total approximately 200 subjects were thought to be eligible for inclusion into the Study. Each subject was randomly allocated into either Group 1 (Treatment group) or Group 2 (No Treatment group). Initial visits to subjects were planned in street order to minimise the travelling time between visits.

An introductory letter was sent to each subject before the researcher's first visit (Appendix 4). The letter was signed by the senior partner of the Practice whom most of the elderly patients knew and it served to identify the researcher as a bona fide visitor and it also meant that the study was perceived by most subjects as initiated by the doctor. If subjects were out at the first visit then a card was left indicating the time the next visit would be made. The subjects were visited a maximum of three times and if on the third occasion they were not at home then they were excluded from the study.

When the researcher made her first visit to the subjects she introduced herself and explained the study in a standard way (Appendix 4).

After the study had been explained, an opportunity was given
for subjects to ask questions. Some took the opportunity, others raised their questions later. If it became apparent that subjects did not meet the inclusion criteria, for example, if it was obvious that another person was living in the household, then the study was still explained and a reason was given as to why they were not included. In total fifty-one subjects were not included in the study. The reasons why subjects were not included are indicated in Table 4.

Table 4. Frequency table of reasons why subjects failed to meet the inclusion criteria

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low score on Isaacs Walton mental impairment measure</td>
<td>1</td>
</tr>
<tr>
<td>No longer at this address</td>
<td>3</td>
</tr>
<tr>
<td>District Nurse visits more than once a month</td>
<td>3</td>
</tr>
<tr>
<td>Refused to participate</td>
<td>6</td>
</tr>
<tr>
<td>No access visits on three occasions</td>
<td>6</td>
</tr>
<tr>
<td>Not living alone</td>
<td>32</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>51</strong></td>
</tr>
</tbody>
</table>

During heavy snow in January and February 1979, the target 120 subjects (Figure 7) were recruited into the study, 60 in Group 1 and 60 in Group 2. No further pre-test interviews took place after the last subject had been recruited. A target was set for five interviews to be completed each day and on some days it was necessary to
make as many as 16 visits to achieve the target.

The Pre-test Interview

The researcher selected a seat which would afford a close proximity to the subject, if necessary a chair was moved. It was thought, and borne out in the pilot work, that proximity and touch facilitated communication, especially with those subjects hard of hearing or easily distracted. After the initial introduction, no planned information was given about the study but questions were answered as they arose.

The interview began directly after the subject had agreed to participate and it was not necessary to make any further appointments to carry out this first interview. The interview followed the format set out in the schedule (Appendix 3). The life satisfaction Index-A was administered on printed cards except in the case of those subjects who were blind or partially sighted and here the researcher read out the items and recorded the answers in the usual way. After the interview schedule had been completed the researcher guided discussion around the health problems which had become apparent and an attempt was made to find out how each problem affected the subject. The problems identified during this pre-test interview were given a rating of zero regardless of their severity or significance to the subject and it was from this base line zero that progress or deterioration was estimated. The information about health problems was recorded using a problem oriented recording format; and the plan of
intervention to be followed by the research assistant was communicated to her using this method. The length of time the interview took varied between subjects. The minimum time taken was 10 minutes and the maximum was 60 minutes with a mean of 23 minutes. Depending upon the group to which the subject had been allocated, an appointment was made for the next visit and a card was left with the name and address of the researcher and the date and time of the next appointment.

**The treatment**

The subjects in Group 1 were first to be exposed to the focused health visitor intervention, the independent variable. The treatment was once monthly for four months (Figure 7). The range of time between the Pre-test and first visit was three days to three weeks and the mean length of time of each visit was 34 minutes.

The focus of the visit was provided by the subject's actual and potential health problems which had been identified at the pre-test interview. The variety of interventions used for each problem category are listed (Appendix 5). After executing the plan of intervention prescribed by the researcher the research assistant, on the basis of her own professional judgment, introduced, if necessary, other interventions. In the case of subjects who were identified at the pre-test as having no problems, a general theme such as home safety was chosen and this it was thought provided an adequate focus for the visit. If subsequent problems emerged, these then generated the focus
for the next visit. However, in all cases it was only
the problems identified at the pre-test interview which
were included in the analysis.

The research assistant recorded each visit using the
problem oriented recording format and by taking into
account what each subject said about her problems and what
she observed, the research assistant rated each problem on
a three point scale as improved, the same, or worse.

Since each problem had initially been given a zero rating,
this score was the baseline and was taken to indicate
that the problem was the same and 1 and -1 served to
indicate improvement and deterioration respectively. The
score forms for Group 1 and Group 2 differed slightly in
their layout and are included in Appendix 3.

Training of the Research Assistant

The research assistant who was a health visitor of
considerable experience but with no special expertise in
visiting the elderly, was appointed to begin work in
January 1979. A three week induction programme was
arranged to initiate her to the study and to acquaint her
with the other people and agencies working in the research
area and also with problem oriented recording. Meetings
were arranged with the doctors and other members of the
primary health care team with the explicit purpose of
discussing her role in the study and to establish a
working rapport. A day was spent with the domiciliary
occupational therapist where information was collected
about adaptations and aids made available to the elderly
through the social services department. Time was also spent with the social workers in the area and information relating to day centres, luncheon clubs and social groups was collected. A visit was arranged for the research assistant to go to a geriatric day hospital to receive instruction from a physiotherapist on how to measure a person for a walking stick and how to demonstrate its use. Instruction was also given on how to teach an elderly person to get up off the floor and how to rise from a chair with the minimum of effort.

The research assistant acquainted herself with the literature on problem oriented recording (Bibliography). In order to gain proficiency in using this method of recording, she accompanied the researcher for a period of two weeks on pre-test interviews and both the researcher and the research assistant recorded information about each problem using this method and recordings were subsequently compared and found to be similar in content. It was thought on the basis of the exploratory work (page 65) that the research assistant's presence would not influence the content of the pre-test visit. At the end of the three weeks induction the research assistant began visiting subjects in Group 1.

The First Post-Test
The first post-test was carried out during May and June 1979 and because appointments had been made four months previously with the subjects in Group 2, a letter was sent reminding each subject of the date and time of the visit.
A copy of the letter is included in Appendix 4. A letter was not sent to the subjects in Group 1 because the research assistant had been visiting this group and had made the appointment at her last visit.

This interview followed almost the same format as that of the pre-test in that the interview schedule was completed and problems were discussed and information recorded in the usual way. However, on this occasion the researcher rated each subject's problem in the same way as the research assistant had rated the problems of subjects in Group 1. The researcher was, however, unaware of the ratings previously given to the subjects in Group 1 by the research assistant. In addition the subjects in Group 1 were asked their opinion about the benefits or otherwise of receiving visits from a health visitor.

Although the questions were asked in a structured manner the answers were open-ended and discussion was encouraged but not always forthcoming.

The first post-test on all subjects was completed by the end of June 1979 and it was at this time that the two groups namely Group 1 and Group 2 crossed over (Figure 7). Group 2 was now the group to receive 'treatment' and Group 1 no longer continued to receive 'treatment'. Appointments were made in the same way as they were at the pre-test interview and at this time 107 subjects remained in the study, 52 in Group 1 and 55 in Group 2.
The second Post-Test

The second post-test was carried out during September and October 1979. The format was almost identical to that of the first post-test. With the exception that this time Group 1, who had not received visits from the research assistant during the preceding four months, received a letter reminding them of their appointment and Group 2 who were visited by the research assistant were asked their opinions about the benefits or otherwise of receiving visits from a health visitor and the problems were rated in the same way as on the previous occasions. In total 100 subjects, fifty in Group 1 and fifty in Group 2, received the second post-test. Table 5 indicates the reasons why subjects were lost to the study.

Table 5. Reasons why subjects were lost to the study

<table>
<thead>
<tr>
<th>Reasons subjects lost</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Died</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>No longer alone</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>District Nurse visiting</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No access visits</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>In hospital</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>On holiday</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Refused</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>10</td>
<td>20</td>
</tr>
</tbody>
</table>
At the final visit a letter was given to each subject explaining that the study had now finished and how they might secure the services of a health visitor in the future should the need arise. The letter is included in Appendix 4. At the conclusion of the study nine subjects were referred to the health visitors attached to the practice and reasons for their referral are shown in Table 6.

Table 6. Main reason for referral of subjects to the practice health visitor

<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incontinence</td>
<td>5</td>
</tr>
<tr>
<td>Obesity</td>
<td>2</td>
</tr>
<tr>
<td>Mental deterioration</td>
<td>1</td>
</tr>
<tr>
<td>Physical deterioration</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>
SECTION III

Findings, General Discussion, Conclusions and Recommendations
CHAPTER 8

Analyses of Data Related to Changes in Subjects' Problem Status
Subjects' actual and potential health problems were identified by the researcher at the pre-test interview. During the course of the study ten subjects were lost in each group (Table 5, Page 131). The first analysis of data related to health problems took place after post-test 1 and at this time 142 problems were said to be present in subjects in Group 1 and 108 problems were said to be present in subjects in Group 2. The second analysis took place after post-test 2 and due to attrition of subjects the number of problems had declined to 134 and 100 in Groups 1 and 2 respectively.

The problems identified after the pre-test interview were not included in the analysis and no distinction was made in analysing the data between problems labelled as either 'actual' or 'potential'. The identified health problems of the subjects remaining in the study up to post-test 2 have been categorised under the headings indicated in Table 7.
Table 7. Frequency of Subjects' Health Problems by Problem Category

<table>
<thead>
<tr>
<th>Problem related to:</th>
<th>Frequency of Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight maintenance</td>
<td>45</td>
</tr>
<tr>
<td>Mobility</td>
<td>39</td>
</tr>
<tr>
<td>Dentition</td>
<td>34</td>
</tr>
<tr>
<td>Sensory Function</td>
<td>34</td>
</tr>
<tr>
<td>Elimination</td>
<td>26</td>
</tr>
<tr>
<td>Loneliness</td>
<td>18</td>
</tr>
<tr>
<td>The Performance of Personal or Household Tasks</td>
<td>15</td>
</tr>
<tr>
<td>Rest</td>
<td>8</td>
</tr>
<tr>
<td>Medication</td>
<td>6</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>234</strong></td>
</tr>
</tbody>
</table>

Subjects in Group 1 and Group 2 were allocated to subgroups according to their number of identified problems. Table 8 and Table 9 indicate the allocation of subjects to their respective problem subgroups at the time of post-test 1 and post-test 2.
Table 8. Number of subjects in each problem subgroup at post-test 1

<table>
<thead>
<tr>
<th>Number of problems</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ 0</td>
<td>3</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>1-2</td>
<td>24</td>
<td>29</td>
<td>53</td>
</tr>
<tr>
<td>3-4</td>
<td>17</td>
<td>14</td>
<td>31</td>
</tr>
<tr>
<td>5-</td>
<td>8</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>55</td>
<td>107</td>
</tr>
</tbody>
</table>

+Subjects in this category were not included in the 'change in problem status' analysis.

Table 9. Number of subjects in each problem subgroup at post-test 2

<table>
<thead>
<tr>
<th>Number of problems</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ 0</td>
<td>3</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>1-2</td>
<td>24</td>
<td>27</td>
<td>51</td>
</tr>
<tr>
<td>3-4</td>
<td>16</td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td>5-</td>
<td>7</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

+Subjects in this category were not included in the 'change in problem status' analysis.

Correlation of Problem Rating Scores

Each problem was rated by the research assistant at each of her four visits and by the researcher at post-test 1 and post-test 2 as either improved (=1) the same (=0) or worse (=−1). Using the Spearman Rank Correlation
Coefficient (Appendix 2) an inter-observer correlation of $r_s = .54$ was obtained between the rating score given by the research assistant at her fourth visit and the rating score given by the researcher (at post-test 1 for subjects in Group 1 and post-test 2 for subjects in Group 2) and this was interpreted as an acceptable level of reliability. However, it was the researcher's rating score which was used as the basis for analysis.

**Calculation of the Problem Improvement Score**

The decision to rate any problem as improved, the same or worse was essentially one of professional judgment. The information which the subject reported about each problem and what the researcher observed about the problem provided the data base for the decision. For example:

**Problem:** Discomfort from urinary incontinence -

S. "These pads make a big difference. They were really good when I had that diarrhoea too."

O. Wearing Kanga Pads, has an adequate supply, had sickness and diarrhoea last week but improving now.

A. Seems that problem has improved since Kanga Pads are helping with the management.

In a situation where the problem under study was said to have improved, but the treatment for that problem resulted in the development of an additional problem the data only reflect the outcome of the problem under treatment and do not take account of subsequent problem
development. For example if a subject reduced her food and fluid intake in an attempt to reduce weight and lost four pounds or more then this would constitute an improvement. If this same subject developed constipation because she had modified her food and fluid intake then this new problem was treated but not included in the analysis. No problem was included in the analysis which was identified after the pre-test interview. Problems related to weight maintenance were the only category of problem where an objective criterion measure was used, a weight gain or loss (depending on the direction of the desired outcome) of four pounds or more was considered as an improvement. Problems where a favourable outcome depended on the co-operation of another agency such as the social services department were rated in the usual way. If a subject had difficulty using the bath and bath aids were ordered; if these had not been installed by the relevant post-test interview the problem, if no worse, was rated as the same.

**Calculation of the Problem Improvement Score**

The problem improvement score for each subject was calculated in two ways: firstly as a proportion of the problems which improved and secondly as a proportion of the problems which improved minus the proportion of problems which remained the same.

**Example using method 1**

If a subject had two problems and one was rated as remaining the same and the other as improved then using
this approach the subject was given an improvement score of \( \frac{1}{2} = 0.5 \), i.e., one problem improved out of two.

**Example using method 2**

If a subject had two problems and one was rated as remaining the same and the other as improved then using this approach the subject was given an improvement score of \( \frac{1}{2} - \frac{1}{2} = 0 \) i.e., one problem improved out of two minus one problem the same out of two.

The findings are reported using both methods because it was thought that this would minimise the chance of error. The number of problems which were rated as becoming worse have not been included in the calculation of the problem improvement score; because of the small number involved it was thought that this omission would not bias the statistical significance of the findings.

The findings are represented graphically in Figures 8 to 21. The crossover in the research design made it possible to make an intergroup comparison at the time of post-test 1 and an intragroup comparison at post-test 2.

The data were submitted to statistical analysis to test the null hypothesis.

**The Null Hypothesis**

That there is no significant difference in the number of health problems which improve in elderly women aged 70 years and over who live alone at home after focused health visitor intervention once monthly for four months.
The Alternative Hypothesis

That there is a significant difference in the number of health problems which improve in elderly women aged 70 years and over who live alone at home after focused health visitor intervention once monthly for four months.

For the purpose of an intergroup comparison the Mann Whitney U test statistic was used and for the purpose of an intragroup comparison the Wilcoxon Matched Pairs Signed Ranks test statistic was used (Appendix 2.) The significance level on a two tailed test worked to was .05, but in reporting the findings the researcher has indicated on a two tailed test the actual probability levels to enable the reader to use his own judgment in deciding whether or not the Null Hypothesis should be rejected.
Figures 8, 9 and 10 indicate the percentage of problems in both Group 1 and Group 2 which changed. An intergroup comparison was made of each subjects' problem improvement score as calculated by methods 1 and 2 respectively. The question of no difference was raised between Group 1 and Group 2 at post-test 1. The data were submitted to statistical analysis using the Mann Whitney U test $(z = 4.4, p = .000)^1$ and $(z = 4 p = .000)^2$. Hence there is a significant difference on a two tailed test. The subjects in Group 1 were exposed to focused health visitor intervention and experienced a greater improvement in their health problem status than the subjects in Group 2 who had not been exposed to focused health visitor intervention, hence the decision is taken to reject the null hypothesis in favour of the alternative hypothesis.

Footnotes. 1. Problem improvement score calculated by Method 1, page 137 to 3 decimal places.
2. Problem improvement score calculated by Method 2, page 138 to 3 decimal places.
Change in Problem Status

Figure 8.
Problem status of Group 2 at post-test 1 (No treatment phase)
N = 108 problems (55 subjects)

Figure 9.
Problem status of Group 1 at post-test 1 (Treatment phase)
N = 142 problems (52 subjects)

Figure 10.
Problem status of Group 2 at post-test 2 (Treatment phase)
N = 100 problems (50 subjects)
An intragroup comparison of each subject's problem improvement score was made between subjects in Group 2 at post-test 1 and at post-test 2. The Wilcoxon Matched Pairs signed ranks test was used to make a decision about the null hypothesis \((z = 3.1, \ p = .002)^1\) and 
\((z = 3.3, \ p = .001)^2\). Hence there is a significant difference, the subjects in Group 2 at post-test 2 (after exposure to focused health visitor intervention) experienced a greater improvement in problem status than they did at post-test 1. Thus the decision is taken to reject the null hypothesis in favour of the alternative hypothesis.
Categorisation of subjects into problem subgroups

Subjects in their respective groups were allocated to one of three problem subgroups depending upon how many problems they were said to have experienced. Figures 11, 12, and 13 indicate the percentage of problems which changed in subjects with one or two problems. An intergroup comparison was made of the problem improvement scores between subjects in Group 1 and subjects in Group 2 at post-test 1. Using the Mann Whitney U test \( (z = 3.1, p = .002) \) and \( (z = 2.7, p = .007) \). There is a significant difference between the two groups. The subjects in Group 1 experienced a greater improvement in health problem status than the subjects in Group 2. Hence the decision is taken to reject the null hypothesis in favour of the alternative hypothesis.

An intragroup comparison of each subjects' problem improvement score was made between subjects in Group 2 with one or two problems at post-test 1 and at post-test 2. The Wilcoxon Matched Pairs Signed ranks test was used to make a decision about the null hypothesis \( (N = 14, T = 16, p = .02) \) and \( (N = 17, T = 25, p = .02) \). There is a significant difference, the subjects in Group 2 at post-test 2 experienced a greater improvement in problem status than they did at post-test 1. Hence the decision is taken to reject the null hypothesis in favour of the alternative hypothesis.
Change in problem status

Figure 11.
Problem status of Group 2 subjects with 1 or 2 problems at post-test 1
(No treatment phase)

Figure 12.
Problem status of Group 1 subjects with 1 or 2 problems at post-test 1
(Treatment phase)

Figure 13.
Problem status of Group 2 subjects with 1 or 2 problems at post-test 2
(Treatment phase)

Problems improved
Problems same
Problems worse

N = 42 problems (27 subjects)
N = 33 problems (24 subjects)
N = 44 problems (29 subjects)
Figures 14, 15 and 16 indicate the percentage of problems which changed in subjects with three or four problems. An intergroup comparison of each subject's problem improvement score was made between subjects in Group 1 and subjects in Group 2 at post-test 1. Using the Mann Whitney U test \((N_1 = 14, N_2 = 17, U = 59, p = .02)\)\(^1\) and \((N_1 = 14, N_2 = 17, U = 56, p = .02)\)\(^2\). There is a significant difference between the two groups; the subjects in Group 1 experienced a greater improvement in health problem status than the subjects in Group 2. Hence the decision is taken to reject the null hypothesis in favour of the alternative hypothesis.

An intragroup comparison was made of the problem improvement scores of subjects in Group 2 with three or four problems at post-test 1 and at post-test 2. The Wilcoxon Matched Pairs Signed ranks test was used to make a decision about the null hypothesis \((N = 9, T = 6, p = .05)\)\(^1\) and \((N = 11, T = 13, p = .08)\)\(^2\). There is a significant difference when the improvement score is calculated by Method 1 however there is no significant difference between the groups when the improvement score is calculated by Method 2. Because of the difference in probability level between the two methods of calculation the researcher had decided to be conservative, hence the null hypothesis is accepted.
Figure 14. Problem status of Group 2 subjects with 3 or 4 problems at post-test 1 (No treatment phase)

Figure 15. Change in problem status
Problem status of Group 1 subjects with 3 or 4 problems at post-test 1 (Treatment phase)

Figure 16. Problem status of Group 2 subjects with 3 or 4 problems at post-test 2 (Treatment phase)

N = 48 problems (14 subjects)
N = 61 problems (17 subjects)
N = 42 problems (12 subjects)

Problems improved
Problems same
Problems worse
Figures 17, 18 and 19 indicate the percentage of problems which changed in subjects with five or more problems.

An intergroup comparison was made of the problem improvement score of subjects in Group 1 and Group 2 at post-test 1. Using the Mann Whitney U test
\( N_1 = 3, N_2 = 8, U = 7.5, p = .368 \) and
\( N_1 = 3, N_2 = 8, U = 6.5, p = .271 \).

There is no significant difference in the problem improvement score between the two groups hence the null hypothesis is accepted.

