INFORMATION NEEDS OF QUALIFIED NURSES IN BLOOMSBURY HEALTH AUTHORITY

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ABSTRACT

The study is concerned with the information needs of qualified nursing staff in Bloomsbury Health Authority.

A stratified sample of 20% was drawn from the total population (thought to be about 2100) and data was gathered by mailed questionnaire and personal interview. Using the critical incident technique, questions focused on the most recent example of information need. Data was gathered on: when information was last needed; what information was needed and for what purpose; attempts to satisfy the information need and the level of success achieved; the frequency of unresolved information needs and the reasons for this.

Results are presented for the sample as a whole and by individual sub-groups:- Enrolled Nurses; Staff Nurses; Ward Sisters/ Charge Nurses; Midwives; Managers; Teachers; District Nurses; and Health Promotion staff (Health Visitors and School Nurses).

55% of respondents reported having an information need in the previous 7 days, 41% reported having had such a need within the previous 30 days or more. Twenty-one areas of information need were identified with medical/surgical, clinical nursing or drug information accounting for 46% of these. 36% of information was needed in order to resolve a clinical nursing problem and 24% was needed to resolve a teaching problem (either patient or nurse education).

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Print sources combined accounted for 53% of all sources used, with all interpersonal sources accounting for the remaining 47% of sources used.

Development of a library computer network linked to each nursing workstation is recommended to overcome problems of time and isolation, giving access to both printed information sources and via electronic mail to colleagues outside the place of work. In the shorter term, an enhanced programme of library promotion and user education is recommended. Promotion of the telephone enquiry service is advised and a suggested breakdown of bookstock expenditure is given.

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INTRODUCTION

This study is concerned with the information needs of qualified nursing staff in Bloomsbury Health Authority.

In 1986 developments in nurse education in Bloomsbury Health Authority resulted in resources being allocated to provide a library service specifically for qualified staff for the first time. Previously, qualified nurses were allowed access to material and services provided for student nurses. At that time there was little available information on the provision of library services for qualified nurses and the information needs which such a service should attempt to satisfy. Only three British studies were located - Gilbert (1976), Valker (1978) and Stapleton (1983). Gilbert and Valker had carried out complementary studies which looked at information needs of nurses' in general, whilst Stapleton's more recent study was concerned with nurses need for continuing education. At the outset of the present research Valker's study was 10 years old, during which time many changes had occured in nursing practice and in nurse education. It was felt that these changes necessitated a fresh look at nurses' information needs. This study was undertaken to try to clarify the information needs of qualified nurses as a whole. It was hoped that the findings would help in providing a service which was responsive to the real needs of qualified nurses,

It is recognised that libraries play a relatively small part in the information seeking/gathering lives of most practitioners (Vilkin 1981) and that other

information sources are preferred as being easier to use, more accessible, and providing speedier responses.

It is the aim of this study therefore to look at the broad picture of information needs of qualified nurses, and to assess the use of other sources such as interpersonal communication, with a view to maximising the role which a formal library system can play in satisfying needs.

The population studied includes all qualified nurses from Enrolled Nurse to the most senior nurse manager, both hospital and community based. Teaching staff and midwives are also included. For reasons beyond the control of the researcher psychiatric nurses are not included in the study.

The report will first consider the role of the nurse in general and of the specific grades under review in particular. Chapter Two will be concerned with information needs research in general and into nursing specifically, and discuss the development of methodologies for investigating information needs. Chapter Three will discuss the design/methodology of the study being reported. Results of the survey will be reported and discussed in Chapter Four. The implications of the survey findings for information provision will be discussed in Chapter Five in terms of general applications and in terms of services in the Authority surveyed. A brief concluding chapter will outline recommendations and make suggestions for further research.

CHAPTER ONE

NURSING
PROFESSION

This chapter will be devoted to consideration of the role of the nurse in general, outlining the routes to qualification as a nurse, and the role of the specific grades relevant to the study. Information for this section has been obtained from the research literature and from discussions with individuals during interviews.

Background to the Profession

Nurses form the largest occupational group in the National Health Service (NHS). In 1987, out of a total establishment of 1,000,600 WTE (NAHA 1989), just over 50% or 513,700WTE were nursing posts - an increase of 9.2% between 1980 and 1987. Of the total nursing and midwifery population, 20% are students, 56% are qualified staff and 24% are care assistants (Royal College of Nursing 1985). Despite the recent emphasis on community care (Cumberlege 1986, Griffiths 1987) only 10% of nurses and midwives are employed in the community (DHSS 1987a).

Figures gathered for the Royal College of Nursing Commission on Nurse Education (Royal College of Nursing 1985) indicate that turnover among nurses is higher in London than in other parts of the country. 73% of nurses in London are under 40 compared with 60% elsewhere. Redfern (1981) found that in London an experienced ward sister was someone who had been in post for 3-5 years. The potential loss of skill which these figures represent points to a pressing need for continuing education and easier access to information.

Nursing in the United Kingdom is under the control of statutory bodies set up

under the Nurses, Midwives and Health Visitors Act 1979. The United Kingdom

Central Council for Nursing, Midwifery and Health Visiting (UKCC) is the

superior body which controls all matters relating to nursing, including

education and training, standards and professional conduct. The UKCC devolves

matters relating to the control of education and training to four National

Boards for England, Wales, Scotland and Northern Ireland.

Role of the Nurse

The role of the nurse has traditionally been seen as a caring or succouring one.

Anderson (1973) found that whilst doctors placed more emphasis on technical

competence, both patients and nurses laid stress on emotional support -

expecting the nurse to be kind, understanding, sympathetic, cheerful and

available to the patient.

McFarlane (1976) points out that the terms 'caring' and 'nursing' have very

similar root meanings:

> "Caring signifies a feeling of concern, of interest, of oversight
> with a view to protection. Nursing derives its meaning from the
> same root as 'to nourish'. The nurse was a woman employed to suckle
> and take charge of an infant, hence it meant to nourish and cherish"
>
> (McFarlane 1976)

Henderson (1968) has produced perhaps the most widely known definition of

nursing:

> "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)
> which he would perform unaided if he had the necessary will or

knowledge, and to do this in such a way as to help him to independence as quickly as possible."

<div align="right">(Henderson 1968)</div>

Writing in 1976, Roper produced an equally well known definition which had not changed a great deal from that of Henderson.

> "Within the context of a health care system and in a variety of combinations, nursing is helping a person towards his personal independent pole on the continuum of each Activity of Daily Living; helping him to cope with any movement towards the dependent pole or poles; in some instances encouraging his move towards the dependent pole or poles; and because man is finite, helping him to die with dignity."

<div align="right">(Roper 1976)</div>

Slevin writing a short while later in 1981 felt that the role of the nurse remained fairly stable during the 1970's, having clearly defined boundaries and sets of rules. He feels, however, that this would not be an accurate assessment of nursing in the 1980's. Indeed he feels that the role of the nurse is changing with greater rapidity than ever before. Not only is the context changing and developing, but the boundaries of the role are becoming increasingly blurred. This is partially reflected in the Nurses Midwives and Health Visitors Rules Approval Order 1983 which lays down those competencies which the Registered General Nurse (RGN) is to have acquired on completion of training. These are worth reproducing in full as they are relevant to further discussion of the role of the nurse and indicate those areas covered in the basic education curriculum. Basic nurse training should prepare the nurse to:

> "accept responsibility for her personal professional development and to acquire the competencies to:
>
> a) advise on the promotion of health and the prevention of illness;
>
> b) recognise situations that may be detrimental to the health and wellbeing of the individual;

<div align="center">13.</div>

c) carry out those activities involved when conducting the comprehensive assessment of a person's nursing requirements;

d) recognise the significance of the observations made and use these to develop an initial nursing assessment;

e) devise a plan of care based on the assessment, with the co-operation of the patient, to the extent that this is possible, taking into account the medical prescription;

f) implement the planned programme of nursing care and where appropriate teach and co-ordinate other members of the caring team who may be responsible for implementing specific aspects of nursing care;

g) review the effectiveness of the nursing care provided and where appropriate, indicate any action that may be required;

h) work in a team with other nurses, and with medical and paramedical staff and social workers;

i) undertake the management of the care of a group of patients over a period of time and organise the appropriate support services."
(Nurses, Midwives......1983)

It should be noted that points a) and b) in the list formally recognise for the first time the nurses' role as a health educator, both in preventing illness and in advising patients about appropriate lifestyle and self-care after the onset of illness.

Other influences on the changing role of the nurse come from the demand of health care consumers to have a say in their care; the growing complexity of the health care system and the move towards the professionalisation of nursing. A major influence is the rapid pace of technological advance in the medical sciences, and the demands which that places on the nurse for increased knowledge of technical procedures - all of which leaves less and less time for the basic and caring components of nursing (Slevin 1981). These influences have

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led to much discussion in the profession about the conflict which arises from an increase in nursing knowledge and skill, referred to as role expansion, and the increasing incidence of non-nursing (usually medical) skills and knowledge, which is referred to as role extension. Thus the nurse is not only becoming more of a nurse but also more than a nurse. There is some acceptance that the nurse can carry out certain procedures more cost-effectively than doctors, but in a climate of acute nursing shortages there is a real fear that this will be at the expense of the nurse's traditional role, and that the traditional role will be taken over by staff who are neither trained nor qualified to carry it out (Rowden 1987, Pearson 1987).

Education for Nursing

Nurses applying for a training programme which leads to Registration are presently required to have 5 'O' level passes, though increasingly candidates have 'A' levels and in some cases first degrees. There is discussion in the profession at the time of writing as to whether the entry gate to nurse education should be widened. The slowing down of the birth rate in the late 1960's and early 1970's means that there are fewer 18 year olds in the population who are available for nurse training. In order to maintain recruitment at existing levels, nurse training would need to attract 50% of all 18 year olds with 5 'O' levels by 1992 (Royal College of Nursing 1985). As this is an unlikely occurence, a modification of entry qualifications is being considered, as are courses for mature entrants and part-time students. More urgently, ways are being investigated of reducing the loss of qualified nurses from the profession.

Currently, the pre-registration nurse education course lasts for 3 years and leads to the qualification of Registered General Nurse (RGN). This particular course is the most common entry point to the profession, although students do have a choice of other more specialist courses at this level. Alternatives include Registered Mental Nurse training (RMN), Registered Sick Childrens Nurse training (RSCN), Registered Mental Handicap Nurse training (RMHN). One school accepts direct entrants to midwifery (RM) training, although at present it is much more common for would-be midwives to undertake RGN training first.

In the mid-seventies a number of undergraduate nursing degree courses were developed, providing a four year course in most cases, with an appreciable amount of time spent in the classroom. This method of education has had a mixed reception from members of the profession, some of whom fear that nurses trained this way will have less practical skill than nurses trained in the traditional manner.

On successful completion of the basic training course, most nurses spend 6-12 months in a Staff Nurse post, consolidating their practical abilities and acquiring basic management skills. Staff Nurses have a number of choices at this juncture as to the path their career will take. Some will be immediately promoted to a Ward Sister post, but this is becoming less common. Most will first take a post-registration course in their chosen area of specialism e.g. Intensive Care, Care of the Elderly or Family Planning. Courses such as these last from 6-12 months and are run by individual hospitals. Nurses gain wide

practical experience in their chosen area as well as taking their theoretical knowledge to greater depth.

Many other courses are also available such as District Nursing, Health Visiting, School Nursing and Occupational Health Nursing, which last for 12-18 months and are run in the general education sector with periods of practical placement in appropriate health service settings.

Courses above this level are for nurses who wish to move into education. Few management courses specifically for nurses have been developed, and so those staff who wish to, take general management courses.

Continuing education is undoubtedly the biggest growth area in nurse education at the present time. Courses in all aspects of the nurse's role are being provided, and are valuable in updating nurses knowledge as well as extending their areas of expertise.

One grade of qualified nurse which has not yet been discussed is the Enrolled Nurse. This grade came into being following the implementation of the 1943 Nurses Act. The 1940's and 1950's saw a similar shortage of nursing recruits as is being experienced in the 1980's. One way of alleviating this situation was to confer 'qualified nurse' status on the many experienced and capable women who had been previously working as care assistants. Formal training for new recruits to this grade was subsequently implemented and Enrolled Nurses have

been an important part of the profession ever since. Gray(1986) estimated that in 1983 they accounted for almost 20% of the total nursing workforce.

PROFILES OF INDIVIDUAL GRADES

The descriptions of individual grades given below are based on practice in Bloomsbury Health Authority, but would be equally valid throughout England and Vales, unless otherwise noted.

The organisational charts given as Figure 1.1 and Figure 1.2 represent the staffing structure in Bloomsbury at the time of writing. These may not be representative of structures elsewhere in England & Vales.

ENROLLED NURSE

Minimum entry requirements for training are 2 'O' level passes or successful completion of an entrance test. Training lasts for 2 years, is based in a School or College of Nursing and concentrates on developing practical bedside nursing skills, which upon qualification will be practised under the guidance of an RGN (usually a Staff Nurse or Vard Sister). Thus in respect of individual responsibility, the Enrolled Nurse is the most junior member of the qualified nursing team.

Chief Nursing Adviser

UNIT GENERAL MANAGER

Director of Nursing Services

Senior Sister

Senior Sister

Sister

Sister

Sister

Sister

Sister

Staff Nurse

Enrolled Nurse

Learner Nurse

Management Accountability ——————

Professional Accountability — — — —
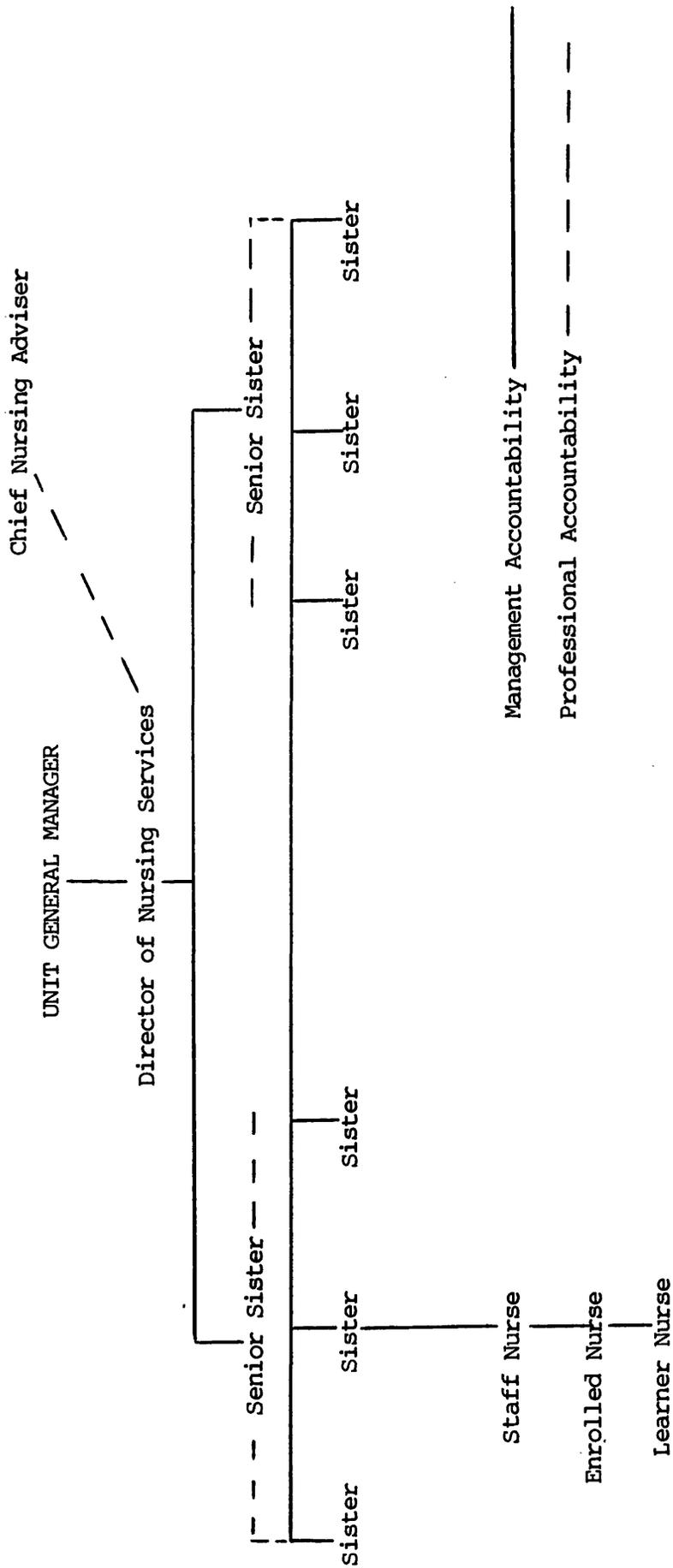
Figure 1.1: NURSING SERVICE MANAGEMENT (General Division)