An intragroup comparison was made of subjects with five or more problems in Group 2 at post-test 1 and post-test 2. The data were not submitted to statistical analysis because there were only three pairs of data and it was thought that the results would not be meaningful.

However, the improvement scores of the subjects with five or more problems were combined with the improvement scores of the subjects in Group 2 with three or four problems and the data submitted to statistical analysis. Using the Wilcoxon Matched Pairs signed ranks test \( N = 11, T = 8, p = .05 \) and \( N = 14, T = 17, p = .05 \).

There is a significant difference; the subjects in Group 2 at post-test 2 after exposure to focused health visitor intervention experienced a greater improvement in problem status hence the null hypothesis is rejected in favour of the alternative hypothesis.
Problems improved
Problems same
Problems worse

Figure 17. Problem status of Group 2 subjects with 5 or more problems at post-test 1 (no treatment phase)

N = 16 problems (3 subjects)

Figure 18. Problem status of Group 1 subjects with 5 or more problems at post-test 1 (treatment phase)

N = 48 problems (8 subjects)

Figure 19. Problem status of Group 2 subjects with 5 or more problems at post-test 2 (treatment phase)

N = 16 problems (3 subjects)

Problems improved
Problems same
Problems worse

Change in problem status

Problem status of Group 2 subjects with 5 or more problems at post-test 2 (treatment phase)
Duration of effect

Suchman (1967) listed six steps which were essential for evaluation to take place (page 16) and he highlighted the necessity for some indication of the durability of the effects of the independent variable (focused health visitor intervention). Figures 20 and 21 indicate the percentage of problems which changed in Group 1 at post-test 1 after exposure to the independent variable and the percentage of problems which changed at post-test 2 after the withdrawal of the independent variable. The number of problems which remained the same are constant and there is a three per cent change in the number of problems which became worse or improved. It is thought that this small change might be accounted for by the passage of time and the deleterious effects of the ageing process.

The findings indicate that focused health visitor intervention significantly influences the number of health problems which improve in women aged 70 years and over who live alone at home in that it promotes improvement. Moreover, the effects of the intervention seem to last for a period of up to five months after the last exposure. Table 10 indicates the percentage of problems which improved, remained the same or deteriorated in each problem category for the subjects in both Group 1 and Group 2 at the time of post-test 2.
Figure 20.
Problem status of Group 1 at post-test 1 (Treatment phase)

Figure 21
Problem status of Group 1 at post-test 2 (No treatment phase)

Duration of effect

N = 142 problems (52 subjects)

N = 134 problems (50 subjects)
Table 10. Percentage of problems which improved, remained the same or deteriorated by problem category

<table>
<thead>
<tr>
<th>Problem Categories</th>
<th>Weight Maintenance n = 45</th>
<th>Mobility n = 39</th>
<th>Dentition n = 34</th>
<th>Sensory function n = 34</th>
<th>Elimination n = 26</th>
<th>Loneliness n = 15</th>
<th>The performance of personal or household tasks n = 15</th>
<th>Rest n = 8</th>
<th>Medication n = 6</th>
<th>Miscellaneous n = 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved</td>
<td>39%</td>
<td>33%</td>
<td>25%</td>
<td>43%</td>
<td>54%</td>
<td>56%</td>
<td>56%</td>
<td>38%</td>
<td>56%</td>
<td>56%</td>
</tr>
<tr>
<td>The same</td>
<td>50%</td>
<td>52%</td>
<td>72%</td>
<td>54%</td>
<td>42%</td>
<td>44%</td>
<td>44%</td>
<td>62%</td>
<td>44%</td>
<td>44%</td>
</tr>
<tr>
<td>Deteriorated</td>
<td>11%</td>
<td>15%</td>
<td>3%</td>
<td>3%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Previously there has been little research based information to indicate where health visitor intervention can be most effective. This study provides information about which problem categories the focused health visitor intervention was able to exert a beneficial effect on. Findings of this type have implication for the practice of health visiting in that they provide a data base from which health visitors can order their priorities and this theme will be pursued further in the general discussion.

In interpreting the findings the researcher is mindful that she has been unable to measure how far focused health visitor intervention was instrumental in preventing existing health problems from deteriorating and similarly it has not been possible to assess how far the successful treatment of problems prevented the development of other problems. The researcher has only been able to measure the impact of focused health visitor intervention in relation to its significance in facilitating improvement in actual and potential health problems.

The threat to external validity of incorporating a pre-test into the research design has already been mentioned (page 85). However it should be borne in mind that the pre-test alone may have stimulated some of the subjects in Group 2 to take action in relation to one or more health problems. This pre-test effect may have contributed to the percentage of problems which were rated as improved in Figure 9.
CHAPTER 9

Analysis of Data Related to Subjects' Life Satisfaction Score on the L.S.I.-A.
CHAPTER 9

The L.S.I.-A score of subjects in both Group 1 and Group 2 were measured at the pre-test interview and at post-test 1 and post-test 2. Table 11 and Table 12 indicate that there was little change in the mean L.S.I.-A score during the study period.

Table 11. L.S.I.-A. score for Subjects in Group 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Intervention</th>
<th>Mean L.S.I.-A Score</th>
<th>Standard Deviation</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>No</td>
<td>11.3</td>
<td>3.1</td>
<td>5 to 17</td>
</tr>
<tr>
<td>Post-test 1</td>
<td>Yes</td>
<td>11.2</td>
<td>3.5</td>
<td>5 to 17</td>
</tr>
<tr>
<td>Post-test 2</td>
<td>No</td>
<td>11.7</td>
<td>3.2</td>
<td>4 to 17</td>
</tr>
</tbody>
</table>

Table 12. L.S.I.-A. score for Subjects in Group 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Intervention</th>
<th>Mean L.S.I.-A Score</th>
<th>Standard Deviation</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>No</td>
<td>10.8</td>
<td>3.1</td>
<td>4 to 16</td>
</tr>
<tr>
<td>Post-test 1</td>
<td>No</td>
<td>10.7</td>
<td>3.4</td>
<td>3 to 16</td>
</tr>
<tr>
<td>Post-test 2</td>
<td>Yes</td>
<td>10.7</td>
<td>3.1</td>
<td>3 to 17</td>
</tr>
</tbody>
</table>

To test the null hypothesis the data were submitted to statistical analysis using the Wilcoxon Matched Pairs Signed Ranks Test (Appendix 2).

The Null Hypothesis

That there is no significant difference in the life satisfaction score on the L.S.I.-A in women aged 70 years and
over who live alone at home after focused health visitor intervention once monthly for four months.

The Alternative Hypothesis
That there is a significant difference in the life satisfaction score on the L.S.I.-A in women aged 70 years and over who live alone at home after focused health visitor intervention once monthly for four months.

For subjects in Group 1 the difference was calculated for each subject between the total L.S.I.-A score obtained at the pre-test interview and the total L.S.I.-A score obtained at post-test 1 after exposure to the independent variable. No significant difference was found at the .05 level of significance on a two tailed test (N = 45, z = .23, p = .818) hence the null hypothesis is accepted.

For subjects in Group 2 the difference was calculated between the total L.S.I.-A score obtained at the pre-test interview and the total L.S.I.-A score obtained at post-test 2 after exposure to the independent variable. No significant difference between the two L.S.I.-A scores was found at the .05 level of significance on a two tailed test (N = 41, z = .63, p = .529) hence the null hypothesis is accepted.

Owing to the fact that there was no significant difference in the scores subjects obtained on the L.S.I.-A before and after exposure to the independent variable and before reaching the obvious conclusion the question of the instrument's ability to measure change should be addressed.
The scores subjects obtained on the L.S.I.-A in both Group 1 and Group 2 have been combined in two histograms one before intervention and one after (Figure 22). It can be seen that the instrument measured a wide range of scores from 3-17 giving the visual impression of a normal curve. The histogram (Figure 22) shows the frequency and distribution of scores. The mode before intervention was ten and after intervention it was thirteen indicating an upward trend. However the mean scores before and after intervention were 11.1 and 11 respectively with a standard deviation of 3.1 and 3.3 respectively.

Despite the evidence indicating that there was no significant change in total L.S.I.-A score before and after focused health visitor intervention, the researcher was aware that a number of subjects had exhibited what can only be described as a noticeable change in life satisfaction. Subjects who had experienced a change in L.S.I.-A score of three points or more at either post-test 1 or post-test 2 or both were identified and the data examined in an attempt to identify possible reasons for the change.
Figure 22. Histograms for L.S.I.-A Score for Group 1 and Group 2 before and after treatment.
A Closer look at the Subjects who Demonstrated a Change in L.S.I.-A Score of Three Points or More between the Pre-test and Post-test 2

In Group 1 25 subjects demonstrated a change in L.S.I.-A score of three points or more. In 18 subjects the change occurred at the first post-test which was after exposure to the independent variable and of these 18 subjects eight experienced an increase in life satisfaction and ten a decrease. During the period between post-test 1 and post-test 2 the group were not exposed to intervention and 15 subjects demonstrated a change of three points or more in life satisfaction; of these 15 subjects eight experienced an increase in life satisfaction and seven a decrease. It is thought possible to explain the change in L.S.I.-A score in 17 of the 25 subjects who demonstrated the change.

Possible Reasons for the Change in L.S.I.-A Score in Group 1

Three subjects admitted to feeling generally unwell at the time their L.S.I.-A score decreased. This statement highlights the feelings of one subject whose L.S.I.-A score decreased from eight to five:

"You're talking to me at a bad time, I feel miserable today I think I may be getting a cold or flu."

The subject also complained of often feeling lonely, however at the second post-test her L.S.I.-A score was 16 and at this time she admitted that she was too busy to be lonely during the daytime:

"I don't have time to feel lonely during the day although I feel a bit lonely sometimes at night."
It appears that, in this case, the L.S.I.-A score was related in some way to feelings of loneliness and general health state and it is noteworthy that the increase in L.S.I.-A score occurred during the no intervention period.

The second subject who admitted to being unwell at the first post-test also experienced a decrease in L.S.I.-A score from eight to five, she was suffering from diarrhoea and was sometimes unable to reach the toilet in time thus soiling herself. At the second post-test this condition was still present and her L.S.I.-A score remained at five. The third subject who was unwell at the first post-test experienced a decrease in L.S.I.-A score from 16 to 12; she had recently returned from one month's holiday in South Africa and had suffered a difficult journey with a number of delays and during this time had omitted to take her Lasix and her legs had become swollen and painful. At the first post-test she had not fully recovered from her journey however, at the second post-test her L.S.I.-A score had returned to its pre-test level of 16.

There were three subjects who were admitted to hospital as medical patients and one who was treated as an out-patient and it is perhaps noteworthy that these subjects experienced an increase in L.S.I.-A score after contact with the hospital. Subject one was admitted to hospital for investigations related to bowel malfunction during the 'intervention phase' of the study. It was suggested that she should undergo major bowel surgery but she refused and
was subsequently discharged. The subject admitted that she enjoyed her stay in hospital immensely and at the first post-test her L.S.I.-A score had increased from 12 to 15 and at the second post-test it had returned to its previous level of 12, however the decrease in L.S.I.-A at the second post-test may be partially accounted for in that at this time the subject was ill in bed.

Subject two was admitted to hospital for restabilisation on her cardiac drugs during the 'intervention phase' of the study. After discharge from hospital she was less breathless and said that she seemed to have more energy and at the first post-test her L.S.I.-A score had increased from ten to fifteen and at the second post-test it had decreased to thirteen. Subject three was admitted to hospital during the 'intervention phase' of the study because she was in cardiac failure. After discharge from hospital at the first post-test her L.S.I.-A score had increased from 12 to 15; however, during the 'no intervention' period between the first and second post-test this subject had a mild stroke and at the second post-test her L.S.I.-A score had fallen to ten.

Subject four was not admitted to hospital but was treated instead on an out-patient basis. She had suffered from increasing immobility from osteoarthritis and her knees had become swollen and painful. During the intervention phase of the study the subject attended the hospital to have the fluid aspirated from her knees. Initially she experienced some improvement in that her knees were less painful and
she was more mobile than before. However, the improvement was short lived and at the first post-test the subject was disappointed because her knees were in her opinion the same or even worse than before they were aspirated and this was reflected in her L.S.I.-A score which decreased from eleven to seven. During the 'no intervention phase' the subject began to attend hospital twice a week for physiotherapy. She was collected by ambulance and said that she really looked forward to the visits because it was the only time she left the house and although her mobility had not improved at the second post-test her L.S.I.-A score had returned to eleven.

There is no doubt that the subjects who were admitted to hospital felt better after they had received treatment. Nevertheless it is unwise to attribute the increase in L.S.I.-A score solely to the physical aspects and an open mind should be maintained regarding the psychosocial effects of a hospital admission: for example, it may result in the family or friends becoming more attentive or the subject feeling that she is better off than other older people who either die or are admitted for long term care.

The three subjects admitted to hospital experienced their increase in L.S.I.-A score after the 'intervention phase' of the study. However, although the researcher acknowledges that the effects of the intervention are compounded with those of the hospital admission a more convincing case can be made for attributing the increase to the cumulative effects of the hospital admission since this
life event seemed to be more alive in the minds of the subjects than the monthly visit from the research assistant. Similarly as aforementioned in the subjects that experienced a decrease in L.S.I.-A score after intervention this decrease has not been attributed to the effects of the intervention but rather to their experience of ill health.

In contrast to the subjects who were admitted to hospital and experienced an increase in L.S.I.-A score one subject who had suffered a heart attack was not admitted to hospital but instead stayed at home and was looked after by her family. This subject demonstrated a decrease in L.S.I.-A score at the first post-test from 15 to 11 and was subsequently excluded from the study since she left her own home to live with her daughter; because she was frightened of being alone in case she had a further heart attack.

Two subjects who experienced a three point change in their L.S.I.-A score complained of feeling very lonely at the pre-test interview and it was thought that their L.S.I.-A score varied according to their expressed feelings of loneliness. In the first subject after the 'intervention phase' her L.S.I.-A score decreased from eight to five and at this time she admitted to feeling more lonely than before however at the second post-test her L.S.I.-A score was seven. The second subject's L.S.I.-A score at the pre-test was nine and at the first post-test was eight; on both of these occasions she said that she was feeling very
lonely. However, at the second post-test her score had increased to 14 and it was on this occasion that she commented that she was going out more and did not have much time left over for feeling lonely.

Two subjects in the study who had a weight related problem did exceptionally well in that they both lost approximately one stone and it is perhaps noteworthy that they also experienced an increase in L.S.I.-A score after the intervention phase of the study. Subject one's L.S.I.-A score increased from 13 to 16 and was 14 at the second post-test and subject two demonstrated an increase from 11 to 14 and maintained the score of 14 at the second post-test. It is contended that a weight loss of one stone is an important enough occurrence in the life of a weight conscious woman to account for the increase in L.S.I.-A score.

The change in life satisfaction of the remaining five subjects was related to the following factors: Subject one experienced a decrease in L.S.I.-A score from 14 to ten at the first post-test during the intervention phase of the study, the subject was unexpectedly bereaved because her youngest daughter of 46 years died of a subarachnoid haemorrhage. This subject was subsequently excluded from the study because she no longer wished to participate. Subject two experienced an increase in L.S.I.-A score at the first post-test from nine to 14 and this has been attributed to the fact that she had heard that there was a place available for her to visit Lourdes with her church and
this was a trip which she had waited almost a lifetime to make. At the second post-test after her return from Lourdes her L.S.I.-A score remained at 14. Subject three demonstrated a decrease in L.S.I.-A score at the first post-test from ten to five and this decrease can be attributed to an argument which she had with her daughter on the morning of the first post-test interview. During the interview the subject was crying and very distressed, however at the second post-test her L.S.I.-A score had returned to its pre-test level of ten. Subject four experienced a decrease in L.S.I.-A score at the first post-test from eight to five and an increase to ten at the second post-test. This change has been attributed to news relating to rehousing. During the 'intervention phase' of the study the subject had been becoming increasingly despondent because she had not heard from the housing department about being rehoused to a ground floor flat, however at the time of the second post-test she had heard that there was a flat available and was making plans to move. Subject five experienced a steady increase in L.S.I.-A score from five at the pre-test interview to seven at the first post-test interview to 12 at the second post-test. This change has been attributed to the subject's general mental state in that she had a medical history of depression and had undergone 'E.C.T. therapy' some years previously. At the pre-test and first post-test interview the subject verbalised that she was depressed and worried about being rehoused while her house was modernised. She cried on and off throughout both interviews, however at the second
post-test her house had been modernised, she did not cry and mentioned that her 'nerves' were much better than they had been on previous occasions.

Possible Reasons for the Change in L.S.I.A. Score in Group 2

The subjects in Group 2 who experienced a change in L.S.I.-A score of three points or more between the pre-test interview and post-test 2 were examined in the same way as those subjects in Group 1. In total 18 subjects exhibited a change in L.S.I.-A score amounting to three points or more and in 15 of the subjects the change occurred at the first post-test which was after the 'no intervention phase' of the study and of these 15 subjects seven experienced an increase in L.S.I.-A score and eight a decrease. During the period from the first to the second post-test the group were exposed to intervention and nine subjects experienced a change in L.S.I.-A score, four experienced an increase and five a decrease. It is thought possible to explain the change in L.S.I.-A score in ten out of the 18 subjects.

Six subjects reported feeling unwell and this has been used to explain their decrease in L.S.I.-A score. Subject one had a L.S.I.-A score of 11 at the pre-test interview and after the 'no intervention phase' of the study at the first post-test this score had decreased to eight. The subject admitted to feeling generally unwell and commented that she had no appetite and always seemed to feel tired, she thought that she had lost weight but had not been to
the doctors. This subject was subsequently excluded from the study at her own request. Subject two had a L.S.I.-A score of 11 and ten respectively at the pre-test and first post-test interview, however at the second post-test her L.S.I.-A score had decreased to seven and at this interview she commented that she was feeling unwell and complained of having a cold and a sore throat. Subject three had a L.S.I.-A score of ten at the pre-test interview and at this time she was suffering from the after effects of a fall in which she had hurt her back and arm and was unable, therefore, to carry out some personal and household tasks. At the first post-test interview she commented that she had recovered from her fall and was able to use the bath and her L.S.I.-A score had increased to 14 and at the second post-test after intervention it was 13. Subject four scored 14 at the pre-test interview on the L.S.I.-A and at the first post-test she scored 11. This decrease is accounted for in that the subject was having difficulty with her bowels and had consulted her doctor who had referred her to the hospital which consequently caused her to worry about the outcome of the hospital visit. At the second post-test after the hospital consultation the subject scored 12 on the L.S.I.-A. Subject five scored 12 on the L.S.I.-A at the pre-test interview and at the first post-test she scored 9. During this 'no intervention' period the subject had been ill in bed with bronchitis and had therefore not been going out as much as usual. However, at the second post-test interview when she had fully recovered her L.S.I.-A score
had increased to 13. Subject six scored 12 on the L.S.I.-A at the pre-test interview and nine at the first post-test interview. During this period of 'no intervention' she had been experiencing bouts of breathlessness and had contacted her doctor and had been referred for an E.C.G. and chest x-ray and at the time of the first post-test she was anxiously awaiting the results. At the second post-test interview she had received the results of the chest x-ray and E.C.G. which were favourable and her L.S.I.-A score increased to 11.

Two of the subjects in this group who demonstrated a change in L.S.I.-A score of three points or more underwent a hospital admission for surgical treatment. Subject one had been having bowel problems and had suffered from severe constipation for a number of years and at the time of the pre-test interview the problem had become almost intolerable and the subject scored 11 on the L.S.I.-A. During the 'no intervention phase' of the study the subject contacted her doctor and was referred to the hospital and at the time of the first post-test interview her L.S.I.-A score had increased to 14 and her constipation on her own admission had improved slightly. During the 'intervention phase' of the study the client was admitted to hospital for an examination under anaesthetic and was subsequently advised to have major bowel surgery. After discharge from hospital the subject was feeling rather debilitated and generally unwell and she thought that her bowels were no better than they were before she had the operation and at
the second post-test her L.S.I.-A score was 11.

Subject two scored 15 on the L.S.I.-A at the pre-test interview, but during the 'no intervention phase' of the study her sister had a severe stroke which was subsequently diagnosed as a brain tumour and this was a source of emotional upset and at the first post-test her L.S.I.-A score had decreased to 12. During the 'intervention phase' the subject was admitted overnight to hospital for the removal of a benign cyst from the axilla, however this event did not appear to affect her L.S.I.-A score and at the second post-test it was 14.