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Director of Nurse Education

Divisional Education Manager (Pre-Registration Courses)

Divisional Education Manager (Post-Registration Courses)

Divisional Education Manager (Continuing Education)

(Each responsible for teams of teachers made up of:)

Senior Education Manager

Tutors

Clinical Teachers

Nurse Allocation Office

College Library

Curriculum Development

Figure 1.2:   NURSING MANAGEMENT STRUCTURE (College of Nurse Education)

Although the duties and responsibilities of the Enrolled Nurse are laid down in law (Nurses Midwives.....1983), many feel disillusioned with their working life. Jefferies (1980) confirmed the impression that EN's are often left in charge of a ward when there are not enough RGN's available, but that as soon as RGN's become available again the EN is relegated to basic duties. EN's are therefore reported as being dissatisfied on two counts. Firstly, they are being asked to take on responsibilities for which they are not trained, and secondly when RGN's are on duty they are seen only as capable of carrying out basic duties.

The only career progression for an Enrolled Nurse is to become a Senior Enrolled Nurse. This post is seen in some hospitals as being equivalent to a Staff Nurse post and may require a short period of further training. Forthcoming changes in the training and practice of nurses resulting from the implementation of Project 2000 will see the cessation of training for Enrolled Nurse grade. The English National Board for Nursing has sanctioned the provision of EN→RGN conversion courses which last for one year. These courses allow the experienced EN to upgrade her training to Registration level and then progress up the career ladder with other RGN colleagues.

STAFF NURSE

The qualification for this role is RGN, obtained on successful completion of the three year training programme. This is usually the first qualified post held. A number of "on the job" Staff Nurse development courses are now being run in

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individual hospitals. Staff Nurses tend to stay in post for about one year before undertaking further training.

The promotion from third year student nurse to Staff Nurse is probably one of the most difficult transitions a nurse has to make. With little preparation for the role the new Staff Nurse finds herself responsible and accountable for her professional practice; having teaching responsibilities to students; dealing with difficult questions from patients and relatives (Sykes 1985). The Staff Nurse will also "act up" in the absence of the Ward Sister and be in sole charge of the ward. These reponsibilities are in addition to her basic role which is to assess, plan, implement and evaluate the nursing care of her patients; to co-ordiate the work of the team who will carry out the care; act as health educator and advisor and liaise with appropriate support services as required by her patients.

WARD SISTER/CHARGE NURSE

The ward sister is an RGN who has previously worked as a Staff Nurse and has probably completed a 6 month post-registration course in her specialty. During her employment as a Ward Sister she is likely to undertake some management training.

The Ward Sister is the senior nurse in charge of a ward, clinic or department. She supervises a team consisting of staff nurses, enrolled nurses, student

nurses and care assistants. She liaises with medical staff, paramedical staff such as physiotherapists and radiographers, catering, cleaning and portering staff. The ward sister is often seen as the key figure in nursing practice (Pembrey 1980) and as the resource person to whom other nursing staff turn. This has been confirmed during interviews with ward sisters and with staff nurses who commented that ward sisters attend more meetings, pass on information to other staff and are generally more "in the know" than other ward based staff.

Runciman reported in 1982 that the main characteristic of the ward sister's role is "fragmented activity". She found that approximately three quarters of the sister's activities lasted for under two minutes and approximately half lasted for under one minute.

Redfern's study (1981) revealed that the ward sister's preferred roles are in giving patient care and in teaching students. Ward sisters' lack of enthusiasm for their management role had been indicated previously by Pembrey (1980) who found that four out of five ward sisters did not fulfill their management role. An explanation of this may be found in a statement by Castledine (1977) who felt that the skills demanded of a ward sister in terms of clinical expertise, management and leadership ability and teaching skills were such that no single person could fulfill them.

Redfern also revealed that 46% of respondents claimed they were unable to obtain enough information to enable them to carry out their roles as they would

wish. Using a Job-related Tension Index, Redfern calculated that lack of

information scored 2.5. on a scale of 1 - 5 ranking equally with "having too

much to do" and "having to do things against my better judgement".

Runciman (1982) also highlighted lack of information as a problem for ward

sisters:

> "sisters worked in an information vacuum, surrounded by
> ungathered facts which might have provided the evidence to
> support or refute their hunches; evidence which could have
> helped the sisters to carry out informed evaluation of
> nursing care management on their wards."
>
> (Runciman 1982)

MANAGERS

This sub-category of staff includes all nursing functions from Senior Nurse up

to and including the Chief Nursing Adviser who is the most senior nurse in the

Authority. There is no specific training for these grades but all will have had

extensive experience either in their clinical specialism or in management. Many

will have had management training at a senior level.There are three grades

included in this grouping.

1.Senior Nurse

There are a number of senior nurse roles. The two apparent to the researcher at

the time the staffing sub-groups were devised were:

  a) Senior Sister who is a ward sister with all the functions of that role,

and with additional responsibilities for the professional nursing standards of a group of 2 - 5 wards in the same speciality. The Senior Sister also acts as the clinical expert for those wards. She may also have a deputy thus allowing her to spend time in meetings discussing policy and ways of measuring standards of care (Wakeman-Rose 198).

b) <u>District Support Nurses</u> are employed to carry out specific non-clinical functions. They provide support and advice to the Chief Nurse Adviser in areas such as quality assurance, personnel and planning.

During the course of the research an additional Senior Nurse function was identified which does not easily sit in a managerial sub-division. These are <u>clinical nurse specialists</u>. During the four years of the research programme, this function has developed and is now a major force in nursing practice. The role of the clinical nurse specialist is to work with patients who have a specific problem and to provide expert advice to nursing colleagues. For example the Breast Care Counsellor works with patients following breast surgery. Other examples are the Stoma Care Nurse and Diabetes Nurse Specialist and the Sexual Therapist. These nurses are not appointed to a particular ward but work with patients and colleagues who need their expertise in all areas of the hospital. Coincidentally, none of these nurses was selected to take part in the main survey and so findings for the sub-group of Managers are unaffected by the development. This does however mean that one new group of qualified nursing staff have not had their needs considered by the survey.

2.Director of Nursing Services

The Director of Nursing Services (DNS) has responsibility for all nursing services in a speciality such as Midwifery, Orthopaedics or Community Services. She has personnel and financial responsibilities in her area and plans and advises the Chief Nurse Adviser on developments in service. She works closely with other senior non-nursing staff in her area particularly the Unit General Manager.

3.Chief Nursing Adviser

As the most senior nurse in the District, she is accountable for all professional matters relating to nursing. She oversees forward planning and developments in the nursing service and provides advice to health authority members and general managers on matters which require a nursing input. Since the implementation of the Griffiths style of management in 1984, the role of this nurse has undergone some changes. The specific aspects of the role and the responsibilities and accountability which it carries vary from District to District and in some cases may be combined with another function such as Director of Nurse Education or Unit General Manager.In the District under survey the Chief Nursing Adviser does not have a dual role.

COMMUNITY NURSING STAFF

Certain factors relating to the environment in which the community nurse works, differentiate her work from that of her hospital-based colleagues.

Barber(1980) outlines three main differences:

1. The patient is always a person, who is surrounded by the evidence of his day-to-day life and life-style. This gives the nurse less authority and may cause problems which would not occur in a hospital setting - poor facilities, lack of heating or bedding, problems associated with stairs or access to bathrooms.

2. Nursing care is not carried out by nurses on a 24 hour basis as in hospital. The community nurse has to persuade the family, who might be quite unsuited, to carry out nursing tasks in her absence.

3. Community nurses are considerably more independent than their hospital collegues, but as a result have more individual responsibility for the standards of care they provide.

Community nurses have been sub-divided for purposes of data analysis into two groups - District Nurses and Health Promotion Nurses (Health Visitors and School Nurses).

DISTRICT NURSES

The District Nurse (DN) must have a minimum qualification of RGN, preferably with some post-registration experience. The DN course is 6 months in duration and aims to prepare the nurse to:

1. Assess and meet the nursing needs of her patients.

2. Apply skills and knowledge effectively to patients

3. Be skilled in communication and be able to co-ordinate services for the benefit of the patient and his family.

4. Have an understanding of management and organisation principles.

5. Accept individual responsibility for her own standards of care.

Dunnell & Dobbs (1982) estimate that the District Nurse spends 33% of her time with patients referred by a General Practitioner, 13% of her time with patients referred by another member of the health care team and 40% of her time on follow-up visits. Such referrals are usually entirely for physical care.

The District Nurse may also act as a link with social services ensuring that help, both financial and social, is available where appropriate (Baker 1987).

Changes in demography and epidemiological trends have affected the work of the District Nurse. Elderly people now account for 75% of her visits. There is more chronic illness in the community, partly due to increased life expectancy. Mentally and physically ill people live longer and there is increased incidence of behaviour- and stress-related illness.

The District Nurse may be the leader of a team of RGN's, EN's and unqualified care assistants. She will delegate caseloads to them whilst remaining accountable for the care they give.

HEALTH VISITOR

The health visitor is an RGN with recognised obstetric training. The health visiting course which is provided in the general education sector, lasts for one academic year and includes 12 weeks of supervised practice. The main areas of study are:

a) normal physiological and psychological growth and development

b) the individual in society, with particular reference to areas such as the multicultural society and disability

c) development of social policy

d) changing patterns of health and disease

e) principles and practice of health visiting - determining priorities, analysing and evaluating needs, health education.

The main emphasis of the health visitor role is on health promotion and the prevention of ill health, working as an independent and accountable practitioner (Dunnell and Dobbs 1982). This is in contrast with the District Nurse who is concerned with giving physical care. The major client group for the health visitor is the family with young children. She has a responsibility to visit and monitor the health of every child under school age. The extent to which she can

do this is determined by the size of her caseload. She will maintain
particularly close contact with families and children who she identifies as
vulnerable or at risk. She has, however, no mandatory right of entry into
clients homes. She may be involved in teaching at mother and toddler groups or
in schools.

Whilst most health visitors concentrate on child care, some specialise in work
with other client groups such as the elderly or middle-aged clients through
Well Man and Well Woman Clinics.
Barber at al (1980) and Clark (1981) report that the health visitor divides her
time as follows:

25 - 30%	home visits
15%	clinic sessions (mainly child health)
25%	meetings, consultations with colleagues, report writing and record keeping.
15%	travelling

Depending on local circumstances , the health visitor may head a team involved
in health promotion and consisting of School Nurses and Health Visitor
Assistants. She is likely to be based in a health centre or GP practice.

SCHOOL NURSE

Training for the role of School Nurse is by block release over a period of two years. Candidates must have the basic qualification of RGN.

Strehlow (1987) in commenting on the Jameson Report (1986) remarks that School Nurses are intended by that report to be qualified health visitors looking after the health of the school age child. It was assumed that the role would be similar to that of health visitors. The findings of the report have never been implemented and so a nationally agreed policy on the role of the School Nurse is still lacking. The following statement of role is derived from the work of a number of authors (Wilde 1986, Strehlow 1987, Royal College of Nursing 1974) and from interviews with School Nurses.

The School Nurse is concerned with the health of the school age child. She is usually based in a health centre and has responsibility for a small group of schools. Each child is seen regularly for routine screening, covering areas such as sight, hearing, dental state. She maintains health records for each child, and liaises with teaching and medical staff and families where necessary.

The role may include formal classroom teaching on areas suitable to the age group concerned and provision of advice to school authorities on health hazards within the school. The School Nurse advises and supports children who have handicaps and provides advice to teachers on suitable learning environments for such pupils.

She may be accountable to a health visitor or to a senior nurse within her
base.

MIDWIVES

The normal route for qualification as a midwife is an 18 month midwifery course

following on from RGN training. There is one midwifery school which takes

direct entrants for a three year training period. This is to be extended to

another 7 schools in the near future (English National Board 1988).

The internationally agreed definition of a midwife is:

> "a person who is trained to give the necessary care
> and advice to women during pregnancy, labour and the
> postnatal period and to conduct normal labour on her
> own responsibility......"
>
> (MacAnulty 1984)

Like her colleagues in community nursing, the midwife has more individual

accountability for her practice than her hospital-based nursing colleagues.

Midwifery training prepares her to care for and monitor the mother's and

baby's progress through pregnancy and into the early post-partum period,

referring to a medical practitioner only if pregnancy or labour deviate from

the normal.

During the early years of this century it was the usual practice for

confinements to take place at home. The Peel Report (1970) however, advocated

hospital confinement for all, with the use of associated technology. This has

resulted in only 9,000 home confinements in 1978 as opposed to 62,000 in 1972

(Turner 1980). Midwives have bitterly opposed this saying that midwives carry emergency equipment to assist the mother and baby until they can be moved to hospital and that in normal births mother and baby are in fact safer at home where there is less risk of infection.

The effect of the Peel Report is also shown in the proportion of qualified midwives now based in hospitals. Out of almost 19,000 qualified midwives, less that 5,000 are community based (DHSS 1987a). An expression used a good deal in discussing the role of the midwife in the 1980's has been "the eroded role of the midwife". This has been said by some to be a direct result of the recommendations of the Peel Report (An Investigation into...1984) who have seen the resulting increased use of technology in childbirth as interfering with the midwife-client relationship and as allowing medical staff control over normal pregnancy and labour, and so reducing the midwife's responsibility for clinical decision making. Robinson (1985) reported on doctors in hospital-based antenatal clinics regularly "double-checking" the findings of midwives during assessment of pregnancy. Robinson also reported some discrepancy between midwives and medical staff perceptions of who had responsibility for management of normal labour in a hospital maternity unit. 45.7% of midwives felt that medical staff were in charge, whilst 79.8% of medical staff felt they were in charge. Some midwives are now attempting to reverse the trend away from the hospitalisation of childbirth and the associated reduction in their role, by setting up schemes whereby a midwifery team takes responsibility for a woman during pregnancy, stays with her at home during the early stages of labour, transfers with her to hospital, devlivers the baby and on the mother

and baby's return home 48 hours later carries out relevant postpartum care.

A Working Party shortly after the Second World War said that "the skills of the doctor and midwife were complementary , but that if this partnership was to be successful the doctor must accept the midwife as his fellow practitioner and not attempt to relegate her to the status of handmaiden" (Ministry of Health 1949 quoted in Robinson 1985). It would appear that the problem has yet to be resolved.

TEACHERS (See Figure 1.2 Nurse Education Management Structure)

CLINICAL TEACHERS

Candidates for clinical teacher training are required to have at least two year's post-registration experience. The course, which lasts for 6 months and can be in General, Mental Illness or Mental Handicap Nursing, covers principles and practice of clinical teaching and detailed study of the chosen option.

The emphasis for the clinical teacher is on the ward/department where she is based. Clinical teachers concentrate on the practical aspects of nursing in clinical areas, following on from and building on to the theoretical teaching provided in the School or College. The Clinical Teacher is also an important liaison between the clinical area and the College, reporting on performance on

behalf of the student and helping ward staff provide a suitable learning environment for students.