The remaining two subjects experienced an increase in L.S.I.-A score after the 'no intervention' and 'intervention phase' respectively and this has been attributed to the following: Subject one at the pre-test interview scored seven on the L.S.I.-A and at this time she was worried because her house was due to be modernised by the council and she was not certain if she would be rehoused while the work was being carried out. By the time of the first post-test she had heard that she was to be rehoused, the uncertainty had been removed and she scored ten on the L.S.I.-A. At the time of the second post-test after the 'intervention phase' of the study the subject had moved to the house and was finding it difficult to settle in since she found herself alongside different neighbours and her L.S.I.-A was eight. Subject two scored 15 at the pre-test interview and 13 at the first post-test, however during the 'intervention phase' of the study she received a
surprise visit from her daughter in Australia whom she had not seen for 25 years and at the second post-test her L.S.I.-A score was 16.

It would seem from the evidence presented that the L.S.I.-A is sensitive enough to pick up a number of changes in subjects' circumstances and the instrument is sensitive to some health related matters. In the total sample six subjects were admitted to hospital and five of the six appear to have experienced a change of three points or more in L.S.I.-A score. From the cases mentioned in this analysis it can be seen that the majority of changes in L.S.I.-A score cannot directly be related to focused health visitor intervention. In accepting the null hypothesis it is contended that the research instrument is sensitive enough to measure changes in life satisfaction amongst elderly women. It is thought that the instrument may have failed to reflect the impact of focused health visitor intervention for two reasons. Firstly, focused health visitor intervention once a month for four months may not be an important enough life event for some subjects to precipitate a significant change in life satisfaction. Secondly, it could be that the beneficial effects of health visitor intervention in terms of increased feelings of wellbeing are immediate and short lived and in order to measure the full impact of intervention it may be necessary to administer the instrument on the same day as the health visitor visit. Because in this study the instrument was administered between three days and three weeks after the last health visit,
it may have failed to measure the immediate and short lived effects.
CHAPTER 10

Subjects' Opinions about the Effects of Focused Health Visitor Intervention
CHAPTER 10

After the fourth and final health visit had been completed by the research assistant the subjects were asked by the researcher either at post-test 1 (for subjects in Group 1) or at post-test 2 (for subjects in Group 2) five open ended questions. It was thought that the questions would stimulate discussion and provide information which would indicate whether or not the subjects thought they had benefited from the health visitor visits. Owing to attrition (Table 5 Page 131) and the omission of two interviews which were incomplete, data relating to 51 subjects in Group 1 and 49 subjects in Group 2 were included in the analysis. The results are considered together for the 100 subjects.

In response to question one\footnote{1} 95 per cent of the sample reported that they had enjoyed the visits from the health visitor. An attempt was made to find out what it was that made the visits enjoyable. Most respondents (75) made comments about the personal attributes of the health visitor which they found pleasing. The health visitor was described as: "friendly, sympathetic, understanding, interesting, frank, talkative, down to earth and a good listener". The majority of respondents in this category placed an emphasis on the social aspects of the visit and there were 38 mentions of the enjoyment inherent in: "just having a talk to somebody" and 19 mentions of:

\footnote{1}{Question 1. Did you enjoy the health visitor visiting you or not? Probe Why, What.}
"just liking company". A visit from somebody other than immediate family was found enjoyable by some and a typical comment was:

"Yes I did enjoy her coming, a nice homely person, well it's really a change, somebody strange instead of your family all the time. I felt as though I could speak to her without feeling out of place."

There were 26 respondents who mentioned the health visitor in relation to their health and there were seven mentions of the health visitor's general overseeing function and this response was typical:

"Oh yes I quite enjoyed it, it was very pleasant you felt that they were keeping an eye on you and if you were needing help they would be there. It was just a nice wee chat and knowing that she was coming it does something to you - it gives you a lift."

There were 17 respondents who reported that they looked forward to the day of the visit. It seemed that just having a visit to look forward to, regardless of what transpired at the visit may in itself have been therapeutic. The notion of looking forward to the visit is therefore termed 'Therapeutic Anticipation' and its implications for the practice of health visiting are explored in Chapter 12.

Another concept which emerged from the data is described as 'The Worthy of Interest Syndrome'. There were 15 respondents who commented that they enjoyed the health visit because it meant that somebody was taking an interest in them. All of the elderly women participating in this study were aware that they were assisting in a research
project and it is possible that this may have given the impression that a special interest was being taken in them.

It is noteworthy that only five per cent of the sample reported that they had not enjoyed the health visitor visits and one respondent commented that the visits had a 'bad effect' on her and this negative response is recorded:

"Oh well I took it all in my stride, I felt it wasn't necessary - it had a bad effect on me I thought do they really think they need to come?"

The notion that visits from a health visitor may have a 'bad effect' on some people is seldom addressed when contemplating routine visiting by health visitors to the elderly.

In response to question two1 62 per cent of the sample reported that they had been helped by the health visitor visits. An attempt was made to find out how they had been helped. Ten respondents explained that they had been 'cheered up' by the visit and a typical comment was:

"Oh yes it helped me I felt quite happy with her, a very cheery person, it cheered me up. That time I broke my arm I was down in the dumps and it cheered me up a bit - a typical nice person you could meet."

Emphasis was placed on the social aspects of the visit and 30 mentions were made of this. It was beneficial to some

Footnote. 1. Question 2. Do you feel that it helped you to have a health visitor visiting you or didn't it help you? Probe How, Why, What.
just to have a visitor and a common response was:

"Oh yes it helped me, you had somebody coming in and it didn't make the day so long, the time passed quicker - just company nothing else."

There were 32 mentions of respondents having been helped directly with health related matters. Some mentioned how the health visitor had assisted them in a specific way for example:

"Oh yes it helped me all the time she was coming I wasn't cheating with my diet. I wanted to make a good impression, you felt that it was nice of her to come and take an interest. If she hadn't come I wouldn't have bothered to lose weight."

Others mentioned advice which they were given related to general health and safety for example:

"Oh she told me how to be careful when I was making tea and she showed me how to hold the teapot and suggested things like that."

The concept of 'therapeutic anticipation' mentioned earlier in relation to question one was also apparent here. There were 14 mentions from respondents who felt that they had been helped by having the visit to look forward to and this comment illustrates the subjective nature of the benefit.

"It helped it gave me something to look forward to. I don't know how it helped, I just felt that much happier and contented."

The answers to question two supported the notion that some respondents benefited from having an interest taken in them and there were 13 reports of this effect:

"It helped me because it was company and it was nice to think people were taking an interest in you. She sat here and gave me her company and asked me how I was keeping she was always thinking about you."
The overseeing or surveillance function of the health visitor was also said to be beneficial and a typical comment was:

"It did help - you knew that somebody was paying attention to how you were and they would be there if you needed them."

It is possible that the regular appointment system provided a sense of security for some respondents in that they would be certain that there was to be another visit and this may have highlighted the overseeing function of the health visitor.

There were 30 per cent of the sample who reported that they had not been helped by the health visitor visits and eight per cent who were undecided about whether they had been helped or not. However, only one respondent reported that the visits had a deliterious effect and her response is recorded:

"It worried me, I thought they must be expecting me to get all those things and I felt a bit down in mood when they went thinking I was old and I never really thought about being old before."

This statement made by one individual suggests that health visitor visits have the potential to depress as well as to enhance mood tone and this is explored further in the general discussion.

In response to question three, 92 per cent of the sample reported that it was a good idea for health visitors to

Footnote. 1. Question 3. Do you think that it is a good idea for health visitors to visit elderly people or not? Probe Why.
visit elderly people. However, there were 15 respondents who commented that they did not need visits from a health visitor but nevertheless thought that it was a good idea for other people and a typical response was:

"It's a good idea for the disabled and others not able to get about. The disabled are more in need than me."

In total there were 40 mentioned of groups of people who it was thought were in need of visits from a health visitor namely: the disabled, ailing, housebound, the lonely and people with no families. The sample appeared to appreciate that health visitors were in short supply and seemed to favour her deployment amongst the lonely, disabled and infirm.

There were 53 mentions by respondents who considered that there were persons worse off than themselves who were in need of health visitor services and this is termed 'the somebody worse than me syndrome' and a typical comment was:

"Oh yes it's a good idea for health visitors to visit elderly people. I'm lucky, but there are other people not so lucky as me I have good neighbours. The health visitor can see what's going on and if somebody is not able she can tell the doctor."

It seems that 'the somebody worse than me syndrome' might be the way that some elderly people cope with growing older. In that as long as they believe that there are people in the world worse off than themselves they are able to cope effectively with the restriction that old age eventually imposes on daily life.

The general overseeing or surveillance function of the
health visitor was frequently mentioned and 33 respondents gave this as the main reason for thinking that health visitor visits were a good idea and a typical response was:

"I think it's a good idea for the health visitor to visit elderly people. It lets the health visitor see that older folk are alright and they can see whether they need help."

There was some repetition in this question (3) with 16 mentions of the social aspects of health visiting including the benefits to be accrued from looking forward to the visit and being taken an interest in.

There were eight per cent of the sample who were undecided about whether or not it was a good idea for health visitors to visit elderly people. Most of these respondents thought that it would rather depend on the individual; in that some people may enjoy visits and others may not.

In response to question four, the majority of the sample, 77 per cent, reported that they had never to the best of their knowledge had previous contact with a health visitor prior to their involvement in the study. There were 17 per cent of the sample who reported that they had previous contact with a health visitor and 11 respondents cited contact they had experienced many years ago when their children were young. The remaining respondents had been visited between two and five years before their involvement in the study by either a health visitor from the hospital or

surgery. Six per cent of the sample reported that they could not remember whether or not they had contact with a health visitor prior to their involvement in the study. It is thought that since only 17 per cent of the sample could recall previous contact with a health visitor that past experience in this context did not overshadow respondents opinions about the effects of health visitor intervention in relation to this study.

In response to the fifth and last question¹ 48 per cent of the sample reported that they would like to continue to receive visits from a health visitor if it were possible. An attempt was made to find out why they would like the visits to continue. The answers were repetitive in that there were mentions of the personal attributes of the health visitor and the social and overseeing aspects of the visit. There were also comments about the visit being nice to look forward to (therapeutic anticipation) and the enjoyment in being taken an interest in (worthy of interest syndrome). Six respondents reported that they would like the health visitor visits to continue for health related reasons and one response is reported:

"I think it would be nice if she kept coming you never know what could alter in your system at my age and you can get advice about it from her (H.V.)."

There were 37 per cent of the sample who did not wish the

Footnote. 1. Question 5. If it were possible would you like the Health Visitor to continue visiting you or not? Probe Why.
health visitor visits to continue and this was a typical response:

"No I don't think it necessary for a health visitor to visit me unless I take a bad turn."

A further 15 per cent of the sample could not decide or did not know whether or not they wished the health visitor to continue visiting them and this was a typical response:

"I don't know I feel alright it may be a waste of time when she could be at somebody else."

The majority of respondents saw the health visitor as a colleague of the doctor who could best be deployed visiting the lonely, sick and disabled. Few respondents associated the health visitor with having a preventive function, she was seen more as a watchdog who would let the doctor know if his patient was ill.

A number of respondents stated that they did not wish to have any further visits from a health visitor but nevertheless added that they may be glad of her services if they became ill. These elderly respondents perceived the health visitor as a person who could give advice and help in times of illness rather than as somebody who could give advice on how to stay healthy during old age.

Brocklehurst (1975) reported that elderly people may ignore the signs and symptoms of disease because they believe that there is no cure or palliative measure which can be taken to improve their condition. Continuing this approach it might be that some elderly people believe that infirmity in old age is inevitable and as a result they may be convinced
that early intervention (when they are still 'well') with a view to improving health and preventing ill health is futile. Hence it is considered by these respondents that health visitors should concentrate their efforts on people who are perceived as eligible because of their physical and social circumstances.

It is noteworthy that although 95 per cent of the sample reported that they had enjoyed the health visitor visits and 92 per cent of the sample reported that it was a good idea for health visitors to visit elderly people, only 48 per cent of the sample reported that they would like to continue receiving visits from a health visitor. There are two feasible explanations for this. Firstly, some respondents may have a strong social conscience which may infer because they are 'well' they are not entitled to visits since they believe it would detract from the visits to people less fortunate than themselves. It could be that some respondents take comfort from the belief that there are some elderly people less fortunate and this knowledge may enable them to feel contented with their life in general. The concept of the 'somebody worse than me syndrome' has implications for the practice of health visiting regarding the routine visiting of the 'well' elderly since it might undermine their usual coping mechanism.

Secondly, some of the respondents may have been reluctant to report negative views about the health visitor visits and this may have generated a false picture which was betrayed
when the direct question was asked about the continuation of visits. The study was perceived by most respondents as having a connection with their family doctor and this may have biased the response because respondents may have subconsciously wished to please the doctor by giving favourable feedback. Similarly it was known that the researcher and research assistant were colleagues and this may have influenced the response since respondents might have thought it probable that unfavourable comments would filter back to the research assistant. However, elderly people are less critical of the health service in general than younger people (Klein 1979). The reason for this is not fully understood it could be due to the fact that people become less critical and more satisfied as they grow older or it could be due to a generational effect in that elderly people regard health care as a privilege rather than a right.

In conclusion it is thought that the majority of the sample found contact with the health visitor enjoyable and were helped in some way by the visits.
CHAPTER 11

Analysis of Process - Outcome Data
An attempt was made to try and isolate the health visitor interventions which were most effective in producing an improvement in subjects' problem status, Bloch (1975) recommends this approach to evaluation (Page 23). The researcher identified in each problem category subjects who experienced an improvement in problem status and subjects who did not and compared the prescribed interventions in an attempt to identify the specific actions which may have explained the change in problem status.

There were some problem categories with too few problems to provide a meaningful analysis therefore an arbitrary decision was made to exclude those categories which had a frequency of less than 27 problems (Table 9). In total four problem categories were included in the analysis namely problems related to weight maintenance, mobility, dentition and sensory functioning. Each problem category contained problems of more than one type and a detailed examination of the data indicated that subjects with identical problems received the same intervention. Because of this unplanned standardisation it has not been possible to isolate effective interventions for specific problem types. Instead, case material has been used from each of the four problem categories to highlight factors which may predispose towards a positive outcome and have implications for the practice of health visiting. Included in the case material are subjects' comments about their respective health problems and these comments complement those reported
in Chapter 10 to give further insight into the effects of health visitor intervention from the consumers' standpoint.

The interventions were examined for subjects who had a problem related to 'weight maintenance' and it was found that all subjects received the same or similar intervention (Appendix 5) and where the intervention varied slightly it did so consistently for all subjects who introduced the same variable into the situation. For example, if subjects were diabetic the dietary discussion centred around the diet sheet and information provided by the hospital and included a discussion of urine analysis and this intervention did not vary between diabetics.

Two subjects were selected who were overweight. Subject one after treatment had gained 13 pounds whereas subject two had lost 11 pounds; both had medical conditions which might have improved if they lost weight. The subject who gained 13 pounds in weight was a diabetic, she had been found at home in a coma nine months before the commencement of the study and in her own words acknowledged that she was 'too big' but nevertheless saw the problem as beyond her own control:

"The doctor at the Royal told me I was a very bad loser one of the worst he had ever known."

The subject interpreted this statement to mean that the doctor had said that it was more difficult for her to lose weight than it was for other people. She had strong medical reasons to lose weight and her records indicated that she had been urged repeatedly to reduce by the diabetic
clinic and her own doctor but without success. It seemed from the beginning that the subject was resigned to the fact that she would not lose weight and commented:

"I've always been big and I can't seem to lose it, I won't have lost any I never do."

This subject had obviously tried to diet in the past and had been unsuccessful, however by the third health visit it seemed as though she lacked incentive to lose weight:

"I know I won't have lost any, I always feel better when I'm big, my mother used to say that too, she said when my arms are big and fat I can get on with the work and that's just me."

It seemed that by being overweight this subject was following in her mother's footsteps and since she had probably been overweight all her life she saw no obvious advantage in becoming slimmer. It may be that this subject gained 13 pounds during the study because reducing weight and therefore food were more in her thoughts, hence she ate more. It might also be considered that her weight gain was a subconscious rebellion against outside interference which also served to prove the point that she was indeed a 'bad loser'.

This subject was worse off after health visitor intervention in terms of her weight but there is some question about whether or not this deterioration can be attributed to health visitor intervention which centred around dietary advice, monthly weighing and a discussion of the benefits to health of reducing weight.

In contrast to subject one, subject two lost 11 pounds in weight and she did not receive more frequent intervention.
She had been urged by her doctor to reduce weight because she suffered from osteo-arthritis and she acknowledged that she was overweight:

"I'm very heavy, I sit about a lot. I take spells when I watch what I eat but I haven't done so for a long time. I will really have to try because I'm overweight."

By the third health visit this subject had lost eight pounds in weight she was encouraged by this and therefore continued dieting. It seems that when dealing with the problem of obesity a positive outcome may be more dependent upon what the subject brings to the situation in terms of past experience, motivation and determination than on the intervention the health visitor provides. In order to reduce weight it is necessary to modify food intake; this has implications for other aspects of daily life such as shopping and cooking and some elderly people may be more willing than others to initiate changes in the habits of a lifetime.

From the category of problems related to mobility two problem types were selected for further study. Firstly the potential problem of 'falling' and secondly the actual problem of 'difficulty or inability to cut toenails'. The interventions for the subjects who experienced the potential problem of falling were the same and no interventions were identified which may have caused a positive or negative outcome. There were variations in interventions but these related to the underlying causes of the problem such as possible ill health states or
environmental hazards. However the subjects who shared the same causal factors also shared the same interventions. One subject experienced dizzy spells and had fallen in the garden; she attributed her dizziness to nosebleeds which had become more common. She was prescribed the standard intervention (Appendix 5) and was advised to visit her doctor, which she did and was subsequently referred to the hospital for treatment which relieved the dizziness and resolved her potential problem. Many older people are anxious not to trouble their doctor unnecessarily, however it is noteworthy that most subjects in the study if advised to visit the doctor as part of their planned intervention did so with the exception of those who suffered from some form of urinary incontinence. The subjects who suffered from urinary incontinence, it is thought, perceived their condition as strictly 'woman's business' which could not with ease be discussed with a doctor whether male or female. However problems related to bowel disorders were readily discussed with the doctor.

A second subject who was at risk from falling suffered from advanced rheumatoid arthritis, she had joint deformities and was unstable on her feet. She had fallen outside of the house four months before her inclusion into the study and recognised that she was unsteady on her feet.

"My legs have been so bad lately I feel I'm going up the road like a cripple."

The subject seemed concerned that people would regard her as a cripple, however this did not stop her going out. She went to church each morning holding on to the arm of a
friend and also went out to social clubs two afternoons each week. The idea of using a walking stick was discussed with the subject as a means of making her more stable on her feet and she was asked to think about whether or not she would like to try using one. At the following visit the suggestion of using a stick was raised again, but was rejected by the subject because she felt that she did not really need one. The subject fell a second time while out with her friend but was still not receptive to the idea of using a stick instead, she restricted her outside activities. It is contended that some older people may not wish to make decisions about whether or not they would like a walking stick, because they may have no previous knowledge on such matters and may subscribe to the view that the professional knows best. Hence if they really needed a stick they may expect not to be asked to decide but instead to be provided with one and directed to use it. Because this subject was asked to decide if she wanted to try using a walking stick it may have conveyed to her the impression that she was not really a 'needy case' and this may have explained her refusal. The subject visited her doctor regularly to obtain tablets for the treatment of her rheumatoid arthritis, she perceived the doctor as an authoritative figure and reported that she followed his instructions; she may have believed that if she really needed a walking stick her doctor would have prescribed one for her and she may then have accepted it rather like she did unpleasant medicine believing it a necessary evil.
All of the subjects who experienced difficulty or who were unable to cut their own toenails were exposed to the same intervention namely the opportunity of referral to a chiropodist. There were slight variations in the problem and hence in the intervention, for example there were subjects who could no longer visit the chiropody clinic and therefore required domiciliary services and there were others who attended a private chiropodist but could no longer afford to pay. The intervention varied with the problem rather than the subject in that subjects with identical problems received the same intervention. It is contended that it is probably the past experience of the subjects and their personality which determine whether or not they will benefit from health visitor intervention in this case by accepting referral to a chiropodist. Two subjects are compared one accepted referral and the other did not, both had medical reasons to sanction their referral. Subject one was a diabetic and subject two suffered from rheumatoid arthritis in its advanced form. The subjects differed in that subject one had a previous experience of having chiropody whereas the other did not, however this difference does not account sufficiently for subject two's refusal to be referred. It is thought that subject two might have been a person who found comfort in the knowledge that there were people in the world worse off than herself. She mentioned twice in conversation that there were people worse than her and it is thought that despite her obvious need she preferred to manage for the time being alone and she seemed to take comfort from the
fact that people worse off than herself would receive the chiropody service, however it was difficult to conceive of anyone worse off than this particular person in terms of physical abilities. It seems that the preventive aspects of the health visitor's work may be compromised to life long coping mechanisms when dealing with elderly people.