The role can be a difficult one to carry out well. Although employed by the College and having loyalty to that institution, by virtue of her work location she may feel more drawn to the problems of the clinical area she is working in. On the other hand she may be seen by the ward staff as an interloper who disrupts the smooth running of the ward and who challenges the authority of the ward sister. Such a position can be very stressful and requires great reserves of tact and patience. The clinical teacher also has to deal on a daily basis with the division between the 'ideal' world of the classroom and the 'real' world of the ward (Robertson 1987).

NURSE TUTOR

Three years post-registration experience and evidence of advanced clinical competence is required in candidates for nurse tutor training. In practice many tutor students are already qualified clinical teachers. The course which lasts for one academic year, does not include further clinical content, but is divided between Principles of Learning, Nurse Education, Human Relationships and a period of teaching practice.

The nurse tutor's role is complementary to that of the clinical teacher, in that she carries out much of the classroom teaching which prepares the student for clinical work. In practice, the tutor is increasingly involved with ward teaching, giving seminars and tutorials which take place during the students'

clinical allocation and working alongside students in the ward situation.

The tutor has the role of personal tutor to a number of students who may be at any stage of training. She acts as counsellor to students on professional, educational and personal matters. The tutor helps with the setting and marking of tests and assessments for students and liaises with ward staff and clinical teacher colleagues about individual students' progress. She also maintains records of training as required by the statutory bodies.

SENIOR EDUCATION MANAGER

The Senior Education Manager (SEM) will be a nurse tutor with a number of years experience. Whilst there is no specific training for this role, some will have undergone management training and an increasing number are required to hold a first degree.

The Senior Education Manager is head of a team of clinical teachers and nurse tutors. She is responsible for the planning of educational programmes for designated groups of students throughout their three year training period. She co-ordinates the teaching committments of her team and oversees the progress of students assigned to her team. She has a personnel management function in relation to both students and her team of teachers and is involved in the selection of both grades. Staff on this grade is also involved in developing future policy for the College/School.

DIRECTOR OF NURSE EDUCATION / DIVISIONAL EDUCATION MANAGER

The Director of Nurse Education is head of the School or College of Nursing and has 2-3 Divisional Educational Managers as her immediate deputies. There is no formal training for these roles. Increasingly staff at this level have a Master's degree and many will have extensive experience outside the NHS education system, having taught nursing subjects in colleges and polytechnics.

These grades are primarily concerned with the management of nurse education and therefore carry out little teaching on a day to day basis. Their specific responsibilities are in the implementation of offical and local policy regarding nurse education and in liaising with statutory bodies, District management teams and Health Authority members.

All have financial and personnel responsibilies, estimating and handling budgets for students salaries, salaries of teaching and support staff and for educational resources such as library and audiovisual facilities, and for determining establishments, overseeing the recruitment of staff and students for their departments and in implementing disciplinary procedures.

EDUCATION SUPPORT STAFF

In addition to the staff desribed above there are a number of support posts. These are in areas such as curriculum development, clinical liaison, special projects and recruitment. Most will be filled by experienced nurse teachers, and may account for 5% of the total education staff establishment.

CHAPTER TWO

INFORMATION NEEDS

This chapter will consider the area of information needs under three main headings:

a) information needs research in general, and dealing specifically with the search for definitions; the importance of role and of non-documentary sources of information.

b) information needs research relating to health care professions and nursing in particular

c) methodologies appropriate to information needs research.

INFORMATION NEEDS RESEARCH - GENERAL

i) Definition of Terms

Writers on information needs are united in agreement about the difficulty of defining terms in this area (Line 1974, Roberts 1975,Faibisoff & Ely 1976, Nick 1980, Wilson 1981, Krikelas 1983). Dervin(1986) in the most recent volume of the Annual Review of Information Science and Technology to discuss information needs, states that the problem has yet to be solved.

The definition of the term 'information' appears to cause particular problems, and has been the subject of much debate for over 20 years.Wellisch (1972) found eight definitions none of which agreed with each other. Otten(1974) wrote that

"when we try to define information, we recognise that there is a
variety of apparently fitting statements, but that none is
universally valid.... the many definitions reflect subjective
and context-dependent concepts of information, and they are
usually subject to criticism by others as being incomplete
beceause they do not include their various, subjective points
of view"

There does however appear to be some agreement that information is something

which reduces uncertainty. Some writers have studied the complexity of the term

and concluded that as it is used in so many different contexts, a single,

universally acceptable definition is impractical and thefore the search for it

should be abandonned.(Goffman 1970). Other writers have understandably

disagreed with this. Fairthorne (1975) perhaps puts the need for a definition

in the most practical terms, in saying that such a widely used term needs to be

defined for clarity of communication if for no other reason.

Belkin (1978) attempts to arrive at a solution by suggesting that concepts of

information should be sought rather than a definition.

"The distinction is that a definition presumably says what
the phenomenon defined is whereas a concept is a way of looking at,
or interpreting a phenomomenon."

(Belkin 1978)

The use of concepts will therefore allow a variety of differing interpretations,

each applicable to a particular type of study. Wilson (1981) comments that the

situation is further complicated by researchers using the term to include any

or all of three concepts.

a) the physical entity e.g. number of books read in a particular period.

b) a channel of communication, through which verbal or written messages
   are transferred.

c) factual data.

He also makes the point that lack of a universally agreed definition of
'information' is not necessarily a major stumbling block for user studies.
According to Vilson, what causes more difficulty is the failure of researchers
to define what is meant by 'information' in relation to their own work, and to
use a definition which is suitable to the scope and level of the individual
study being carried out.

The definition of information thought most appropriate to the type and level of
study being reported is:

"Information is any stimulus that reduces uncertainty"

(Krikelas 1983)

The expression 'information need' has generated an equal amount of debate,
much of it by the same authors. Information need has been variously defined as:

"What an individual ought to have for his work, research etc"

(Line 1974)

"A function of extrinsic uncertainty produced by a perceived
discrepancy between the individuals current level of certainty
about important environmental objects and the criterion state
he seeks to achieve"   (Atkin 1973)

"Information need arises from a users need to acquire data with
which to test some hypotheses he has formulated about the nature
of his world"

(Davis & Rush 1979)

"A conceptual incongruity in which a person's cognitive structure
is not adequate to a task"

(Ford 1977)

"When the current state of knowledge is less than needed"

(Krikelas 1983)

Derr (1983) proposes that in order for an information need to exist, the

information needed must have some sort of purpose and suggests the following

as a suitable definition:

"An information need is a condition in which certain information
contributes to the achievement of a genuine or legitimate information
purpose"

(Derr 1983)

Faibisoff & Ely (1976) have suggested that part of the difficulty with the term

relates to the fact that it is used as an umbrella term for a variety of sub-

concepts, to the extent that its meaning has become confused. Line (1974)

confirms this approach, saying that because of imprecise terminology, many so-

called information needs studies are in fact studies of demands and uses.

To return to the work of Wilson (1981), it seems important for very practical

reasons, that the definitions chosen for use in any study are:

a) understandable and justifiable by the researcher

b) understandable by the respondents and applicable to their work

experience.

It is felt by the present researcher that none of the definitions given above

fulfill both those criteria. Again Krikelas provides a useful and clear

definition:

> "Need is defined as a recognition of the existence of uncertainty
> in the personal or work-related life of an individual"
> (Krikelas 1983)

This definition defines need as something which is recognised by the individual.

It does not take account of "unrecognised" or "unfelt" information needs. These

are outside the scope of the present study.

The idea of different levels of information need appears in the writings of a

number of authors (Line 1974, Roberts 1975, Faibisoff & Ely 1976, Krikelas

1983). Most agree that the various 'levels' of need are stages along the

continuum of information seeking behaviour. This is represented in Figure 2.1.

Line suggests some definitions for the latter stages on the continuuum.