The interventions related to problems concerned with sensory function and dentition were examined and the same pattern emerged, however the starting point for intervention varied according to the subject's existing knowledge. For example, if a subject was unable to read newspaper print with her reading glasses on it was suggested that she should visit an optician, if she already knew of an optician then she was not provided with the names and addresses of opticians in the area.

The number of subjects with identical problems sharing the same intervening variables was too small to see whether variation in intervention for example between making an appointment at the dentist for a subject and suggesting that she make her own appointment influenced the outcome.

There was one housebound subject who had uncomfortable dentures, the research assistant made the dental appointment for this subject and also arranged W.R.V.S. transport to take her to and from the dentist and this subject obtained new dentures which she wore and found comfortable. There was only a 25 per cent improvement rate in problems related

Footnote. 1. Women's Royal Voluntary Service.
to dentition (Table 10) and it is contended that subjects may be reluctant to take action. Firstly, because of the effort involved in making an appointment with the dentist either by telephone or in person and secondly in keeping the appointment especially in bad weather conditions. It may be more effective in terms of outcome for health visitors to relieve older people from the effort of making the appointment. If the health visitor makes an appointment for a person the problem to which the appointment relates may take on a greater significance and hence may stand a better chance of improving. This suggestion raises the question of how much a health visitor should do for any client and how much she should expect the client to do for herself.

The observation that the interventions for identical problems were, on paper, the same is not surprising since there was only one person (the researcher) prescribing the intervention and she could only prescribe within the limits of her knowledge. It is apparent from the examples given that the microprocesses of health visiting practice which have not been recorded could be crucial variables and even though the interventions were said to be the same and it is contended that their delivery may have been individualised in terms of phraseology and non-verbal behaviours. Mayers (1973) refers to problems being 'usual' and 'unusual'. A usual problem is a predictable difficulty or concern shared by persons with the same condition and an unusual problem is a special
difficulty experienced by a person at any point in the life cycle. Usual problems are said to have standard interventions and unusual problems are said to have ideosyncratic interventions.

It is contended that the problems identified by the researcher may be considered as usual problems experienced by elderly women; and this may, in part, explain the unplanned standardisation of interventions. The findings from this attempt at process-outcome evaluation are discussed insofar as they are thought to have implication for the practice of health visiting in Chapter 12.
CHAPTER 12
General Discussion, Conclusions and Recommendations
CHAPTER 12

The objective of this chapter is to discuss to what extent the aims of the study stated on page 77 have been met. An attempt is made to highlight the main findings and to relate these to the practice of health visiting. Recommendations for further research are made based on the findings from this study.

It would seem that it has been possible to measure the outcome of focused health visitor intervention with elderly women by identifying actual and potential health problems and estimating whether they improve, stay the same or deteriorate. The distinction between actual and potential problems had a practical use in that it allowed consideration to be taken of the health visitor's preventive function. However, for the purpose of the analysis actual and potential problems were rated in the same way. It was mentioned (Page 104) that Mayers (1978) used the terms 'actual', 'potential' and 'possible' problems as a means of differentiating between problems. The term 'possible' problem was not used in this study because the researcher anticipated that there might be some difficulty in distinguishing between 'potential' and 'possible' problems. In retrospect it is thought that the term 'possible' problem may have a useful application in the practice of health visiting. It is suggested that age cohorts of people share the same 'possible' problems but may nevertheless experience different 'actual' and 'potential' problems. It is thought that it may be
feasible to develop a teaching programme based on the 'possible' health problems of age cohorts, since this approach would complement the life cycle perspective which is encouraged by the Council for the Education and Training of Health Visitors.

Suchman's (1967) goal attainment approach to evaluation formed part of the framework for this study. During the pilot work difficulties were experienced in setting behavioural goals which could be used as outcome criteria (Page 110). Suchman does not advocate behavioural goal setting, but instead an identification of the goals which are being worked towards. The subjective (S) and observation (0) data incorporated in the problem oriented system of recording used in the main study, provided information at each visit from which it was possible to determine whether or not a problem had improved, deteriorated or remained the same. Using the problem oriented approach the overall goal of nursing intervention may be considered simply as an improvement in the problem as opposed to the attainment of a specific behavioural goal. Behavioural goal setting is advocated by King (1971) as a means of evaluating nursing care and it is suggested that patients/clients should be involved in setting goals. The study described here may raise a fundamental question about this approach in relation to the evaluation of nursing care namely: does the attainment of a behavioural goal always signify an improvement in the problem? It would seem that there may be less chance of
error if the problem itself is used as the baseline from which to evaluate the effects of nursing care. It is acknowledged that error may be introduced by an inaccurate definition of the problem but it is thought that an error of this type would almost certainly come to light when recording what the client said about the problem. It is submitted that it may be useful to encourage health visitors to adopt a problem oriented approach to their work which would facilitate the use of problem oriented recording which in turn may provide a means of assessing the effects of their care.

The findings reported in Chapter 6 indicate that the percentage of problems which improved in Group 1 (43%) after focused health visitor intervention was significantly greater than the percentage of problems which improved (19%) in Group 2 after no intervention. It is possible that the pre-test interview may have contributed in some way to increase the number of problems which improved in subjects in Group 2. When subjects were allocated to their respective problem subgroups the percentage of problems which improved after intervention varied between 40-50 per cent, whereas the percentage of problems which improved in the subjects who were not exposed to intervention varied between 14-31 per cent. It would seem that focused health visitor intervention is able to precipitate a significantly greater improvement in subjects' health problems than no intervention. The problems identified were not weighted in any way and no
attempt was made to grade problems in terms of their relative importance either to the subject or to health in general. It is possible that more problems might have improved if the intervention had continued for a longer period; however, when working with elderly subjects it is necessary to consider that the passage of time alone may foster degenerative change which may inhibit problem improvement.

In relation to the practice of health visiting this study indicates that significant improvement in problem status can be achieved with focused health visitor intervention. Some problem types may be more likely to improve than others and Table 10 (Page 151) indicates the percentage of problems in each category which improved. Because there is a lack of information related to problem improvement in other age groups it is not possible to know whether a 40-50 per cent improvement rate is relatively 'good' or 'bad'. This is the only study which has used a problem oriented approach in an attempt to evaluate the effects of health visitor intervention and it is confined to the elderly. Therefore, there is no comparable information available about the effectiveness of health visitor intervention to other age groups. It is reasonable to assume that the potential for effective impact might be used as a criterion for establishing priorities in the health service. The results of this study demonstrate such a potential for the elderly, but there are no means at present of assessing whether a greater or lesser
improvement might be achieved with other age groups. Hence the findings from this study cannot realise their full potential in terms of assisting planners to set priorities until further research is undertaken.

An attempt was made to find out if the effects of focused health visitor intervention lasted beyond the time of the last health visitor visit. The findings indicate that the effects of intervention in terms of problem improvement last for a minimum of approximately 4-5 months (Page 149). This has implications for the practice of health visiting in that it may be possible when working with the elderly to contemplate discharging clients to facilitate the delivery of the service to more people.

It was suggested by Dingwall (1977) that health visitor students did not like visiting elderly people because the visits took too long and this was borne out by the comments of health visitors in the exploratory study. Findings from this study demonstrate that pre-test visits took approximately 20 minutes and subsequent visits by the research assistant took on average, 34 minutes. Clark (1973) categorised 'very short' and 'very long' health visits. Short visits were said to be of less than 15 minutes duration and long visits of more than one hour's duration: more than half the visits in Clark's study lasted longer than 15 minutes and one in eight visits lasted longer than 30 minutes. However, of the visits which lasted over one hour only 10.2 per cent were made to households containing an elderly person. It is contended
that visits to the elderly do not take longer than visits to other age groups. It is thought that health visitors may be under the impression that visits to the elderly take longer because they may experience difficulty in terminating the visit. It is suggested that if health visitors centre their visits to the elderly around the client's health problems then the visit may be more conveniently terminated.

The L.S.I.-A was used as a measure of life satisfaction in an attempt to tap the more elusive aspects of health visiting. It was necessary to accept the Null hypothesis (Page 153) since no significant changes in life satisfaction were identified when a comparison was made before and after intervention. The instrument did appear to be sensitive to changes related to health and this is discussed in Chapter 9. If it is accepted that the L.S.I.-A is a valid and reliable measure, sensitive to changes in health state there are two feasible explanations for the lack of significant change in subjects' L.S.I.-A scores before and after focused health visitor intervention. Firstly it is possible that the changes in affect described by subjects in their own words in Chapter 10 were short lived and hence not detected because of the time delay of between three days to three weeks from the last health visit to the post-test. It is also possible that some subjects may have been disappointed because the 'health visitor' was not to continue visiting and this may have overshadowed the beneficial effects of
the visit. Secondly it is possible that the benefits accrued from the focused health visitor visits were rendered insignificant by the occurrence of other life events. It is noteworthy that changes such as hospitalisation and ill health appeared to be reflected in the subjects L.S.I.-A score. It is suggested that if this instrument is used in future research it should be administered as soon after the 'health visit' as possible and at least within 24 hours.

Subjects were asked their opinions about the effects of the health visitor visits and their comments are discussed in Chapter 10. Subjects were not asked directly about 'intervention' since it was anticipated that the 'visit' rather than the 'intervention' would be foremost in their minds. The majority (95%) of subjects reported that they enjoyed the visits, over half the sample (62%) thought that they had been helped by the visits and approximately half (48%) wished the visits could continue. It would seem that the social aspect of health visiting, that is the opportunity to interact with somebody who is not a relative in the confines of one's own home, is inseparable from the 'intervention' aspect of the visit in that the health visitor's personality and her social presence are concomitant with the advice, guidance and help which she gives. In the context of this study the personality of the health visitor is not an issue since there was only one health visitor/research assistant. Many comments were made by subjects about the personal attributes of the
'health visitor' and it is thought that the clients' feelings about the health visitor (that is whether she is a 'nice' person or not in their view) may influence their opinions about the benefits or otherwise of visits.

In discussions the researcher has had with practising health visitors it has become apparent that some health visitors consider that it is important to build a relationship with each client. In the context of the elderly some health visitors believe that a relationship has to be built before it is possible to ask intimate and necessary questions. The findings from this study suggest that it is not necessary to build a relationship before asking direct and intimate questions. It is thought that a working relationship between a health visitor and her client already exists in the form of predetermined role expectations. It is contended that where clients have had no previous contact with the health visitor the primary or assessment visit may set the pattern for all future visits. Hence, if the first visit is used to obtain direct information about a client's health status it is necessary to ask intimate questions which may as in the case of the study described here be answered by the client in a matter of fact way. It is suggested that the direct approach may be less confusing to the client since from the beginning she is aware that the relationship is on a professional rather than social footing.

In so far as subjects' comments have implications for the
practice of health visiting it would seem that some people might benefit if health visitors could be encouraged to make appointments with them. In the light of the concept described as 'therapeutic anticipation' (Page 171) it may be that health visitors can optimise their effectiveness in terms of perceived client benefit. It became apparent from the comments of a few subjects that it cannot be assumed that all elderly people will benefit from health visitor intervention, and it is thought that a small number of people may even find contact with a health visitor harmful. It is contended that some older people take comfort from the knowledge that there are other old people who are worse off than they themselves and this is referred to as 'the somebody worse than me syndrome'. It is suggested that some individuals may have their usual coping mechanism undermined by routine health visitor intervention. The reason for this is thought to be related to the fact that many old people consider that health visitors are engaged in visiting the ailing, lonely and disabled, therefore, a visit from a health visitor may suggest to an elderly person that she is in need of 'help' and this may raise doubts in her mind about there being people left in the world who are 'worse off' and this in turn may negate her usual coping mechanism and have a deleterious consequence. Bearing in mind a well known dictum of Miss Nightingale's 'the nurse should do the patient no harm' it is thought that it may be possible to attempt to identify the characteristics of persons who may find health visitor intervention harmful;
this might be an area which could be explored in further research.

It was assumed that an increased L.S.I.-A score and an improvement in one or more problems after intervention could be interpreted as 'favourably influencing' the lives of elderly women who live alone at home. The findings from this study indicate that focused health visitor intervention has the potential to improve up to 50 per cent of health problems, however no significant increase in life satisfaction was found using the L.S.I.-A. Nevertheless, subject opinion seemed to imply that the majority of respondents benefitted in some way from health visitor contact. It is contended that focused health visitor intervention directed at subjects' health problems does have the potential to favourably influence the lives of elderly women.

It was thought that it might be possible to develop a predictive model of health care for elderly women in the sample by relating the process of focused health visitor intervention to the outcome. It soon became apparent during the analysis that the intervention prescribed by the researcher was determined by the problem rather than the person and it is contended that it is the interpersonal processes involved in the delivery of health visiting services which individualises otherwise standard interventions. It is thought that the power base for change in health visiting rests with the client. When elderly people are cared for at home they are usually in
control of their own daily activities and environment hence
the opportunity to individualise care in a practical sense
is minimised. In hospital, over and above the inter-
personal aspects of nursing; intervention or care may be
individualised in terms of - bedtime, waking hour, food,
bath time frequency and type. The nursing assessment
may take these individual variations into account.
However, it is doubtful whether prescribed treatments
such as pre-operative teaching, dressings or medication
can be individualised to the same extent. There is
certain information which it is necessary to convey to the
patient/client and specific actions which it is necessary
to carry out; it is these elements of nursing which it is
though are dependent upon the patient's problem, hence
interventions of this type remain constant between patient
with the same problem. Because elderly people living
alone at home control their own lives and environment,
health visitors do not have the same opportunities as
hospital nurses to individualise the care which they give
to clients and this in part explains why the same
interventions were given to people with same problem.
Nevertheless it is thought important to reiterate that
interventions are thought to be individualised in an
unplanned way in terms of the microprocesses inherent in
the delivery of health visitor services.

King (1971) contends that her conceptual frame of
reference can be used by researchers to identify variables
that have some influence on the effectiveness of care
provided by nurses. Figure 4 (Page 60) shows four types of variables which can generate hypotheses for testing in nursing situations. The findings from this study suggest that the 'Type II' or patient variables cited by King exert the most forceful influence on the nursing process and more specifically on the outcome of nursing care.

King states that:

"An individual's perception of his health state is influenced by his age, sex, class, education, family background, knowledge about health, knowledge about available health services and previous experiences with illness." (Page 36)

To an extent, age, sex and social class were controlled for in this study and the other factors mentioned by King can be assumed to be randomly distributed between Group 1 and Group 2. Within each group after intervention there were individuals whose problems improved and individuals whose problems did not improve. It is suggested that personality factors and life coping mechanisms may determine in part whether or not a client accepts and acts upon the advice and guidance of the health visitor. It may be possible to identify the salient variables involved in compliance and it is thought that this may assist the health visitor to predict the outcome of her care.

The 'Type I' or 'nurse variables' described by King as 'potential predictors' and the 'Type III' variable described as 'situational behaviors' were controlled for to an extent in this study in that there were only two nurses involved, namely the researcher and research assistant. However, it should be borne in mind that their prime goal
was evaluating the effects of focused health visitor intervention and not the delivery of care and this may have exerted an unknown bias on the outcome of care in terms of benefits to the client. The 'Type IV' variables described by King in Figure 4 (Page 60) as 'criteria of effectiveness' encompass a broader area than the study described here. The dependent variables used in this study bear some relationship to the criteria suggested by King in that the health assessment was based on an activities of daily living framework. An attempt was made to measure changes in health problems (rather than health status). Life satisfaction was measured and this is thought to have some connection with adjustment (Page 89). Subjects' comments about their problems were sought throughout the study which is in keeping with King's emphasis on patient/client perception. It is contended that King's theory of nursing provides a useful framework in which to conduct research and it is also considered that it may be possible for health visitors to apply King's theory to the practice of health visiting.

**Conclusion**

The aims of the study appear to have been met in that the questions posed (Page 77) have been answered and the hypotheses stated on Page 78 have been tested. King's (1971) frame of reference was thought to be useful and assisted in determining the type of variables which might be instrumental in predicting the outcome of health visitor intervention in the future, namely patient/client
variables.

In line with most research this study raises more questions than it answers and the findings have the potential to assist in determining priorities in the allocation of scarce resources. At a time of scarcity it would seem helpful to know if it is expedient or not to deploy health visitors in visiting elderly people. Because of the current state of nursing knowledge exemplified by the lack of comparative data it is not possible at present to make a value judgment regarding the 40-50 per cent problem improvement rate. In addition the external validity of the study may be described as weak and it is not certain that the findings may be generalised beyond the study population.

Regardless of its limitation it is considered that this study has made a unique contribution to the body of knowledge related to nursing; further it is thought that the study has contributed to the development of method for studying the outcome of nursing and more specifically health visiting practice. Secondly, the findings from the study have provided new information concerning the effectiveness of focused health visitor intervention with older women. It is contended that the findings may provide impetus for further and more sophisticated attempts at the evaluation of nursing practice. It is considered that the findings from this study will have practical application for health visitors, health visitor tutors and their students.
Recommendations

The findings from this study have raised a number of questions which it is considered may be answered by research and five suggestions for further research are listed below:

1. Because of the uncertainty over the external validity of this study it is thought appropriate that a replication of the study should be undertaken with two slight modifications in the research design. It is suggested that there should be three groups instead of two with the third group receiving visits from a 'voluntary worker'. It is also advocated that the L.S.I.-A should be administered at the final health visit rather than at a post-test interview.

2. This study did not provide information about the full effects of health visitor intervention in that no indication was given about problems which were prevented from developing because of intervention. In an attempt to find out more about the long term effects of health visitor intervention it is suggested that a longitudinal study lasting over three or more years might be undertaken using an experimental design.

3. It would appear that there is a lack of information regarding the effects of health visitor intervention with other age groups. It is suggested that research might be undertaken using a similar design to the study described here. It is hoped that a
study of this nature would provide base line information from which it would be possible for administrators to make rational decisions regarding the deployment of health visitors.

4. It is contended that possibly the most promising predictors of the outcome of health visitor intervention are hidden in the clients psycho-social background. It is suggested that the search for these predictors might begin with an identification and analysis of the personality and social class differences in compliance with the advice given by the health visitor. It is thought that this type of qualitative research might take the form of in depth case studies.

5. It has been suggested that the microprocesses of health visitor intervention are probably the way in which interventions in the form of advice and guidance are individualised. It is suggested that research might be undertaken to try and identify the variations in the microprocesses of delivery. It is thought that this research might begin by looking at the health visitor's approach in terms of whether or not she adopts an authoritarian or case-work standpoint and whether or not this varies between clients or between problems.

It is acknowledged that these recommendations may appear rather ambitious, nevertheless, it is submitted that if the findings from small studies are to be useful then they
must form part of a greater whole and it is thought that it may advance the art and science of nursing if future research builds on the foundations of existing research. It is hoped that this study may provide a foundation for further research into the effectiveness of health visitor intervention.
APPENDIXES
APPENDIX 1

Histogram of Population Projections for Scotland
Population Predictions as they relate to Scotland

65+ Age Group Males and Females, Scotland 1974 - 2011 (thousands)

75+ Age Group Males and Females, Scotland 1974 - 2011 (thousands)

85+ Age Group Males and Females, Scotland 1974 - 2011 (thousands)

Source: Williamson (1976)
APPENDIX 2
Statistical Tests
The Null Hypothesis

The statistics used in this study were based almost exclusively on the work of Siegel (1956). When it is necessary to make a decision about differences the null hypothesis ($H_0$) is tested against the alternative hypothesis ($H_1$). $H_1$ constitutes the statement which is accepted if the $H_0$ is rejected. Since the value of $\alpha$ determines the probability level at which $H_0$ is rejected, objectivity dictates that it be set in advance. The $\alpha$ level of significance worked to in this study is .05.

In reporting findings the researcher has indicated the actual probability level associated with the findings to enable the reader to use his own judgment in deciding whether or not the null hypothesis should be rejected. There are two types of error which may be made in relation to a decision about the null hypothesis. The first is described as a type I error and involves rejecting the null hypothesis when in fact it is true. The second is referred to as a type II error and is where the null hypothesis is accepted when it is false. In any statistical inference there is a danger of making one of the two types of errors and an attempt should be made to optimise the balance between the probabilities of making either of these two errors. In achieving this balance the notion of the power function of a test statistic is relevant. Siegel defines the power of a test as the probability of rejecting the null hypothesis when it is false. Power is also related to the expression of the
alternative hypothesis. If the alternative hypothesis has direction a one-tailed test is used. A one-tailed test is more powerful than a two-tailed test. Therefore in the study reported here in an attempt to minimise the likelihood of error the less powerful two-tailed test has been used throughout.

Choosing an Appropriate Test Statistic

Non-parametric statistical tests have been selected because these statistics do not specify conditions about the parameters of the population from which the sample is drawn. The assumptions associated with non-parametric tests (i.e., that the observations are independent and the variables under study have continuity) are fewer and much weaker than those associated with parametric tests and these assumptions are satisfied in this study.

The Wilcoxon Matched Pairs Signed Ranks Test

The Wilcoxon Matched Pairs Signed Ranks Test, a non-parametric test statistic, was used to make a decision about the null hypothesis stated on Page 138.

This test was thought appropriate since the data were scores from two related samples (L.S.I.-A total score before and after focused health visitor intervention and problem improvement scores before and after focused health visitor intervention) and each subject was used as his own control. The significance level was \( \alpha = .05 \) and \( N \) = the number of pairs of data minus any pairs whose difference score \( (d) \) is zero. The sampling distribution under \( H_0 \) is
the value of $T$ or the value of $z$ as computed from formula 5.5. Thus Table G Siegel gives various values of $T$ and their associated level of significance. Table A Siegel gives the probability associated with the occurrence under $H_0$ of values as extreme as the observed $z$. Since the region of the difference has not been predicted a two-tailed region of rejection is used. The region of rejection consists of all values of $z$ (obtained from data with such $T$'s) which are so extreme that the probability associated with their occurrence under $H_0$ is equal to or less than $\alpha = .05$.

Formula 5.5 Siegel (1956) page 81.

\[
z = \frac{T - \frac{N(N + 1)}{4}}{\sqrt{\frac{N(N + 1)(2N + 1)}{24}}}
\]

A summary of the procedure is given in Siegel (Page 83). All calculation related to the test statistic were carried out by computer.
Mann Whitney U Test

The Mann Whitney U test statistic was employed to make a decision about whether or not there was a significant difference in the number of problems which improved between subjects who had been exposed to focused health visitor intervention and those who had not. This test was selected because it is one of the most powerful non-parametric tests and can be used on measurements which are weaker than interval scaling. The test is appropriate for two independent samples (Group 1 and Group 2). The significance level selected was the same as it was for the Wilcoxon Matched Pairs signed Ranks test $\alpha = .05$. The sampling distribution varies with the sample size. For a group with up to 8 subjects the probabilities associated with the occurrence under $H_0$ of values as small as an observed $U$ are given in Table J Siegel. When the larger group $N_2$ is between 9 and 20 significance tests may be made using Table K Siegel. For $N_2$ greater than 20 the probability associated with the occurrence under the $H_0$ of values as extreme as an observed $z$ may be determined by reference to Table A Siegel.

Since $H_1$ does not predict the direction of the difference the region of rejection is two tailed and consists of all values of $z (U)$ which are so extreme that their associated probability under $H_0$ is equal to or less than $\alpha = .05$.

Formula 6.7a Siegel Page 120:

$$U = n_1 n_2 + \frac{n_1 (n_1 + 1)}{2} - R_1$$
Formula 6.9 to find the value of z with correction for ties Siegel Page 124:

\[ z = \sqrt{\frac{n_1 n_2}{2}} \neq \frac{U - \frac{N^3 - N}{12} - T}{\sqrt{\frac{n_1 n_2}{N(N - 1)}}} \]

A summary of the procedure is given in Siegel (Page 126). All calculations related to this test statistic were carried out by computer.

**Correlation Coefficients**

Correlation coefficients are expressed in values ranging from -1 to +1, the nearer a value is to either of these extremes, the closer the relationship is between the two variables. If the value is positive then the relationship is direct as the independent variable increases so does the dependent variable. If the value is negative then the relationship between the variables is inverse; as the independent variable increases, the dependent variable decreases. The nearer the coefficient value is to zero the less the correlation is between the two variables (Reichmann 1961).

The Spearman Rank Correlation Coefficient: \[ r_s \]

The Spearman Rank Correlation Coefficient was selected because it is possibly the most well known statistic for measuring the association between two variables. It is suitable for data which do not assume a normal distribution but requires that both variables be measured on at least an
ordinal scale so that the objects or individuals under study may be ranked in two ordered series.

Formula 9.7 Siegel (1956) Page 204:

\[ r_s = 1 - \frac{6 \sum_{i=1}^{N} d_i^2}{N^3 - N} \]

Formula 9.4 Siegel Page 203 for use when a large proportion of ties are present:

\[ r_s = \frac{\sum x^2 + \sum y^2 - \sum d^2}{\sqrt{\sum x^2 \sum y^2}} \]

It is possible to test the significance of \( r_s \) by setting up a null hypothesis and Table P Siegel gives the critical values of \( r_s \).

A summary of the procedure is given in Siegel (Page 212). The calculation of this statistic was made by computer.
APPENDIX 3

The Interview Schedule, Interpretative Notes and Problem Score Sheet
<table>
<thead>
<tr>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1-3)</td>
</tr>
<tr>
<td>(4)</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>(5-6)</td>
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<td>(7)</td>
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<td>2</td>
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<tr>
<td>(8)</td>
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<td>0</td>
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<tr>
<td>(9-11)</td>
</tr>
<tr>
<td>(12)</td>
</tr>
<tr>
<td>(13-14)</td>
</tr>
</tbody>
</table>

**Client Number**

**Card Number**

**Date of Assessment**

**Group**

Control

Experimental

**Length of Interview (Minutes)**

**Interview**

First

Second

Third

**Age in Years Last Birthday**

**Life Satisfaction Index A (Neugarten et al, modified)**

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>Disagree</td>
<td>Undecided</td>
</tr>
</tbody>
</table>

Check boxes from right to left with a diagonal line, boxes with a X score one point.
1. As I grow older, things seem better than I thought they would be.

2. I have had more chances in life than most of the people I know.

3. This is the dreariest time of my life.

4. I am just as happy now as when I was younger.

5. My life could be happier than it is now.

6. These are the best years of my life.

7. Most of the things I do are boring or monotonous.

8. I expect some interesting and pleasant things to happen to me in the future.
9. The things I do today are as interesting to me as they ever were.

10. I feel old and somewhat tired.

11. As I look back on my life, I am fairly well satisfied.

12. I would not change my past even if I could.

13. I like to take an interest in my appearance.

14. I have made plans for things I'll be doing in a month or a year from now.

15. When I think back over my life, I didn't get most of the important things I wanted.

16. Compared to other people, I get down in the dumps too often.
17. I've got pretty much what I expected out of life.

18. In spite of what people say, the life of the average person is getting worse not better.

TOTAL SCORE LSIA  Boxes with a X score one point

ISSACS WALKEY MENTAL IMPAIRMENT MEASURE
I am going to ask you a few questions to test your memory. You may find some of them rather simple, but I hope you do not mind answering them. (Stroke Study)

1. What is the name of this street? ........................................
2. What day of the week is it today? .....................................
3. What month is it? .........................................................
4. What year is it? ............................................................
5. What age are you? (allow + 1 year error) .........................
6. In what year were you born? ...........................................
7. In what month is your birthday? .....................................
8. What time is it? (allow + 1 hour error) ..........................

TOTAL SCORE ......................................................... (35)

7 - 8 No significant impairment                                    1
5 - 6 Moderate impairment                                          2
1 - 4 Severe impairment                                             3
0 - 3 Complete failure                                             4

(EXCLUDE PERSONS WHO SCORE 6 OR LESS)
### HOUSING

1. Client lives in a:
   - House
   - Bungalow
   - Flat
   - Bedsitter
   - Room in house sharing facilities
   - Sheltered housing
   - OTHER specify

2. Level of entrance to flat/room/house
   - Ground floor
   - First floor
   - Second floor
   - Above

3. Is there a lift in the building?
   - Yes
   - No

4. Do you use the lift?
   - Yes
   - If NO, specify reason
   - No

5. Do you use the stairs?
   - Yes
   - If NO, specify reason
   - No

6. How long have you lived in this neighbourhood?
   - Less than 5 years
   - 5 - 10 years
   - 11 - 20 years
   - Longer

<table>
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<td>(36)</td>
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<tr>
<td>(37)</td>
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<tr>
<td>(38)</td>
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<td></td>
</tr>
<tr>
<td>(40)</td>
<td></td>
</tr>
<tr>
<td>(41)</td>
<td></td>
</tr>
</tbody>
</table>
7. Interviewer's estimate of home conditions

(SEE DEFINITION SHEET)

- Code - Route -
  | Good   | 1 |
  | Fairly good | 2 |
  | Poor    | 3 |

8. How long have you lived by yourself?

- Code - Route -
  | 0-2 years  | 1 |
  | 3-5 years  | 2 |
  | 6-10 years | 3 |
  | 11-15 years| 4 |
  | 16-20 years| 5 |
  | Longer    | 6 |

FINANCES

9. If you had more money, is there anything particular that you would like to spend it on? PROBE

- Code - Route -
  | Yes    | 1 |
  | No     | 2 |

10. Do you have a telephone?

- Code - Route -
  | Yes    | 1 |
  | No     | 2 |

11. Do you use the phone?

- Code - Route -
  | Yes    | 1 |
  | No     | 2 |

12. Are you:

- Code - Route -
  | Single | 1 |
  | Married| 2 |
  | Divorced| 3 |
  | Separated| 4 |
  | Widowed| 5 |
## CHILDREN AND SOCIAL CONTACTS

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<th>No</th>
<th>Code</th>
<th>Route</th>
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</thead>
<tbody>
<tr>
<td>13. Do you have any children?</td>
<td>Yes</td>
<td>No</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2</td>
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<th>Code</th>
<th>Route</th>
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</thead>
<tbody>
<tr>
<td>14. Do you see your children as often as you would like?</td>
<td>Yes</td>
<td>No</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>2</td>
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<table>
<thead>
<tr>
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<th>No</th>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Do you have a special person/friend whom you can confide in, and share your pleasures and disappointments with?</td>
<td>Yes</td>
<td>No</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>2</td>
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<th>Often</th>
<th>Sometimes</th>
<th>Never</th>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Some older people say that they feel lonely - would you say that you feel lonely?</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td></td>
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<td>2</td>
<td>3</td>
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<th>No</th>
<th>Code</th>
<th>Route</th>
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<tbody>
<tr>
<td>17. Are there any things which you particularly enjoy doing?</td>
<td>Yes</td>
<td>No</td>
<td>1</td>
<td></td>
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<td></td>
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Could you tell me what these things are? PROMPT

<table>
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<th>Code</th>
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<tbody>
<tr>
<td>18. Watching TV</td>
<td>Yes</td>
<td>No</td>
<td>1</td>
<td></td>
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<th>Code</th>
<th>Route</th>
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<tbody>
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<td>19. Listening to the radio</td>
<td>Yes</td>
<td>No</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
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<th>No</th>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. Reading/Talking Book</td>
<td>Yes</td>
<td>No</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
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<td>2</td>
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<td>(55)</td>
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</tr>
<tr>
<td>22.</td>
<td>Music (playing an instrument/records)</td>
<td>Yes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>2</td>
<td></td>
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<td>(56)</td>
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<td></td>
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<tr>
<td>22.</td>
<td>Needlework</td>
<td>Yes</td>
<td>1</td>
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<td></td>
<td></td>
<td>No</td>
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<td>(57)</td>
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<td></td>
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</tr>
<tr>
<td>23.</td>
<td>Gardening</td>
<td>Yes</td>
<td>1</td>
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<td></td>
<td></td>
<td>No</td>
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<tr>
<td>(58)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>Walking</td>
<td>Yes</td>
<td>1</td>
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<tr>
<td></td>
<td></td>
<td>No</td>
<td>2</td>
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</tr>
<tr>
<td>(59)</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>OTHER specify</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>(60)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>25.</td>
<td>Are you involved in any social or group activities, e.g. social club, women's meeting, OAP club, lunch club, etc?</td>
<td>Yes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>2</td>
<td></td>
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<tr>
<td>(61)</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>26.</td>
<td>Are you able to go to the meetings as often as you would like?</td>
<td>Yes</td>
<td>1</td>
<td></td>
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<tr>
<td></td>
<td>If NO specify reason</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>(62)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>Do you belong to a church or other religious organisation?</td>
<td>Yes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
28. **Are you able to go to the service as often as you would like?**
   - Yes
   - No

   **If NO specify reason**

   **HEALTH**

29. **Would you say that your health is generally:**
   - Very good
   - Good
   - Fair
   - Poor
   - OTHER specify

30. **Is there anybody you can contact should you be unwell?**
   - Yes
   - No

31. **Who would that be?**
   - Neighbour
   - Friend
   - Daughter/son
   - Other relative
   - Passer-by
   - OTHER specify

32. **How would you contact them if you could not go out?**
   - Knock on wall/ceiling/floor
   - Shout
   - Phone
   - Somebody always visits
   - OTHER specify

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(63)</td>
<td>1</td>
</tr>
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<td>(64)</td>
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<td>2</td>
</tr>
<tr>
<td>(66)</td>
<td>Q.33</td>
</tr>
<tr>
<td>(67)</td>
<td></td>
</tr>
</tbody>
</table>
### PERFORMANCE IN ACTIVITIES OF DAILY LIVING

<table>
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<tbody>
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<td>(68)</td>
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<tr>
<td>1</td>
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</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

#### 33. Provision of meals (modified Akhtar et al)

- Do you prepare all your own meals?
- Do you prepare some, but not all your own meals?
- Do you rely on others to prepare all your meals for you?

#### 34. Do you receive meals on wheels?

- Not at all
- Once a week
- Twice a week
- Three times a week
- More often
- OTHER specify

#### 35. Do you have any difficulty cutting food on the plate, for example meat?

- Yes
- No

#### 36. Do you use any special cutlery?

- Yes
- No

#### 37. Diet history:

What did you have to eat and drink yesterday?

- Early morning
- Breakfast
- Mid-morning
- Lunch
- Mid-afternoon
Evening meal/tea
Late snack
OTHER

**DENTITION**

38. Do you have:  
   - Your own teeth  
   - Your own teeth/dentures  
   - Dentures only  
   - Edentulous

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.42</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0.42</td>
</tr>
</tbody>
</table>

39. Are your dentures:  
   - Comfortable  
   - Uncomfortable

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.41</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

40. Are they uncomfortable:  
   - On the top  
   - On the bottom  
   - On both

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

41. Are you able to eat what you like with your dentures in?  
   - Yes  
   - No

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

42. Check tongue:  
   - Pink and moist  
   - Coated and moist  
   - Coated and dry  
   - Pink and dry  
   - OTHER specify

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>
43. Check weight: (Interviewer's Estimate)  
Appears overweight for body build  
Appears correct weight for body build  
Appears underweight for body build  

44. Does the client see her weight in either direction as a problem?  
Yes  
No  

45. Shopping:  
Do you do all your own shopping?  
Do you have assistance with the heavy shopping?  
Do you rely on other people to do all your shopping?  

46. Housework:  
Do you do all your own housework including personal and household laundry?  
Do you require assistance with heavy housework and household laundry?  
Do you require assistance with all household tasks and laundry?  

If subject has already mentioned home help code YES  

47. Do you have a home help?  
Yes  
No  

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(77)</td>
<td>1</td>
</tr>
<tr>
<td>(78)</td>
<td>2</td>
</tr>
<tr>
<td>(79)</td>
<td>3</td>
</tr>
<tr>
<td>(80)</td>
<td>TAKE NEW CARD and duplicate Cols. 1-3</td>
</tr>
<tr>
<td>(4)</td>
<td>2</td>
</tr>
<tr>
<td>(5)</td>
<td>Q.49</td>
</tr>
</tbody>
</table>
48. How many hours a week does she come?

HEATING

49. Check how rooms feels:
   (TO INTERVIEWER)
   Hot
   Just right
   Cold

50. Does the room feel:
   (TO SUBJECT)
   Hot
   Just right
   Cold

51. Do you use any heating in the bedroom during the cold weather?
   Yes
   No

52. Why don't you use heating?
   Not cold
   Too expensive
   Use electric blanket
   OTHER specify

53. Subject's hand feel to interview:
   (TOUCH HAND SOCIALLY)
   Hot
   Just right
   Cold

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(6-7)</td>
<td></td>
</tr>
<tr>
<td>(8)</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
</tr>
<tr>
<td>(9)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>(10)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>(11)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0.53</td>
</tr>
<tr>
<td>(12)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>(13)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
**MOBILITY** (Akthar et al, modified)

54. Are you:

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(14)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2</td>
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<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Fully mobile inside and outside of the house without a walking stick/aid
Fully mobile inside and outside of the house with a walking stick/aid
Mobile inside and outside the house with difficulty
Mobile inside the house with no assistance
Mobile inside the house with walking stick/aid, no personal assistance
Mobile inside the house with personal assistance.

OTHER specify

Specify difficulty in mobility in 3.

**SELF CARE**

55. Bathing: Do you get in and out of the bath/shower by yourself?  

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(15)</td>
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</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Yes
No

56. Do you have any aids to help you, such as a bath seat, rail, mat, etc?

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(16)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Yes
No

If YES specify.

57. In your everyday personal washing and grooming, do you need any assistance?

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(17)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Yes
No

58. Who helps you?

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(18)</td>
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<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Nobody
Nurse/Auxiliary
Friend
Relative
OTHER specify
59. Dressing: Some older people say that they have difficulty in dressing themselves; for example, they may not be able to fasten small buttons or put their shoes on. Do you have any difficulty getting dressed?

CHECK. | Code | Route |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No difficulty, able to dress self completely</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Difficulty with shoes and/or buttons only</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Needs assistance to dress</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

60. Bladder Function.

Some older people say that they have difficulty getting to the toilet in time when they want to pass water, or they sometimes pass water unexpectedly when they cough or laugh. Do you have any difficulty of this sort? Ask Subject to explain difficulty.

CHECK. | Code | Route |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Has full control of bladder function</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Good control, occasional accident or stress incontinence</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Nocturnal incontinence</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Urinary incontinence day and night</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

61. INTERVIEWER'S IMPRESSION:

Is there any evidence to suggest that the subject may have difficulty getting to the toilet?

Yes | 1 | |
No | 2 | |

62. Do you wear or use any protective pads or clothing, e.g. special underwear, sanitary towels?

Yes | 1 | |
No | 2 | |
### SLEEP

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>63. Bowel Function: Are you constipated, by that I mean when you have your bowels opened do you pass dry hard motions?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Often</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sometimes</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>64. Do you do anything to prevent or treat constipation? PROBE.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diet</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Laxatives</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Diet/laxatives</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Nothing</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>OTHER</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>65. Some older people say that they have difficulty in controlling their bowels, and sometimes are unable to reach the toilet in time and as a result soil themselves. Do you have any difficulties of this sort? (Ask Subject to explain the difficulty). CHECK.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has full control over bowel function</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Occasionally incontinent of faeces</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>No control over bowels</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>66. How did you sleep last night?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very well</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Fairly well</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Poorly</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OTHER</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>67. Did you get up in the night for any reason?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
68. What did you take to help you sleep?
   - Nothing
   - Alcohol
   - Milk drink
   - Tablets
   - OTHER

69. Would you say that last night was a fairly typical night for you?
   - Yes
   - No

MEDICATION

70. Do you take any tablets/medicine prescribed by your Doctor or Hospital at the moment?
   - Yes
   - No

71. Could you tell me what the tablets/medicines are?

   LIST:
72. Do you ever have trouble remembering which tablets/medicines to take?  