WANT =   "what an individual would like to have whether or not the
            want is actually translated into a demand"

DEMAND =   "what an individual asks for; more precisely a request for an
            item of information believed to be wanted"

WORKING ENVIRONMENT

Individual —— Stimulus —— Need —— Want —— Demand —— Use

Satisfaction

Non-satisfaction

WORKING ENVIRONMENT
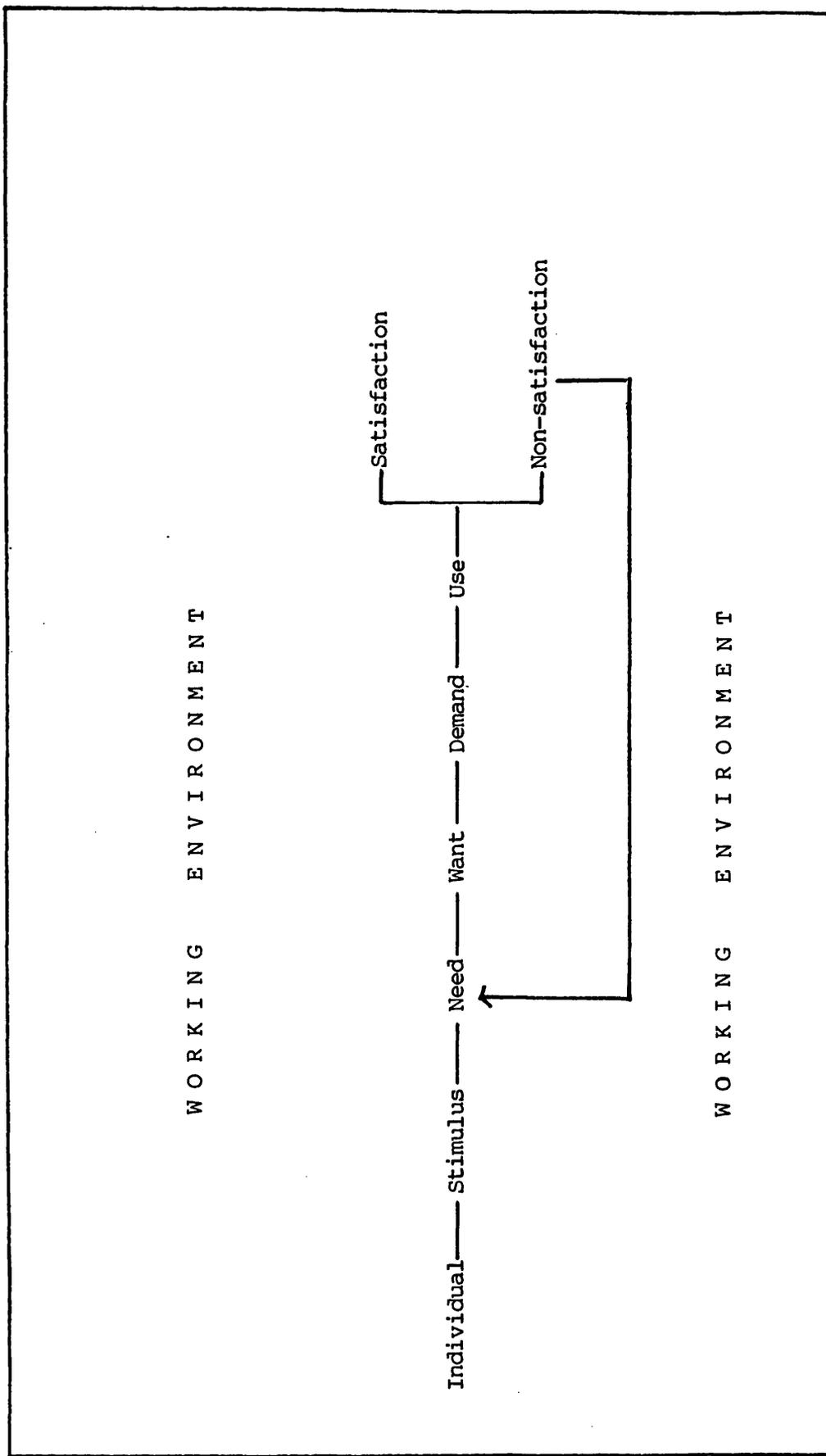
Figure 2.1: Information Needs Continuum

USE =   "what an individual actually uses - use may be satisfied demand
            or may be the result of browsing or accident"

(Line 1974)

Use of a document or of information acquired via interpersonal communication
may either lead to satisfaction of the need i.e. solution of the problem which
generated the need, or it may lead to non-satisfaction which may in turn lead
to other attempts to obtain suitable information. It may lead to a re-
formulation of the original need-generating problem or it may result in the
solution of the need being deferred. In the context of the study in hand, this
activity takes place in, and is influenced by, the individual's working
environment.

Some writers have also referred to a distinction between 'immediate' and
'deferred' needs i.e. those needs which must be answered immediately to solve a
problem, and those which can be dealt with at a later date. Krikelas (1983)
describes the information related activities concerned with these types of need
as 'information-seeking (immediate) and information-gathering(deferred). Hick et
al (1980) describe two similar types of information-related behaviour as

    a) applications needs - concerned with finding the answer to a
       specific problem

    b) nutritional needs - concerned with maintaining the general
       competence of the individual.

Although because of the methodology employed, mnost of the needs identified in this study are likely to be of the 'immediate', 'information-seeking' or 'applications' approach, it is not the intention of the study to exclude 'information-gathering' or 'nutritional' needs if they are reported.

ii)Findings of Information Needs Research

Following a survey of information needs research, Faibisoff & Ely (1976) felt able to make some preliminary generalisations about users behaviour in seeking out information. Whilst stressing that these generalisations could in no way be considered as laws, it was felt that they could guide further research . The generalisations, which are independent of any specific populations, are concerned with:

1. Behaviour of the user, in relation to accessibility of information, habitual modes of information gathering, lack of knowledge of potential sources, preference for interpersonal contact

2. Nature, amount and source of information sought with reference to role, information overload, inadequate bibliographic control

3. Quality of information and users dissatisfaction with it, plus the characteristics familiar to many information workers - that the amount of information available on a topic is in inverse proportion to its quality,

4. <u>Timeliness of information</u> - that information must be provided when it
   is needed, be current, be in a form accessible to the user and be
   relevant.

Faibisoff & Ely felt able to move on from these generalisations to put forward
12 guidelines for the designers of information systems. Those most relevant to
this study are:

1. Identify the specific information the user actually needs or requires
   for what he is doing

2. Identify the user in relation to his discipline or environment

3. Since oral comunication is an important feature of information
   gathering, the system should devise ways of facilitating the
   dissemination of such information

Work which has been carried out both before and since Faibisoff & Ely's work
gives weight to these statements. A brief review of work relevant to
the above areas follows.

a) <u>Importance of Understanding Information Needs</u>

The central importance of an understanding of client's information needs
by information workers has long been accepted. Donald Urquhart (1981) in
a brief but valuable discussion of the underlying principles of
librarianship listed as his first two principles:

i) Libraries are for users

ii) Failure of an information supply system to satisfy its users, is

as a rule not obvious

This lead to a later point "objective data about users requirements

should be used in planning developments in libraries."(Urquhart 1981)

or to put it another way - if you don't know what your users need, how

will you know when you are failing them.

Provision of information facilities is increasingly expensive, therefore it

is becoming even more important that users are well satisfied with the

services provided for them. In order to do this user needs must be

measured (quantitatively if possible) (Kunz 1976)

Lancaster (1974) also says that in order to justify its existence in cost-

benefit terms an information service must be fully responsive to the needs

of its clientele. He quotes Coover (1969)

> "A determination of the needs of users is absolutely essential to
> the management of an information center.......It must continually
> demonstrate that it can find information better for people than
> they can find themselves. Consequently, this organisation must
> continually appraise the needs of the user in order that the
> information center can obtain and have available what the user
> needs when he needs it. In fact the value of the information
> center can only be known in terms of it's satisfying the user's
> needs."
>
> (Coover 1969)

b) Importance of Role in Information Needs Research

Krikelas (1983) stated that the question "What information do you need?"

is really asking "With what problems or issues are you concerned?"

Line (1969) had previously commented that information need could be expressed in the question "What information would further this job or this research and would be recognised as such by the recipient?" Line also commented that in order to think successfully about information need, it is necessary to consider carefully the nature of the task which creates the information need i.e. to study what is involved in the job, research or other activity.

Studies on a wide range of general as well as professional groups have demonstrated that the setting in which a person works has a great influence on determining information needs.

In a study of information needs of research scientists Blom (1979) stated that "The point of view taken in this investigation is that unless the information needs of potential users are examined in the context of the job they do, the findings obtained will be of little practical value in providing design criteria for an information service."

Paisley (1968) and Allen (1969) have both developed models to demonstrate the complexity of systems within which an individual carries out his work, and which influence his information needs. Allen, in a simplified version of Paisley's 10 point model, identified 6 fields to which the individual belongs and which influence his information needs and behaviour.

1. The user as an information processor
2. The user in connection with the working team
3. The user as an individual in an organisation
4. The user as a member of a professional society
5. The user as a member of the invisible college
6. The user as part of a formal information system

This model stresses the importance of the work role, the work environment, the professional 'milieu' to which the individual belongs, along with personal contacts and contact with a formal information system such as a library.

Wilson (1981) has developed a model of factors influencing needs and information-seeking behaviour (see Figure 2.2). This also demonstrates the importance of role and environment. Wilson comments that:

> "At the work role level, it will be clear that the performance of
> particular task, and the processes of planning and decision-making
> will be the principle generators of cognitive needs; while the nature
> of the organisation, coupled with the individual's personality
> structure, will create affective needs such as the need for
> achievement, for self expression and self-actualisation. The particular
> pattern of needs and the resulting form of information-seeking
> behaviour will be a function of all these factors, plus factors such as
> the organisational level at which the role is performed and the
> climate of the organisation."

(Wilson 1981)

Nick et al (1980) report on the development of a conceptual framework from which to view individual behaviour within a corporate environment. Part of the development of this model was an attempt to place the individual behaviour within the context of task, role, functional and organisational factors. (Figure 2.3)

ENVIRONMENT

ROLE

PERSON

PHYSIOLOGICAL NEEDS

AFFECTIVE NEEDS

COGNITIVE NEEDS

WORK ROLE

PERFROMANCE LEVEL

WORK ENVIRONMENT

SOCIO-CULTURAL ENVIRONMENT

POLITICO-ECONOMIC ENVIRONMENT

PHYSICAL ENVIRONMENT
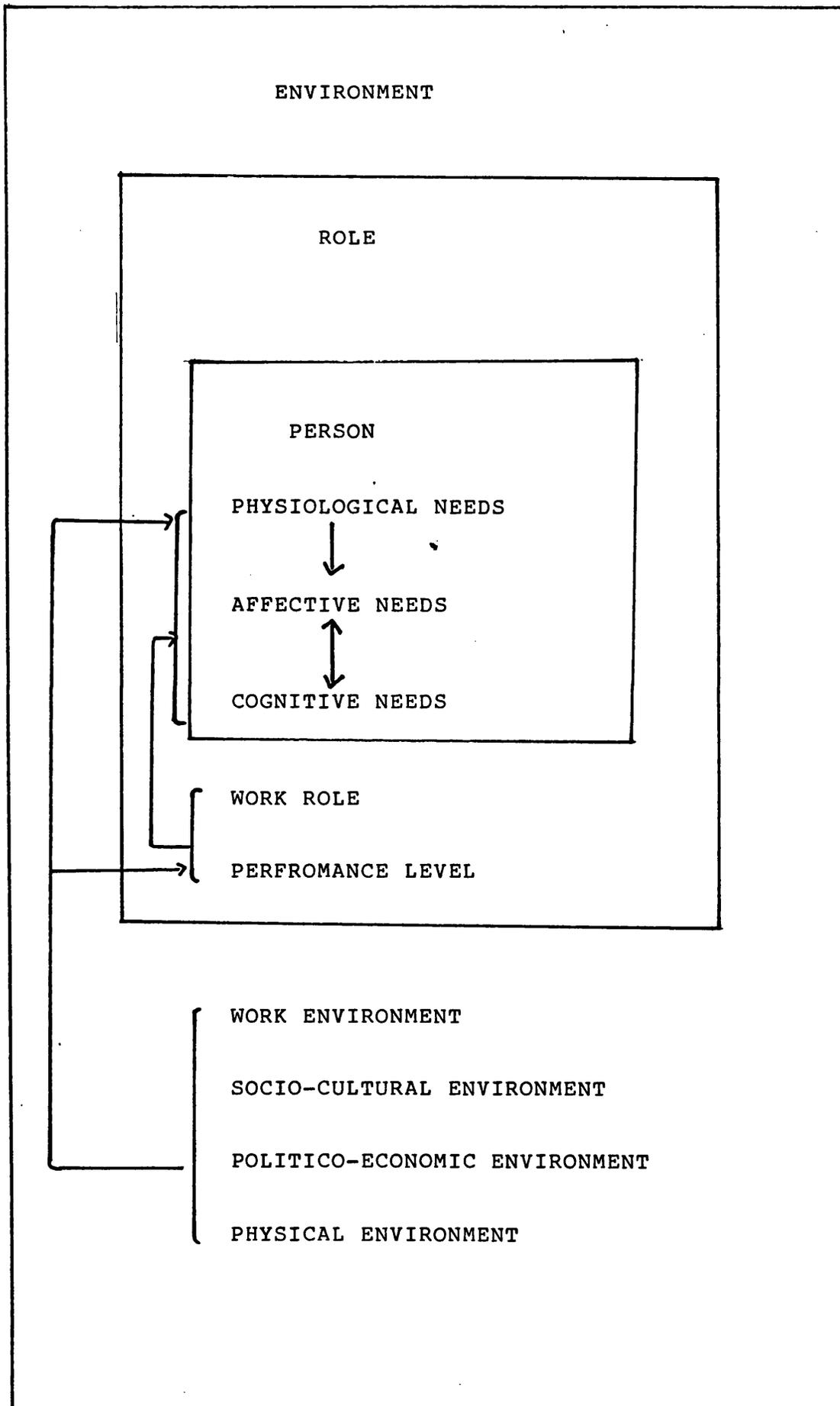
Figure 2.2:   Factors influencing Information Needs (Wilson1981)