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(31)</td>
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</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

73. Do you cut your own toe nails?  

<table>
<thead>
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<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(32)</td>
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<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

74. Who cuts them for you?  

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(33)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Nobody</td>
</tr>
<tr>
<td>2</td>
<td>Chiropodist</td>
</tr>
<tr>
<td>3</td>
<td>Relative/friend</td>
</tr>
<tr>
<td>4</td>
<td>Nurse</td>
</tr>
<tr>
<td>7</td>
<td>OTHER</td>
</tr>
</tbody>
</table>

**VISION**

75. Give Subject newspaper size print to read (with glasses if worn). Can the Subject read newspaper print?  

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(34)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Easily</td>
</tr>
<tr>
<td>2</td>
<td>With difficulty</td>
</tr>
<tr>
<td>3</td>
<td>Not at all</td>
</tr>
<tr>
<td>4</td>
<td>Illiterate</td>
</tr>
</tbody>
</table>

76. Are you registered as blind or partially sighted?  

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(35)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Yes - blind</td>
</tr>
<tr>
<td>3</td>
<td>Yes - partially sighted</td>
</tr>
</tbody>
</table>

77. Have you had your eyesight tested in the last two years?  

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>(36)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
</tr>
</tbody>
</table>
HEARING

78. Is the subject wearing a hearing aid?  
   Yes  
   No

79. Do you have a hearing aid which you do not wear?  
   Yes  
   No
   If YES specify reason not worn.

80. Subject can hear (with aid if worn)  
   Normal spoken voice  
   Raised spoken voice  
   Difficulty hearing raised voice

81. Have you had your hearing tested in the last two years?  
   Yes  
   No

BALANCE

82. Do you feel giddy/dizzy when you get up quickly from the chair or bed?  
   Often  
   Sometimes  
   Never

83. Can you bend to pick an object off the floor?  
   Easily  
   With difficulty  
   Not at all
84. Have you had a fall in the last six months?  
<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
</tr>
</tbody>
</table>

85. Where did you fall?  
- At home
- Outside
- Friend's home
- OTHER specify

<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>At home</td>
</tr>
<tr>
<td>2</td>
<td>Outside</td>
</tr>
<tr>
<td>3</td>
<td>Friend's home</td>
</tr>
<tr>
<td>7</td>
<td>OTHER specify</td>
</tr>
</tbody>
</table>

86. Client cried during interview?  
<table>
<thead>
<tr>
<th>Code</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
</tr>
</tbody>
</table>

I would like to thank you very much for your help. I have asked you a lot of questions, now is there anything you would like to ask me:
The aim of this interview schedule is to establish a data base from which subjects' problems may be identified and appropriate intervention planned. Pages 1 - 4 of the schedule contain a modified version of the LSI - A Neugarten et al (1961) and a shortened version of the Isaac Walkley (1964) mental impairment measure. Where the interview schedule draws upon the work of others this is acknowledged. Most of the questions contained in the instrument are self explanatory and the following definitions will, it is hoped, clarify questions which do not fall into this category.

Definitions:

Question 1, page 5: - Housing. A house is a single dwelling place on more than one level with the entrance at the ground level, occupied by one person or family. A bungalow is a single dwelling place on one level with the entrance at the ground level occupied by one person or family. A flat is a self-contained dwelling on one level in a building composed of other, like dwellings, i.e. tenement. A bedsitter is one room in a dwelling house used for living, cooking and sleeping. Sheltered housing. A bungalow or flat purpose built for elderly people with an internal intercom or 'phone to contact a warden or other person.

Question 7, page 6: - Interviewer's estimate of home conditions.
Good. The subject has the use of an inside W.C., bath or shower and has hot running water which can be heated independently of a coal fire.
Fairly good. The subject has the use of an inside W.C. and may or may not have a bath or shower. The hot water supply is dependent on a coal fire.
Poor. The subject has the use of an outside W.C., no bath or shower and only cold running water.

Question 47, page 12. Home help. The term refers only to persons employed by the social services department and deployed under the title 'home help'. It does not refer to help subjects may obtain from relatives or private arrangements.

Question 49, page 13. Room temperature. It was thought unnecessary to use a thermometer to record room temperature since one usually adjusts the heating and ventilation to suit how one feels and not the thermometer.
Question 53, page 13. "Subject's hands felt". Elderly people are known to experience poor peripheral circulation. Subjects with cold extremeties can be said to be at risk from burning themselves on hot water bottles or by sitting too close to the fire.

Coding:

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Where a question has more than one column the appropriate number should be doubled. For example, Question 48, page 13: "How many hours a week does the home help come?" Col.(6 - 7) is interpreted as not applicable.
Subject's Opinions Vis a Vis Health Visitor Visits

1. Did you enjoy the health visitor visiting you or not? Probe why, what

2. Do you feel that it helped you to have a health visitor visiting you, or didn't it help you? Probe How, why, what.
3. Do you think that it is a good idea for health visitors to visit elderly people or not? Probe why.

4. Have you met many health visitors in the past? Probe where, when.
5. If it were possible would you like a health visitor to continue visiting you or not? Probe why.
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APPENDIX 4

Letters and Standard Explanation of the Study
Dear Colleague,

The questionnaire which you have been given is to be used as an assessment tool in a research project to assist in identifying the health problems of elderly people.

It would be most useful if you could use this questionnaire beginning on page 4 to assess an elderly female client, 70 years of age or over, who lives alone; and who if possible you have not visited in the last twelve months. Please could you comment on the appropriateness of the questions on the questionnaire and its potential usefulness for the health visitor as an aid to identifying the problems of the elderly. If you find that there are any areas which you feel have not been adequately covered, your suggestions for improvement would be most welcome.

Please could you return the questionnaire and comments to me either via Miss. at the College or by sending it to the above address.

Thank you for your help.

Yours sincerely,

Karen A. Luker
SHHD Research Training Fellow
9th November 1978

Dear Colleague

Thank you for your help in administering the questionnaire related to the elderly and also for your useful comments on how the instrument might be improved.

If you have not had time to complete the questionnaire, or have completed it but not yet returned it to me, perhaps you could give it to your student to hand in at College on or by the 20th November.

Thank you for your help.

Yours sincerely

Karen Luker
SHHD Research Training Fellow
Dear

A Miss Karen Luker may be calling on you in the next few weeks since she is visiting most of our older patients. Miss Luker is from the Nursing Research Unit at Edinburgh University and is interested in talking to older people about their health and life in general. I suggested that you may be willing to help her. If you are out when she calls, she will leave a card.

Yours sincerely

[Signature]

Dr.
"Good morning/afternoon Mrs/Miss ______. My name is Karen Luker and I am from the Nursing Research Unit at the University. I believe that your doctor wrote to you explaining that I may be calling on you, (at this point the researcher was usually invited in). Doctor ______ suggested that you may be able to help us. We at the Nursing Research Unit are interested in the health of older people who live alone and we are carrying out a study to see if health visitors can help older people with any problems or worries which they might have. In order to get a general picture about older people we would like to include some people with a lot of problems and some with none at all.

This study will carry on for about a year. If you feel that you can help it will mean me asking you some questions about your health and life in general on three separate occasions and a health visitor, Mrs Allan, visiting you four times to try and help you with any problems or worries which you might have. If you live alone, and would like to help us and if it is convenient, I will ask you the first lot of questions today and then Mrs Allan, the health visitor, will visit you four times between now and May/June and then I will call and ask you the same questions as today. You will not see Mrs Allan after May/June but I will call again in September/October and ask you the same questions all over again. Now that I have explained the study to you do you think that you will be able to help?"

This explanation of the study was suitable for subjects allocated to Group 1 and was modified for subjects in Group 2.
Dear

You may remember when I called in January/February that we arranged to meet again. I am writing to confirm that I will be calling to see you on ......................................... at approximately ..............

I look forward to seeing you then.

Thank you for your help.

Yours sincerely

Karen A Luker
SHHD Research Training Fellow
Dear

You may remember when I called in May/June that we arranged to meet again. I am writing to confirm that I will be calling to see you on............................................at approximately ......................I look forward to seeing you then.

Thank you for your help.

Yours sincerely,

KAREN A. LUKER,
SHHD Research Training Fellow
Dear

Thank you very much for participating in our project concerning the health of older people. The project has now finished which means that we will not be visiting you again. If in the future you feel that you need the services of a health visitor she may be contacted through your family doctor.

Thank you for your help.

Yours sincerely,

Karen A. Luker
APPENDIX 5

List of Interventions for each Problem Category
Interventions for Problems Related to Weight Maintenance

1. Discuss meal planning and find out how much client knows about foods high in carbohydrate, protein, etc.
2. Make a list of foods to be avoided.
3. Discuss items client eats between meals and amount of sugar in tea/porridge, etc.
4. Advise client to cut out (if possible) eating between meals.
5. Suggest meet friend for a main meal not a snack.
6. Plan with client menu for a week taking into account foods in season.
7. If it is essential that client eat between meals, suggest low carbohydrate foods.
8. Weigh and plot weight on graph monthly - leave graph with client.
9. Discuss slimming clinic and diet and encourage to follow clinic advice.
10. Check medical records to see if 'Ponderax' prescribed.
11. Discuss advantages of losing weight to heart and health in general.
12. Discuss exercise as an aid to dieting.
13. Discuss different ways of cooking food to reduce the calorie intake.
14. Discuss diet client was on while in hospital.
15. Discuss urinanalysis and ask client to show you book in which she writes sugar level.
16. Discuss foods client usually buys for week.
17. Suggest client visits doctors for vitamin pills.
18. Discuss possibility of client having meals on wheels.
19. Discuss possibility of client sticking to diet she used to have.
20. Provide list of essential foods which should be eaten daily.
21. Suggest Carnation instant breakfast food or Complan if client does not feel like cooking.
**Intervention for Problems Related to Mobility**

1. **Enquire if W.R.V.S. interested in taking elderly people out.**
2. Discuss action with client and if agreeable arrange a meeting with W.R.V.S. volunteer.
3. Arrange for voluntary driver.
4. Discuss possibility of rehousing and allow client to talk about the type of house which she would like to live in.
5. Intervention as for weight loss.
6. Ask client to demonstrate walking with stick.
7. Explain advantage of using stick "stick as a steadier".
8. Encourage client to view stick in a positive light and use it when she goes out.
9. Phone vicarage to see if priest would be willing to visit client and discuss action with client.
10. Inform client of procedure for obtaining chiropody.
11. Discuss possible waiting time.
12. Encourage client to visit doctor to get letter of referral to chiropody clinic.
14. Inform client of phone number of clinic in case she needs to cancel appointment for any reason.
15. Discuss availability of private chiropody and possible cost of treatment.
16. Discuss outcome of contact with chiropodist.
17. Discuss with client need for diabetics to take special care of feet; encourage client to visit the chiropodist and discourage her from cutting her own toenails.
18. Check medical records for history of falls or 'dizzy turns'.
19. Suggest client visits doctor to discuss 'dizzy turns'.
20. Await doctor's diagnosis and reinforce his instructions.
21. Enquire about further falls.
22. Encourage client to return to doctor and to stress falls occur because dizzy.

23. Suggest client may benefit from using a stick discuss the acceptability of this.

24. Check if stick the correct length.

25. Check if client found stick helpful.

26. Suggest client sits on edge of bed before getting up in the morning.

27. Explain how sudden change of position can make people dizzy.

28. Suggest client wears shoes when she gets up, not slippers.

29. Suggest client uses her Teasmade in the night to reduce risk of falling in kitchen.

30. Suggest client uses a trolley to push things through from kitchen to living room.

31. Discuss home safety and need for a chair in the kitchen to sit on when dizzy.

32. Discuss acceptability of commode.

33. Discuss with client how she gets up off the floor after a fall. Is she able to get up?

34. Demonstrate how client might more easily get up off the floor.

35. If willing, ask client to demonstrate how she gets up off the floor.

36. Advise to hold on to work surface in kitchen when reaching for things from cupboard or when bending.

37. Encourage to use Zimmer frame even when in the house.

38. Encourage to go out of doors when weather better.
Interventions for Problems Related to Dentition

1. Discuss benefit of going to dentist regularly to preserve own teeth.
2. Suggest client might visit a dentist for dental check-up.
3. Explain changes which have occurred in dentistry vis a vis anaesthetic and drilling now relatively painless.
4. Discuss and provide names and addresses of local dentists; suggest client might go with relative or friend.
5. Reassure would not need to have teeth out at first visit.
6. Ask client to put new teeth in and explain how much better she looks with new teeth.
7. If client unreceptive to trying new teeth suggest dental fixitive for old ones and demonstrate how to use.
8. If teeth seem hard to roof of mouth suggest comfort pads and explain the need to break teeth in gradually rather like shoes.
9. Discuss financial aspect of new teeth with client.
10. If client feels she can afford dentures supply with names and addresses of dentists in area.
12. Arrange U.R.U.S. transport when you have made appointment.
13. Visit on morning of appointment to give encouragement.
14. Suggest client wears dentures for 1 hour in morning and 1 hour in afternoon and increase until in all day.
15. Suggest to client that if she is dissatisfied with dentist to think about going to dental hospital instead.
16. Phone dental hospital to enquire about waiting list; inform client of possible wait.
17. Encourage client to make appointment at dental hospital.
18. Suggest 'Snug' as interim measure if amenable; fit 'Snug' to teeth.
19. Fit 'Snug' to teeth.
Interventions for Problems Related to Sensory Functions

1. Discuss possibility of client visiting an optician.

2. Find out names, addresses and telephone numbers of opticians in the area and assist client to choose and encourage to make an appointment.

3. Discuss cost of new glasses and financial help available.

4. Check with client if appointment (a) made, (b) kept and discuss outcome of visit.

5. Discuss visit to hospital and eye specialist's findings.

6. Explain to client possible need to get used to new glasses and that many people experience some difficulty.

7. Suggest client wears glasses ½ an hour in morning and ½ an hour in the evening and to increase the length of time to one hour and so on until they are worn all the time.

8. Check medical records for information about eye condition.

9. Reinforce doctor's instructions and advice.

10. Allow client to talk about visual difficulties.

11. Discuss possibility of client using a magnifying glass, demonstrate how to use it.

12. Discuss slight modifications to home to make it a safer environment, i.e., removal of small mats and trailing wires.

13. Find out about availability of large print book at library and if there is a scheme whereby books can be sent to the client.

14. Discuss benefits of being registered as partially-sighted and encourage client to give consent to this next time she visits the hospital.

15. When treatment for eye condition discontinued, continue to provide client with the opportunity to discuss problem.
16. Discuss hearing loss with client, i.e., when she finds it most noticeable?

17. Discuss benefits of wearing a hearing aid.

18. Suggest client might visit G.P. to have ears examined with a view to syringing if necessary.

19. Discuss possibility of going for a hearing test at the hospital.

20. Discuss outcome of hospital visit.

21. Explain that it takes time to get used to new hearing aid.

22. Ask client to demonstrate adjusting the aid, discuss general maintenance of aid with client, i.e., battery changing.

23. Encourage client to visit hearing clinic to get aid serviced.

24. Make arrangements with hearing clinic for batteries to be sent to client.

25. Explain to client procedure for getting batteries sent, i.e., client will need to send 'battery book' to hearing clinic when she has 2 or 3 batteries left and new batteries will arrive in about 5 days.
Interventions for Problems Related to Elimination.

1. Encourage client to visit doctor to obtain treatment.
2. Encourage client to finish course of treatment.
3. Check medical records for result of urine test.
4. Inform client of results of urine test.
5. Discuss frequency of micturition and incontinence in terms of pairs pants worn in a day.
6. Discuss incontinence with G.P. (if client willing).
7. Discuss possibility of Kanga pants with client if agreeable; measure hips and waist.
8. Explain to client how to use Kanga pads and pants.
9. Discuss disposal of used pads; suggest burning on fire in the winter.
10. Enquire about soreness in vulva region.
11. Discuss possibility of client trying incontinence pads at night; if agreeable give her some pads to try.
12. Discuss possibility of client using bedpan before gets up in the morning.
13. Discuss possibility of commode in bedroom.
14. Discuss danger inherent in restricting fluid as a means of controlling urine problems.
15. Discuss how many pads client uses and get client to estimate how many she will need in a week.
17. Explain how bran works.
18. Discuss usual diet and explain how bran might best be added.
19. Discuss the positive benefits of a natural laxative.
20. Discuss frequency and consistency of bowel action.
21. Check medical records re - investigations for bowel problems.
22. Discuss hospital admission and whether it has improved bowel problem.
23. Suggest client visits G.P. to request a mild laxative.
Interventions for Problems Related to Loneliness

1. Provide an opportunity for client to talk about her feelings.

2. Allow client to cry; provide support such as "It sometimes makes people feel better when they have a good cry". "I don't mind if you cry, it must be very sad to lose such a good friend".

3. Discuss when client feels most lonely.

4. Check medical records vis a vis history of depression "nerves".

5. Discuss what client thinks would improve her situation.

6. Discuss possibility of client joining club or guild, etc.

7. Suggest getting somebody from club to visit to explain what goes on.

8. Give client a letter of introduction to club organiser.


10. Discuss client visiting doctor and explaining her feelings to him.

11. Suggest voluntary visitor if acceptable make arrangements.

12. Discuss hobbies and encourage client to take an interest in matters other than "health".
Interventions for Problems Related to Carrying out Personal and Household Tasks

1. Discuss with client suitability of bath aids, i.e., rails, non-slip mat, etc.
2. Contact O.T. Department re bath aids, shower aids.
3. Explain procedures to client and discuss possible waiting time.
4. Check medical records re - loss of use in arms and legs?
5. Contact social services re - volunteer or paid help to clean 'stair'.
6. Encourage client to exercise arm and demonstrate exercises.
7. Discuss possibility of client using adapted knife/ fork.
9. Check if aid delivered/fitted.
10. Demonstrate use of aid.
11. Supervise client getting in and out of the bath with clothes on.
Interventions for Problems Related to Rest

1. Allow client to talk about her sleeping habits or how she feels when she can't sleep.

2. Consult medical records re history of insomnia.

3. Suggest client change her bedtime and bedtime drink to a small glass of sherry or brandy in water.

4. Suggest client may try reading until she feels tired.

5. Explain how older people need less sleep than they did when they were younger.

6. Suggest taking outdoor exercise if possible each day.

7. If all plans fail, suggest client visit doctor for mild sedative.

8. Suggest client takes no fluid after 7p.m. and goes to bed at usual time.
Interventions for Problems Related to Medication

1. Ask client to show you tablets/medicines and ask her to explain when she takes them.

2. Discuss possibility of using an egg box or similar box and label, Morning and Night or with times tablets to be taken and suggest client puts tablets out at one set time each day, i.e., bedtime or breakfast time.

3. Consult medical records to see if there is any indication of client doing without tablets before.

4. Ask if client has collected new prescription.

5. Discuss possibility of client collecting new prescription while she still has a few days' supply of tablets left.

6. Take pulse.

7. Explain the importance of the tablets and what each one is for.

8. Ask client to tell you what each tablet is for.

9. Check medical records to see which tablets current and correct dosage.

10. Discuss medication with doctor.
APPENDIX 6

Published Papers Arising from the Study
Goal attainment

A possible model for assessing the work of the health visitor

Karen A. Luker, BNurs, SRN, HVCert, NDNCert

SOME health visitors believe that the effects of health visiting are too subtle, intangible or elusive to be realistically assessed. If this were so there would be little reason for health visitors to offer a service, since no one, including the client, would be aware of the effects. Intangible or elusive changes can hardly be worthwhile goals or a reason for continuing professional practice.

Moreover in the context of the present economic climate it would seem urgent to assess the care given by health visitors in order to demonstrate its effectiveness and to justify the provision of the service.

Health visitors have been content to avoid studying the process of health visiting in terms of outcome and effectiveness by dismissing it as methodologically impractical. Researchers have focused on describing health visiting in terms of what health visitors say they do, Clark (1973), in her study of health visitors in Berkshire, decided against the method of non-participant observation on the premise that a third person would distort the interaction between the health visitor and client.

A good deal of the health visitor's work is carried out inside the home and as such is invisible to others. Dingwall (1977) observed that there were strong boundaries between the work of individual health visitor which were sanctioned by the concept of privacy. This privacy allows scope for variation in practice, the only public area of a health visitor's work being her records.

The skills and expertise used by health visitors in their work have not been well defined: 'A good detail is written on what health visitors should do but little on how they should do it, so there is no clear objective standard by which judgement of their work performance can be made.' Hunt (1972).

It would seem that the evaluation of intervention for individual clients in terms of goal attainment might prove to be a useful way of looking at the outcome and effectiveness of health visiting. There are inherent weaknesses in using this method in that evidence of a change in client behaviour related to health is not necessarily evidence that the change occurred because of the health visiting service; similarly, evidence of no change cannot be taken as a demonstration that services had no effect as they may, for example, have prevented a deterioration.

Despite the limitations of the goal attainment model it is contended that it would be possible, using this method, to learn more about the outcomes of health visitor intervention and the contribution the health visiting service makes to the health and welfare of individuals.

An evaluative study of the work of the health visitor with the elderly is currently being planned. The design, though in its early stages of development, will be experimental and will utilise the individual goal attainment model. The Life Satisfaction Index (Neugarten et al, 1961) will be used as one of several outcome criteria. Observation with careful recording using a problem-oriented approach will be the method of date collection and Kratz's (1974) Continuum of Care Model (Fig 1) will form the initial frame of reference.

The study

In preparation for this study a small exploratory investigation was undertaken with the following objectives:

1. To explore the possibility of using non-participant observation as a means of identifying the goal content of health visiting.
2. To attempt to determine the criteria by which health visitors evaluate their work.
3. To observe how the elderly fit into the case load of the health visitor and to establish how the health visitor perceives her work with this age group.
4. To broaden the researcher's perspective on health visiting and to familiarise her with the health visiting service in Scotland.

The study area was chosen on the basis of the following criteria:

1. A willingness to be involved in the research.
2. Travelling distance from the researcher's base.
3. An area with general practitioner attachment schemes.
4. Health visitors involved in visiting the elderly.

The health visitor service delivered in any area is to a large extent directed by local policy and priorities and the study area was no exception. The health visitors were involved in using a computer-based child screening programme and in initiating a similar programme for the elderly. The computer system determined to a certain extent the minimal interval between visits to families with children under five years of age.

It has been contended that it is unrealistic to observe the work of the health visitor because the presence of an observer might influence the interaction between the health visitor and client (Clark, 1973). However, in this study clients and health visitors appeared to be unperturbed by the presence of an observer.

During the observations a wide range of topics were covered, some of which one might have expected to be embarrassing to discuss in the presence of an unknown observer; and there appeared to be no inhibition in the health visitor-client interaction.

This might be accounted for in several ways:
1. Health visitors and clients are now used to the presence of students on home visits since in Scotland community experience is an essential part of registered general nurse training.
2. Health visitors may have chosen to visit clients whom they felt would be uninhibited by the presence of a third person.
3. Health visitors may have avoided topics which were known to cause embarrassment to some clients.

Table 1 shows the breakdown of visits observed.

Observations

Clearly this exploratory study was not intended to produce generalisable findings. However, using Kratz's frame of reference, an observation was made which will be pursued further. It suggested that health visitors may structure their visits according to the age group of the client.
The most highly structured and focused visits were observed in the families with children of six months of age and under. The health visitor appeared to have a plan which usually centred around diet, weight, immunisation and development. The families were also given opportunity to discuss their current problems in relation to child care. It was apparent that health visitors gave advice from a knowledge base.

In the case of feeding the government recommendations on infant feeding were often quoted, and the benefits and risks of pertussis vaccination discussed from an informed stand point.

The children over six months but under five years of age did not receive such highly structured visiting. The health visitor had a plan but it was not detailed and centred mainly on the acquisition of developmental milestones; again evidence of a knowledge base was apparent in the advice given regarding developmental progress.

Only 14 visits were observed in the broad category of persons over five years but under 60 years of age; these visits seemed less structured than the others, the health visitor worked more to the client’s plan rather than her own; the focus of the visit was sometimes provided by the medical diagnosis of the patient and discussion would centre around this.

Health visitors were asked to visit at least two elderly persons and a total of 21 visits to the elderly were observed. These visits appeared to lack any form of structure, the focus of the visit was provided by the elderly person and rarely centred on health.

The elderly

In accordance with the third objective of the study the health visitors were asked their opinions on visiting the elderly. They were unanimous in their view that the elderly was an ‘at risk’ group and should receive some priority. They drew attention to the government recommendations that health visitors should visit elderly persons, but maintained that if this was to materialise then they needed more health visitors or at the very least more registered nurses to visit the elderly.

The health visitors seemed not to regard the elderly as part of their case load in the same way as they did the children, and in one instance the records referring to the elderly were kept in a separate place.

It was mentioned that during school holidays the school nurses were employed in visiting the elderly. Some health visitors were in favour of this practice, others did not like the arrangement because the nurses had a tendency to promise services which necessitated the health visitor visiting after all to assess the situation. The health visitors expressed the view that without ‘back up services’ such as meals on wheels and chiropody visiting for the elderly was irrelevant.

The current policy was to visit the elderly after an event which necessitated them consulting a general practitioner from whom most referrals came. When asked about the feasibility of a specialist health visitor service for the elderly, the health visitors all considered that it would be a depressing job and that it would be difficult to find health visitors willing to do it. They stated that if everyone over 75 years of age were to be visited on a regular basis a considerable number of such specialised health visitors would be needed, as visits to the elderly took longer. The comment by one responder

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<td>4</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>9</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Total 34 14 21 8 23

Column 5 refers to visits health visitors made to doctors’ surgeries, nursery schools and childminders. ‘No access’ visits refer to visits where the health visitor failed to gain entry to the house, or if the person she called to see was not at home.
"You just can't get away" summed it all up." Dingwall (1977) in his study of the social organisation of health visitor training commented that health visitor students did not like visiting the elderly because it took too long. Dingwall hypothesised that the reason they could not terminate the visit was because it had no structure; they were not in control and, to use his own words, the health visitor students 'did not have an agenda' and hence the client took over.

Kratz (1974) in her study of problems of care of the long-term sick in the community with particular reference to patients with stroke, observed that district nurses gave different care to patients with the same underlying condition; she identified four categories of care (Fig 1a).

The theory arising out of Kratz's hypothesis is that district nurses will meet the observed needs of patients so long as they know why they do so and how to do it. District nurses appear to work to a medical model; the patients who are seriously ill receive the most highly valued and focused care whereas the patients who are not getting better receive the least valued and most diffuse care.

The continuum of care model seems applicable to health visiting (Fig 1b). From observation it was apparent that health visitors did not work to a medical model, but to a developmental model, which was related to chronological age. Infants aged six months and under seemed to receive the most intensive and structured visiting whereas visits to the elderly were the most aimless and unstructured; the other age groups fell somewhere in between. If health visitors are working to a developmental model it could be argued that since the developmental needs of the elderly have not been well documented the care they require is not known and hence not valued.

Conclusions

This has been a small exploratory study, consisting of seven days' observation of health visitors at work. The aim of this paper is to discuss the method used to collect the data and to share the framework which will form the basis of the main study, and findings have been mentioned only in relation to the framework.

Three of the four objectives of the investigation appear to have been met, namely one, three and four. Non-participant observation is a feasible method of obtaining first-hand information regarding the content of home visits and it is a means of identifying the goal content of health visiting. It was possible to determine the place of the elderly in the health visitors' case load and to identify how the health visitors perceived their work with this age group. The study served to broaden the researcher's perspective on health visiting and to familiarise her with health visiting in Scotland.

The second objective 'to attempt to determine the criteria by which health visitors evaluate their work' was not met; clear criteria by which health visitors evaluate their work were not identified.

However, health visitors did appear to be sensitive to behavioural cues. Changes in client behaviour cannot be identified by a once-off observation; it is submitted that changes in client behaviour are perhaps the key to the evaluation process. If health visitors could learn to set explicit behavioural goals, to share these goals with the client and to record the behavioural changes that they observe on each visit along with the process of intervention, then we may move a stage nearer identifying true outcome criteria. A longitudinal study using non-participant observation may uncover criteria by which health visitors could evaluate their work. It is expected that the main study will make a contribution in this area.

I wish to thank Miss Louise Hockey for her help in the preparation of this article.

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REFERENCES


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Health visiting and the elderly

By Miss K. A. Luker, B.Nurs, SRN, HV Cert, NDN Cert, S.H.H.O Research Training Fellow

Observations from home visits with the elderly suggest that health visitors may not be aware of the special needs of this group of patients.

The idea of health visitors working with the elderly is not new. It has been suggested that health visitors should increase their involvement with this age group, (DHSS 1976.) In spite of a seemingly long standing involvement with the elderly we do not really know how the health visitors' work benefits the client. In the light of the present economic climate and before increasing health visitor involvement with the elderly, it would seem to be urgent to assess the care given by health visitors, in order to demonstrate its effectiveness, and to justify the provision of a health visiting service to the elderly.

The figures from research based studies and government statistics indicate that there is a variation in the number of elderly people receiving visits from a health visitor.

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Per cent of HV visits to people over 65 years as a percentage of the total number of HV visits</td>
</tr>
<tr>
<td>Brighton¹</td>
</tr>
<tr>
<td>Brighton²</td>
</tr>
<tr>
<td>Berkshire</td>
</tr>
<tr>
<td>London</td>
</tr>
<tr>
<td>Scotland³</td>
</tr>
</tbody>
</table>

Notes:
¹First visits made by the HVs in a Pilot GP attachment scheme in Brighton during 1967-68.
²First visits made by all HVs in Brighton during 1967.
³This figure had risen from 5.3 per cent in 1965 and it is anticipated that the figures for England and Wales will show a similar trend.

It is rather too easy when looking at the figures in Table 1 to make the assumption that the increase in health visitor visits to the elderly is directly related to the increase in the numbers of elderly people in the population. The age structure of the population is important in predicting the type of work which the health visitor undertakes; but is not the only factor involved. Other factors such as the attachment of health visitors to general practice, local policy, and the personal preference of the health visitor, all serve to influence the type of work which she does.

Gilmore’s study¹ was undertaken in Brighton where there is a relatively high proportion of elderly people in the population compared to the rest of the United Kingdom. If we look at Gilmore’s figures it is possible to see that the health visitors who were working in the pilot general practitioner attachment scheme made more first visits to the elderly than other health visitors in Brighton. The literature indicates that health visitors who are attached to general practice visit more elderly people. The reason for this is two-fold: firstly the GP may make more referrals to the health visitor because she is known to him. Secondly, health visitors who are GP attached have access to medical records and in some instances to an age/sex register which means that they are more able to seek out people in need of their service. This is sometimes referred to as case finding and is thought to enhance the preventive aspect of the health visitors’ work.

Clark¹ and Marris² carried out their surveys of the health visitors’ work about the same time in two entirely different areas. In Clark’s³ study the health visitor involvement with the elderly was higher than the national average at 15 per cent; this can be partially accounted for by the fact that the health visitors she studied were GP attached. In Marris’s study health visitor involvement with the elderly was merely 2.1 per cent, which may be accounted for by the policy in London at that time which was to employ visitors for geriatrics and they were not included in the study.

The figures for Scotland show an increase in the health visitors’ work with the elderly from 1965 to 1975. This increase is possibly a reflection of all the factors mentioned above, namely, age structure of the population, GP attachment and local policy.

One factor not yet enlarged upon is the influence of the personal preference of the health visitor in determining her visiting pattern. Despite the extraneous constraints upon the work of the health visitor it is contended here that the strongest factor in determining the content of her work is her own personal preference. It is quite probable that in many cases visits to the elderly will rank fairly low on the health visitor’s list of priorities and as such will be delegated to less qualified personnel. Personal preference can be exercised more readily by the health visitor because once she has left her base she becomes an invisible practitioner.

Health visitors have avoided studying the process of health visiting in terms of outcome and effectiveness by dismissing it as methodologically impractical. Researchers have tended to focus on describing health visiting in terms of what health visitors say they do, and have not used observation techniques on the grounds that
Continuum of Intervention model

<table>
<thead>
<tr>
<th>Category</th>
<th>Age</th>
<th>Intervention known and valued</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 months and under</td>
<td></td>
<td>Focussed intervention</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Age</th>
<th>Intervention known within limits and valued within limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 6 months under 5 years</td>
<td></td>
<td>Semi-focussed intervention</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Age</th>
<th>Intervention thought to be known and valued accordingly</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 years and over; under 60 years</td>
<td></td>
<td>Semi-diffuse intervention</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Age</th>
<th>Intervention not known and not valued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 60</td>
<td></td>
<td>Diffuse intervention</td>
</tr>
</tbody>
</table>

A third person would distort the interaction between the health visitor and client. The very nature of health visiting makes the health visitor an invisible practitioner and she rarely has the opportunity to observe colleagues at work in the home and as a result may run the risk of becoming entrenched in her own practice.

Because I was interested to see how other health visitors worked I decided to ask health visitors if I could accompany them on home visits; and since I was particularly interested in the care which they gave to the elderly I asked each health visitor if she would include at least two elderly people on her visiting list for the day, in total I observed 75 home visits.

Observations on home visits

1) The health visitors and clients did not appear to mind being observed and it was thought that this could be accounted for in several ways:
   (a) Health visitors and clients are now more accustomed to the presence of a third person because the community has opened up as a training ground for students.
   (b) Health visitors may have decided to take me only to clients whom they knew would be uninhibited by my presence.
   (c) Health visitors may have avoided discussing topics which were known to cause embarrassment to the client.

2) A noteworthy observation was that health visitors appeared to structure their visits differently according to the age group of the client. The most highly structured visits were to families with children of six months of age and under and when visiting these families the health visitor seemed to have a detailed 'agenda'. In contrast the visits to the elderly appeared to lack any definite structure and the health visitor seemed to have no such agenda.

Kratz in her study of problems of the long term sick in the community, with particular reference to stroke patients, observed that district nurses gave different types of care to patients with the same underlying condition and she identified four categories of care along a continuum from focussed care to diffuse care.

Continuum of care model

<table>
<thead>
<tr>
<th>Category</th>
<th></th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seriously ill</td>
<td></td>
<td>Waiting to go into hospital</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th></th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care known and valued</td>
<td></td>
<td>Care known within limits and valued within limits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th></th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Really getting better</td>
<td></td>
<td>Not getting better</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th></th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care thought to be known and valued accordingly</td>
<td></td>
<td>Care not known and not valued</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th></th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semi-diffuse care</td>
<td></td>
<td>Semi-focussed care</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th></th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aim invented</td>
<td></td>
<td>Aimless</td>
</tr>
</tbody>
</table>

Aim known | Limited aim known |
The district nurses Kratz observed appeared to work to a medical model. The patients who were seriously ill received the most focused care whereas the patients who were getting better received the most diffuse care. Kratz thought that the reason district nurses gave focused care to the patients who were seriously ill was because they knew what care to give and valued the care which they were giving. The patients who were not getting better received diffuse care and Kratz thought that the reason for this was that the district nurses did not know what care they were to give and therefore could not value it.

Kratz's continuum of care model it seems is, with modification, applicable to the health visiting situation. From my observations of health visitors they did not seem to work to a medical model but to a developmental model and this was related to chronological age. Infants of six months of age and under appeared to receive the most structured visits and to use Kratz's term, the most 'focused visits'. Whereas the elderly seemed to receive the most unstructured or diffuse visits and the other age groups fell somewhere in between. The developmental needs of the elderly have not been well defined or documented. Therefore, if health visitors are working to a developmental model the care required by the elderly may not be clearly known to them and hence not valued by them.

When working with the elderly it seems as though health visitors may be denied the opportunity of working from their usual frame of reference. More often than not health visitors may be required to draw upon their past nursing experience which may or may not be appropriate when dealing with the elderly. Bearing this argument in mind I would like to pose two questions. Firstly, should health visitors become more involved in visiting the elderly? Secondly do health visitors themselves want to become more involved in visiting the elderly?

References
Measuring life satisfaction in an elderly female population

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B.Nurs. S.R.N. H.V. and N.D.N. Certificates
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Accepted for publication 27 March 1979

Measuring life satisfaction in an elderly female population
The study described in this paper was undertaken as part of the pilot work for a main study, which attempts to evaluate the effectiveness of health visitor intervention on an elderly female population in Scotland. The Life Satisfaction Index A (Neugarten et al. 1961) was modified by the researcher and tested on a female Scottish population and is subsequently being used as one of three outcome measures of health visitor intervention.

THE CONCEPT OF ADAPTATION
A concept which lends itself readily to the study of nursing is adaptation. Nursing practice is based upon an understanding of man from conception to old age, both in sickness and in health. Much of what we claim to know about man and his environment can be explained and understood within the framework of adaptation theory. An exploration of the theory of adaptation in relation to the individual and his environment gives consideration to the needs of man and to the resource within or available to man. The individual is viewed as an integral part of his environment and cannot with ease be examined in isolation. It is possible to define health embodying the concept of adaptation. King (1971) defines health as: 'A dynamic state in the life cycle of an organism, which implies continuous adaptation to stresses in the internal and external environment through optimum use of one's resources to achieve maximum potential for daily living.'

Old age can be interpreted within the framework of adaptation theory. Adapt comes from the Latin adaptare, meaning to adjust. The original meaning of adaptation is therefore adjustment. Havighurst (1968) describes old age as: 'An adaptation to changes in the structure and function of the human body and changes in the environment.'
The layman is naturally unconcerned with the diverse concepts associated with the word adaptation; for him to be well adapted simply means to be able to function effectively and happily for as long as possible in a particular environment.

During later life the facilities for adaptation are greatly reduced. In old age one is required to adjust to more far-reaching changes of a physical, social and psychological nature. Based upon the assumption that elderly persons have a reduced capacity for adaptation the role of the health visitor can be interpreted as that of facilitator of adaptation, with adaptation being understood in the layman's sense of the word.

In order to evaluate the effects of health visitor intervention, it is necessary to have a valid, relevant, appropriate and discriminating outcome measure. It is the purpose of this paper to discuss the possible contribution of one such measure—life satisfaction scale. The choice of this measure was based upon the assumption that the level of adaptation of elderly persons would best be reflected by their subjective feelings, referred to as life satisfaction. It is acknowledged that criterion measures related to psychological and sociological variables are more difficult to determine as measurements and are approximate rather than precise. It is of great importance when working with the elderly to give some thought to the quality of life experienced and to date this has been a neglected area of study. It was decided for many reasons not to attempt to develop a new instrument to measure life satisfaction of elderly persons, but instead to search the literature for an appropriate tool.

Measuring instrument

The essential pre-requisites of any measuring instrument are validity, reliability and sensitivity, and it is an advantage for comparative purposes if the instrument has been widely used. In addition to these requirements it was thought that the life satisfaction instrument chosen should be short and easily administered, which would facilitate its use on an elderly population. An instrument was sought which was not based upon either the activity or disengagement theories of ageing; the independence of the instrument would mean that elderly subjects who enjoyed solitary pursuits would be as likely to score highly as those who enjoyed interactive pursuits.

There have been various attempts to define and measure psychological well-being in elderly people, with the purpose of using such a measurement as an operational definition of successful ageing. A number of scales have been developed with the primary aim of testing the activity and disengagement theories and Cavan et al. (1949) were the first to introduce an attitude scale as a measure of adjustment in old age. Instruments not based upon either the activity or disengagement theories have subsequently been developed. The most widely used instrument for the measurement of life satisfaction in the elderly during the last decade has been the Life Satisfaction Index A developed by Neugarten et al. (1961).
Life satisfaction in an elderly female population

The Life Satisfaction Index A (LSI-A) has been found to be a valid and reliable measure of life satisfaction on a relatively healthy elderly middle-class population in the USA. The instrument consists of 20 items and measures five components of life satisfaction, namely: zest for life versus apathy, resolution and fortitude versus resignation, congruence between desired and achieved goals, positive self-concept and mood tone. The instrument was developed for use as a postal questionnaire and each item requires an agree, disagree or uncertain response. An individual is regarded as being at the positive end of the continuum of psychological well-being to the extent that he enjoys everyday life, regards life as meaningful and accepts what life has been, feels he has achieved his major goals, holds a positive self-image and maintains a happy and optimistic mood tone.

Adams (1969) submitted the LSI-A to factor analysis. He recommended that two items be omitted: Item 11 - 'I feel my age but it does not bother me' and Item 14 - 'Compared to other people my age I have made a lot of foolish decisions in my life.' It was thought that the Adams' (1969) amended version of the LSI-A may provide a more reliable estimation of life satisfaction and it is this version of the index that is used as the basis of the study described.

**ORIGINAL LIFE SATISFACTION INDEX**

*Life Satisfaction Index A*

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
<th>Uncertain</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>As I grow older, things seem better than I thought they would be</td>
<td>✗</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2</td>
<td>I have gotten more of the breaks in life than most of the people I know</td>
<td>✗</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3</td>
<td>This is the dreariest time of my life</td>
<td>—</td>
<td>✗</td>
<td>—</td>
</tr>
<tr>
<td>4</td>
<td>I am just as happy as when I was younger</td>
<td>✗</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>5</td>
<td>My life could be happier than it is now</td>
<td>—</td>
<td>✗</td>
<td>—</td>
</tr>
<tr>
<td>6</td>
<td>These are the best years of my life</td>
<td>✗</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>7</td>
<td>Most of the things I do are boring and monotonous</td>
<td>—</td>
<td>✗</td>
<td>—</td>
</tr>
<tr>
<td>8</td>
<td>I expect some interesting and pleasant things to happen to me in the future</td>
<td>✗</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>9</td>
<td>The things I do today are as interesting to me as they ever were</td>
<td>✗</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>10</td>
<td>I feel old and somewhat tired.</td>
<td>—</td>
<td>✗</td>
<td>—</td>
</tr>
<tr>
<td>11</td>
<td>*I feel my age but it does not bother me</td>
<td>✗</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>12</td>
<td>As I look back on my life, I am fairly well satisfied</td>
<td>✗</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>13</td>
<td>I would not change my past life even if I could</td>
<td>✗</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>14</td>
<td>*Compared to other people my age, I've made a lot of foolish decisions in my life</td>
<td>—</td>
<td>✗</td>
<td>—</td>
</tr>
</tbody>
</table>
Compared to other people my age, I make a good appearance ✓ — —
I have made plans for things I'll be doing a month or a year from now ✓ — —
When I think back over my life, I didn't get most of the important things I wanted — × —
Compared to other people I get down in the dumbs too often — × —
I've gotten pretty much what I expected out of life ✓ — —
In spite of what people say, the lot of the average man is getting worse not better — × —

* Adams (1969) amendment

Key: Score one point for each response marked X.

A thorough search of the literature did not reveal the LSI-A having been used as a measure of change. However, Wylie (1970) used the Life Satisfaction Index Z, which is a shortened version of the LSI-A, as an impact criterion for examining the effect of a 3-year demonstration programme upon the lives of an elderly population.

The LSI-A contains questions related to present and past life and it is therefore assumed that current events, such as health visitor intervention, have the potential to change a subject's view of present life; however, the relationship between current events and satisfaction with past life cannot reasonably be assumed. Since the LSI-Z demonstrated its ability to record positive and negative changes, it seems reasonable to remain optimistic regarding the ability of the LSI-A (Adams amended version) to measure change after health visitor intervention on an elderly female Scottish population.

In order to use the LSI-A (Adams amended version) in Scotland it has been necessary to change the wording of some of the items to keep the content of each item meaningful. It was thought that if previous studies had changed the wording from American English to British English then it may be possible to use the already modified version. Three studies were located which had used the LSI-A on an English population, Coleman (1972), Bigot (1974) and Abrams (1978); however, these studies did not attempt to modify the wording of the items.

### Changes made in the administration and wording of LSI-A (Adams amended version)

It was thought that since an elderly population of aged 70 years and over were to be used then a postal questionnaire or self-administered questionnaire would not be very appropriate. It was decided to administer the questionnaire during a short interview. Because many people of advanced years are troubled with hearing defects items were written in large print on cards 5 × 3 inches and the subjects...
Life satisfaction in an elderly female population

were presented with the card and asked if they agreed, disagreed or were uncertain about the statement. In instances where subjects were partially sighted or blind the questions were read out and the answers recorded.

The wordings of items Numbers 2, 15, 19, and 20 were changed in an attempt to make the statements more meaningful to a Scottish population.

Original item 2: 'I have gotten more breaks in life than most of the people I know' was modified to 'I have had more luck in life than most of the people I know'.

Original item 15: 'Compared to other people my age I make a good appearance' was modified to 'Compared to other people my age, I look smart when I am dressed to go out'.

Original item 19: 'I've gotten pretty much what I expected out of life' was modified to 'I've had just about what I expected out of life'.

Original item 20: 'In spite of what people say the lot of the average man is getting worse not better' was modified to 'In spite of what people say the life of the average man is getting worse not better.'

AIMS OF THE EXPLORATORY STUDY

1 To try out the new method of administering the LSI-A.
2 To test the appropriateness of the word changes.
3 To test the reliability of the instrument over time.
4 To validate the instrument against an external criterion.
5 To give the researcher experience in administering LSI-A.

Population

Elderly women aged 70 years and older living in an old persons' home or sheltered housing in a city in Scotland.

Sample

A convenience sample consisting of 21 subjects 70–92 years of age was recruited from either an old people's home or sheltered housing.

Method

The purpose of the visit was explained to all subjects and it was made clear that it would be necessary to interview each subject a second time after an interval of one month. There were two interviewers and each interviewer saw the same respondent at the second interview. It was thought that this would give the subject some continuity, and since it was the respondent's answer and not the interviewer's interpretation which was recorded it was felt unnecessary to check for interviewer reliability.
External validating criterion

The warden and matron of the home or sheltered housing, respectively, were asked to estimate each subject's life satisfaction. Life satisfaction was defined as happiness or contentment with life in general. A 5 x 3 inch card was used with a 9 cm line divided into 18 points called a life satisfaction ladder.

![Life Satisfaction Ladder]

The warden and matron were asked to put a mark on the line at the point which they thought the individual subject would fall. The original intention was to have each subject rated twice: once at the first interview and once at the second, and to take the mean of the two scores. For various reasons this was not possible and each subject was rated only once at either the first or second interview.

FINDINGS

The primary aims of the study were to try out the new method of administering the instrument and to test the revised wording of the items. The card method was used where the items were written on a card and the subjects were asked whether they agreed, disagreed or were uncertain about the statement. This seemed to be a most satisfactory and efficient way of administering the index. In three cases the method could not be used because the subjects were blind or partially sighted. Here, the instrument was administered verbally, the statements were read and then the subject's response was recorded in the usual manner. The main disadvantage of reading the questions out, in the home, was that others could overhear and this could have proved inhibiting to the subject.

The word alterations were not entirely successful; there still seemed to be ambiguities. For example, Item 2 (Original) 'I have gotten more breaks in life . . .' changed to 'I have had more luck in life . . .' was not successful, since one or two respondents did not agree that there was such a concept as luck. The wording was modified further to read 'I have had more chances in life . . .' and at subsequent testing this modification was found to be acceptable.

Item 15 after modification proved to be difficult for some subjects to answer: 'Compared to other people my age, I look smart when I'm dressed to go out'. The difficulty arose because some subjects said that they did not go out and others were reluctant to say whether or not they thought they looked smart. The wording was further changed to read: 'I like to take an interest in my appearance', and at subsequent testing this modification was found to be acceptable.

Item 19 was modified to read 'I've had just about what I expected out of life'. This item seemed in some way to presuppose a low expectation and subjects said they had had more than they had expected out of life, therefore the item was changed again to resemble the original to read 'I've got pretty much what I
Life satisfaction in an elderly female population

expected out of life' and at subsequent testing this change was found to be acceptable.

Item 20 was modified to read: 'In spite of what people say the life of the average man is getting worse not better'. This item differed from the original in that the word 'life' was used instead of 'lot'. However, this item was found to be confusing to older women since the concept of the 'common man' was not
understood by all and a number of subjects commented that they did not have much to do with men. This item was further modified to read 'In spite of what people say the life of the average person is getting worse not better', and at subsequent testing was found to be acceptable.

The third aim of the study was to test the reliability of the LSI-A over time. The highest possible score using the Adams amended version of the index is 18 and the lowest 0. The frequency graph (Fig. 1) shows the relationship between score one and score two. The correlation coefficient of the scores is $r = 0.84$, and this is interpreted as a satisfactory level of reliability.

The fourth aim of the study was to test the validity of the LSI-A. The external validator was the warden's and matron's rating of the subject's level of life satisfaction. The scores the subjects obtained on the day they were rated by the warden or matron correlated with the rated score at $r = 0.64$, and this was interpreted as an acceptable level of validity. The scatter diagram (Fig. 2) shows the relationship between the two scores.

CONCLUSION

The aims of this pilot study appear to have been met. It was necessary to make further modifications to some items but at subsequent testings these modifications were found to be acceptable. The study was undertaken on a small sample and moreover variables reported to be related to life satisfaction such as socio-economic status, health and family have not been examined. The data seem to indicate that the modified LSI-A is a reliable and valid instrument for the measurement of life satisfaction on an elderly female population in Scotland. The data do not give any information about the instrument's ability to measure changes in level of satisfaction over time. It has, therefore, been decided, for the purpose of the main study which attempts to evaluate the effectiveness of health visitor intervention on an elderly female population over time, to use the LSI-A with the specified modifications as one of three outcome measures of health visitor intervention. It is hoped that the LSI-A may tap the more elusive aspects of health visiting.

At the time of writing the main study is well underway.

Acknowledgement

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Life satisfaction in an elderly female population


A framework for the nursing process: problem-oriented recordings

A method of organising recordings in a systematic way
Karen A. Luker BNurs, SRN, HVCert, NDNCert

Many of the books and articles devoted to the discussion of the nursing process tend to focus on the stages of the process, namely assessment, planning, care giving and evaluation, and they make little or no reference to the framework upon which the process is to be based.

However, the nursing process cannot stand alone, and at its best it is merely a recipe for planned nursing care which incorporates systematic problem solving. Also its implementation will be in accordance with the nurse’s beliefs and values about man and nursing.

Before the nurse makes her initial assessment of the patient, she has to make a decision about what information to collect and from which sources to collect it. This decision, and subsequently the rest of the nursing process, is influenced by many factors, the most important being the nurse’s personal philosophy of nursing.

The philosophies or beliefs held by persons providing a nursing service are reflected in the care given. When one talks about nursing philosophy one speaks in terms of what one believes patients and nurses to be, and what their rights and obligations are.

An explicit philosophy offers advantages in planning patient care by helping the nurse to recognise the frame of reference from which she is working. It also forms a foundation of known dimensions upon which to structure nursing care.

Planned care can be derived from different frameworks: such as a body systems framework, a needs framework, a disease framework or an activities of daily living framework.

The nurse cares for a patient within a definable frame of reference. However, frameworks are not mutually exclusive and a nurse may use more than one at any time.

Articles on the nursing process, which fail to make explicit the beliefs and values upon which the assessment and subsequent stages of the nursing process are based, will mislead nurses’ into thinking that the nursing process itself is the panacea in nursing.

Frameworks
Florence Nightingale introduced the idea of frameworks in nursing practice. Nightingale (1859) described the goal of nursing as, ‘To put the patient in the best condition for nature to act upon him.’ At that time the procedure and framework for nursing practice consisted mainly of environmental manipulation. Early nursing books were procedure manuals and these texts gave no clear goal of nursing. Later, books based on a

Fig 1. An example of a problem-oriented nursing report. S = subjective, O = observation, A = analysis, P = planning

General Notes. Mrs Smith, a 78-year-old widow of 2 years’ standing, who lives alone in a ground floor flat, was admitted as a casualty on the night of 9.12.78 after being found by her daughter on the floor, thought to have had a mild C.V.A. No apparent weakness.

Date Problem list
10.1.79 Problem 1. Urinary incontinence.
Problem 2. Loneliness.
Problem 3. Obesity.
Problem 4. Pressure sores.

Goal 1. Patient will stay dry for four-hourly periods by 17.1.79.
Goal 2. To reduce patient’s subjective feelings of loneliness by 17.1.79.
Goal 3. Patient will lose 4lb in weight by 17.1.79.
Goal 4. Patient will not develop pressure sores by 17.1.79.

Problem 1. Urinary incontinence
11.1.79
S. ‘I get so upset when I wet myself. It’s so dirty, I don’t know why I do it.’
O. Patient does not know when she is wet.
A. Patient distressed by incontinence and has very little understanding of her problem.

P.1. Explain reasons for incontinence to patient. P.2. Commence two-hourly toilet regime and explain reason for the programme to patient. P.3. Try patient with Kangas pants. P.4. If patient is wet between visits to the toilet, stay and talk with her after assisting her to change, to indicate that she is a desirable person to talk with.

Signature
J.B.L.

NURSING TIMES AUGUST 30, 1979
Behaviour modification: Principles and clinical applications
W. Stewart Agras, MD (Editor)
Little, Brown & Co. £5.15. 307 pages

'Behaviour modification' has joined the 'boo' and 'hurrah' words which elicit an immediate negative or positive emotional response depending on the person's unexamined attitudes, beliefs and misconceptions.

Neither the practitioners of traditional psychotherapies nor the advocates of behaviour therapy are innocent of polemical attacks on each other and of an unwillingness to question their concepts, methods and outcomes.

Caught in a power conflict between professionally stronger groups, nurses frequently escape into a cynical negativism which often effectively undermines equally the strivings towards a therapeutic community promoted by one and the behaviour therapies initiated by the other side.

It is against this background of a still largely unresolved conflict that nurses should read this book. The four parts of the book are documented and often self-critical. It clearly identifies the common ground between the warring factions and increases the justified hope that troubled people may eventually benefit fully from insights and gains derived by different means.

principles and procedures underlying the behaviour therapies are cogently argued by the editor who also contributes the material on reinforcement, extinction and token economy.

Barlow deals with the aversive techniques and acknowledges the moral doubts and condemnation that they have caused. But his attempt to discuss these issues in five short paragraphs is seriously inadequate and surprisingly naive. To compare the 'pun' inflicted by aversion techniques with that suffered during dental treatment or by inoculations is facetious.

He could have ignored the fundamental criticism of psychiatric intervention as a means of socio-political control in which aversion techniques are more often used by even cruder therapists and therefore attract more immediate and direct condemnation.

To dismiss the vexed and complex question of informed consent in the one trite statement that it must be obtained is farcical.

Although much is said elsewhere in the book about the active involvement of relatives, friends and indeed of the clients themselves in many of the behaviour therapies, the central questions of who defines socially unacceptable behaviour (for example, lack of assertiveness, delinquency, frigidity, homosexuality, low achievement, role reversal, truancy) and who decides on the mode of 'treatment' have not been addressed by any of the contributors.

Relaxation training and related techniques are discussed by Taylor while implosion, desensitisation and allied techniques are presented under the concept of 'exposure' geared towards fear reduction by the only British contributor to this American publication.

Its transatlantic origin however does not pose any problems of language or context.

The clear, well-paced type and the faultless uncluttered tables and diagrams would be a most welcome feature of many a book produced in this country.

An Annotated Therapeutic Index as well as the final contribution by Ferguson and Birch on 'Therapeutic Packages' would be of particular help to those readers searching for a possible solution to specific problems.

Now in its second and largely revised edition, this book should be available to all psychiatric nurses and their teachers. For anyone else who would find an overview of the field of behaviour therapy useful, a clearer, more balanced and more reasonably priced account might be difficult to find.

RUTH A. SCHRÖCK, MA, DNS (Educ.), SRN
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Dangerous mistakes in drug administration

Medico-Pharmaceutical Forum

50p each up to 10 copies, 40p each over 10 copies: 10 pages

The terms of reference for the working party set up to explore the 'identification of dispensed medicines' was to review the problems encountered by anaesthetists in identifying dispensed medicines and to advise possible courses of action.

The problem is not confined to anaesthetists, however, for, as nurses, we agree that human error is the cardinal reason. First is the failure of communication of the spoken or written word, and second is the failure to read labels accurately.

Here the findings of the working party are discussed under three main headings: drug handling and storage, nomenclature and labelling, then recommendations. "Dangerous mistakes in drug administration are, unfortunately, sometimes made by nurses."

This very reasonably priced little pamphlet should be available for nurses in all clinical areas and in schools of nursing.

The address of the publisher is: 1 Wimpole St, London W1M 8AE.

I MILES, BA, DIPED, SRN, RNT

Books received

The Doctor: Father Figure or Plumber. James McCormick. Croom Helm Ltd., £7.50, 171 pages.

The book argues that doctors are falling to meet society's expectations, and neglecting ethical responsibilities. If nurses, too, are concerned that the profession is not living up to expectations, as far as the patient is concerned, this may be a helpful book.


An extensive text book, this is intended for readers in social administration, applied social studies and social work.
TEACHING THE NURSING PROCESS

disease framework were developed by doctors for nurses.

An early attempt to analyse nursing action using an interpersonal framework was made by Peplau (1952). She defined nursing as, 'A significant therapeutic interpersonal process which functions cooperatively with other human processes that make health possible for individuals and communities'.

Henderson et al.,(1958) and Orlando (1961) also developed the interpersonal process as a concept of nursing. Henderson's (1955) definition of nursing is probably one of the most widely acclaimed and used. The unique function of the nurse is to assist the individual, sick or well, in the performance of those activities contributing to health or its recovery (or to a peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge.

And to do this in such a way as to help him gain independence as rapidly as possible.'

During the last decade there has been an increase in the study of nursing frameworks and theories; nurses are gradually becoming more aware of the need to base their practice on a conceptual framework. Books explaining specific theoretical frameworks have begun to appear such as Rogers, (1970), Orn, (1971), King, (1971) and Reif and Roy, (1974). These books have their origins in North America but the concepts are relevant to nursing practice anywhere.

Choosing a theoretical framework upon which to base one's practice is not an easy matter. Ideally one would like to know everything about the client/patient's past, present and future life situation but clearly this is not realistic. Therefore the nurse's own philosophy directs her in her interpretation of the nursing process. The nurse collects information which, according to her belief and value system, appears to be relevant and worthwhile.

If a nurse believes her prime function to be coping with the patient's disease, then she will confine her questions and observations to matters related to the disease and the nursing goal will be the same as the medical goal, namely cure or eradication of the disease state. But if the nurse perceives her function as assisting the patient in the performance of his activities of daily living then she will ask questions and make observations about the patient's performance in the activities of daily living. The goal of nursing care will then be to assist the patient in gaining independence in these activities.

Problem-oriented recording

If nurses implement the nursing process in accordance with their philosophy of nursing, it does not necessarily follow that recordings other than the initial assessment will be organised in a systematic way. Doctors have been using formal problem solving for much longer than nurses have, but if one consults medical records, systematic recording is usually reflected only in the initial assessment, and not in the subsequent progress notes.

A doctor, Lawrence Weed, developed the concept of problem-oriented medical records, as a means of logically organizing information about a patient around the patient's medical problem. Weed (1969) views the patient's record as a tool which facilitates the accomplishment of goals for and with the patient.

Within the framework of the nursing process, there is no built-in plan for the systematic recording of progress notes, although problem-oriented recording lends itself readily to this. The content of the nursing assessment is directed by the nursing history format; however, because progress notes usually lack any definite structure, they often become aimless and haphazard.

I believe that a modified Weed (1969) system of recording progress notes, incorporating the mnemonic S.O.A.P., can be used in conjunction with the nursing process, and in some situations it may be used to implement the nursing process. In Weed's (1969) problem-oriented recording system, the mnemonic S.O.A.P. represents Subjective and Objective information about the patient problem, Assessment and Planning.

To make this recording format more applicable to nursing, it is suggested that subjective information should be removed to what the patient says about his problem. Also, the term objective should be replaced by the word observation, and these should be observations that the nurse makes about a patient's problem.

The word assessment may be confused

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NURSING TIMES AUGUST 30, 1979

Problem 2. Loneliness
S. 'I feel even more lonely now because my daughter has gone back to work and can't visit me as often.
O. Patient cries whenever she talks about her feelings; daughter now only visits once a week.
A. Patient obviously lonely but could also be depressed.

P.1. Ask patient if she minds your asking the doctor to see her. P.2. Investigate the possibility of patient becoming more involved in ward activities. P.3. Arrange to see daughter to discuss the possibility of other relatives’ visiting. P.4. Investigate the possibility of a voluntary visitor.

Problem 3. Obesity
S. 'I have always been big, but I have put on weight recently. The doctor at home has told me that I should slim down; all this extra weight is doing me no good.'
O. Patient weighs 13st 5lb with nightdress on. About 3st overweight. Breathless on exertion. Finds it difficult to fasten clothes and cannot reach shoes.
A. Patient has probably gained about 2st in last 2 years; clothes no longer fit; began to overeat after husband's death; a lady who used to enjoy taking an interest in her appearance.


Problem 4. Pressure sores
S. Nil.
O. Patient incontinent of urine, buttocks red, quite reluctant to move from chair.
A. Patient probably nervous of walking because of incontinence, strange environment.

P.1. Walk with the patient to the toilet and remind patient to change her sitting position.
Otherwise Plan = Same as Problem 1.
with the formal assessment involved in the first stage of the nursing process, so I suggest that the word analysis be used instead; this means that the nurse interprets the subjective information alongside her observations of the patient's problem and then plans how she is going to deal with the patient and his problem, or alternatively how she will help the patient to deal with his problem.

Fig 2. Combined S.O.A.P. format

An actual problem may be anything about a patient that concerns the patient or the nurse at the time of the assessment. A problem may however, be potential in that it is not present, but there are indicators which inform the nurse that a patient has a higher than average risk of the problem developing.

An example is given in Fig 1. New records are not necessary when the S.O.A.P. format for the recording of progress notes is used and the Kardex may still be used. It is not essential to write out the problem and goal each time an entry is made if the problems and goals are numbered then the number will be all that is required.

Many patients have more than one problem and so it may be more practical to use a combined S.O.A.P. format. Recognised abbreviations may be used or developed for use in progress recording.

An example of combined S.O.A.P. format is given in Fig 2.

The emergence of problem-oriented recording in nursing may provide impetus for the use of the nursing process. When nurses use a problem-oriented format it makes the nursing process explicit and not an option to be ignored.

I contend that problem-oriented recording of progress notes may be the key to the successful implementation of the nursing process and a useful means of introducing the nursing process in accordance with an explicit philosophy of nursing.

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