Role
Constraints

Perceived Information
Environment

Information Universe

Functional
Constraints

Information available
to perform task

All Information relevant
to task

Information
Environment

Organisational
Constraints
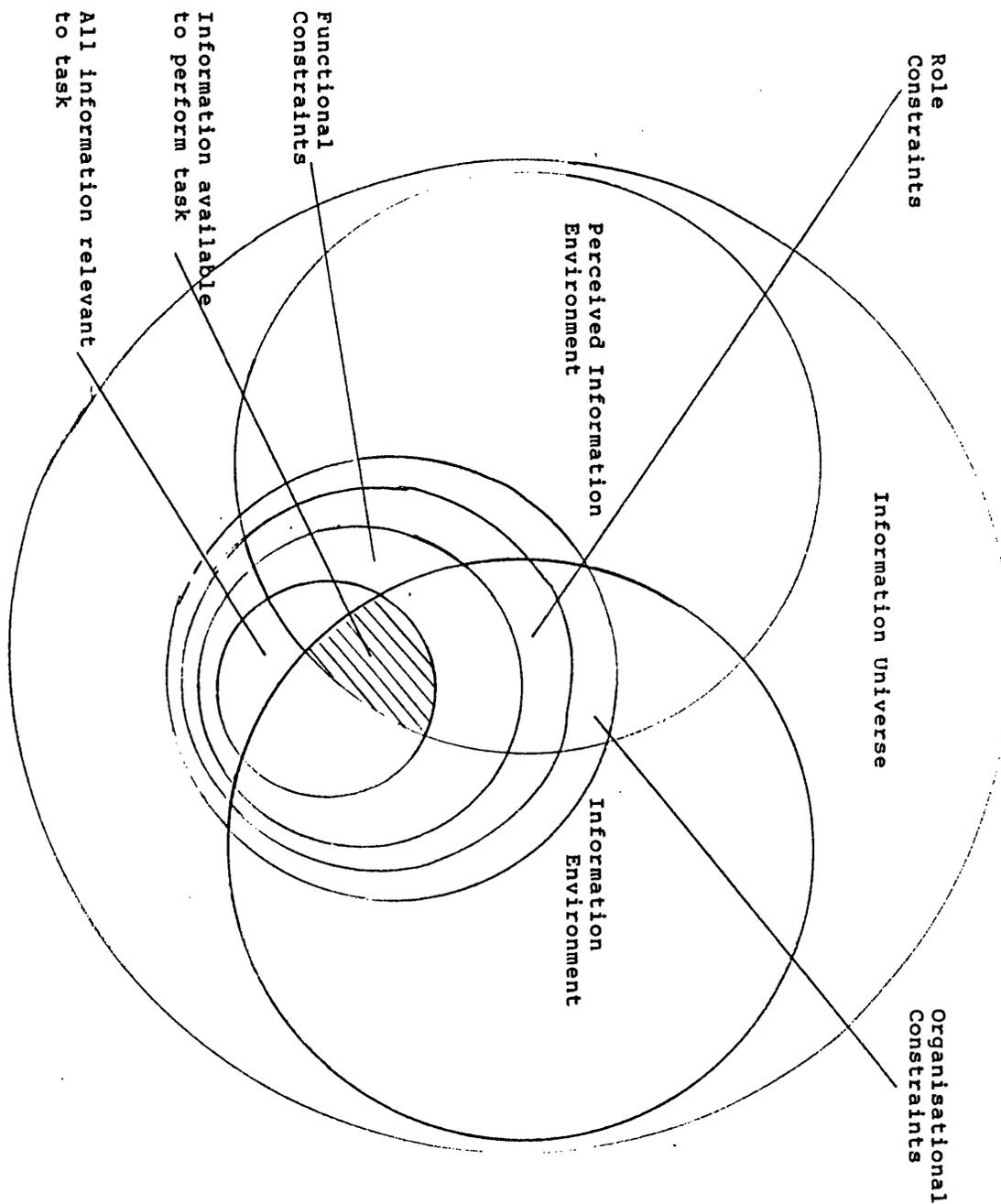
Figure 2.3

Impact of Environment, Organisational Constraints, Role
Constraints and Task Requirements on Individual
Information Behaviour. (Mick et al. 1980)

In recognition of the importance of role in relation to information needs. Chapter Two will be concerned with nursing as a profession, the role of the nurse and the role of specific grades. This information is provided in an attempt to clarify the setting within which the information needs expressed by the questionnaire results can be located.

c) Importance of Interpersonal/Informal Sources of Information

Whilst most of the definitions given above were concerned with information needs in relation to formal information systems, they are equally applicable and relevant to needs which may be satisfied by informal person-to-person communication. That this is an important method of satisfying information needs has been recognised by a number of writers. Both Brittain (1977) and Krikelas(1983) have commented that a major drawback of many user studies is that they have concentrated on the need for documentary information. Krikelas remarks that this is understandable bias coming from researchers whose prime interest is in printed sources. The approach however ignores the alternative, and to the user, more important sources of information such as personal contacts.

Studies of groups as diverse as defence personnel (Auerbach 1967), social scientists (INFROSS 1971) and nurses (Walker 1978, Thomas 1983) have shown that when individuals turn to external sources, they prefer personal

rather than documentary contact. In the face of so much contrary evidence, it would be surprising nowadays to find a study, which did not report interpersonal contact as very high on the list of preferred sources.

Krikelas suggests that when a choice is available individuals prefer to get their information from a knowledgeable and perceptive colleague (i.e. one that understands the subject and the situation). This source is usually someone known to the enquirer. The next level of preference would again be interpersonal, but would be someone from a organisation of relevance, membership of which would label the person as knowedgeable and situation-perceptive. As a third choice the individual would turn to an impersonal choice - documentation.

Scientists questioned during the Department of Defense study indicated that colleagues were able to provide the right amount of information at the right time (Auerbach 1967). Other research, including that reported by Poole (1985), has indicated that accessibility and ease of use are of paramount importance.

The earlier comments reported by Brittain and Krikelas are particularly pertinent when it is remembered how small a part formal information services play in the day-to-day information seeking patterns of most groups.

It is the intention of the study being reported that a wide range of

information needs of nursing staff should be considered. Informal and

personal information sources are likely to be extensively reported.

INFORMATION NEEDS RESEARCH IN HEALTHCARE

The purpose of this section is to briefly review the work of 2 authors of studies carried out in the United Kingdom in the last 10 years, with a view to placing the work on nurses in general, and the present study in particular in the context of healthcare information needs research.

Much of the work carried out on information needs has been concerned with the information needs of academics and researchers, and relatively little with the needs of practitioners. One area where this is not true is in the field of health care where work has concentrated to a great extent on the work of practising health professionals. This is of particular interest to this study as all but a small proportion of nurses being surveyed are engaged in clinical practice.

Wilkin (1981) produced an overview of the needs of practitioners in a number of professional fields, including physicians and nurses. She comments that one of the characteristics of practitioners is that they are under constant pressure to get the job done and that they make decisions on the basis of insubstantial knowledge, searching for a satisfactory solution rather than the best solution. Wilkin also comments on the difference between medical practitioners who are involved in patient-related decision making, and nurses who traditionally have

"little opportunity for individual problem solving particularly in hospitals where their work is subject to the authority of senior nurses, procedural rules and physicians' decisions. As might be expected, nurses appear to make little use of their professional literature for everyday practice, while medical practitioners make considerable use of their literature when compared with other practitioners." (Wilkin 1981)

Vilkin goes on to say however, that even for medical practitioners, use of the literature is sometimes seen as irrelevant or inappropriate and that the only acceptable basis for clinical decision-making can be previous experience. This finding is backed up by work extending back into the 1950's (Osiobe 1985). Vilkin comments that this attitude still lingers today.

In an earlier study Vilkin (1979) had looked at the needs of health care practitioners in particular and had noted a number of characteristics, some of which are equally vaild for groups outside the healthcare professions. Evaluation of the clinical librarianship project had indicated that most information needs are not urgent, not related to current patients and are not recurrent, and not helped by the presence of a clinical librarian. Library services did not figure prominently on the list of preferred sources, but were secondary to colleagues, own journals and book collections. Vilkin felt that choice of source was influenced by convenience and accessibility, but also suggested that practitioners knowledge of alternative sources was poor.

A finding of particular interest was that Vilkin thought her interview checklist was too detailed and comprehensive for exploring nurses information behaviour. She felt that the main reason for this was that nurses made little use of information sources other than colleagues and that documentary sources were virtually non-existent or inaccessible. The present study may indicate how far this situation has changed for nurses, since Vilkin reported in 1979.

Ford et al (1980) in a survey of the use of medical literature commented that the quality, quantity and nature of information required varied considerably, not only between different fields but also among individuals within fields. This study which was concerned with information-seeking behaviour rather than information needs per se. One interesting finding was that hospital based medical staff were much more active in looking for information than community based colleagues. Other findings which are of relevance to the present study were that older respondents seem more confident that they are meeting all their information needs than younger colleagues; informal sources are more important than formal ones; severe constraints on information use are imposed by geographical location and language; because demand is heavily influenced by supply, respondents with access to only limited facilities make less demands on them, but are more likely to express satisfaction with them than colleagues with access to better facilities. One of the recommendations of this report was that further work is needed on the information needs of nurses. As far as has been ascertainable, the present study is the first to be carried out on nurses in general since that date.

INFORMATION NEEDS RESEARCH - NURSING

The earliest study located, which considers the information needs of nurses was carried out in the United States of America by Strasser (1976). Strasser quotes an earlier survey carried out in Ontario, Canada which showed that both hospital and community-based nursing staff relied very heavily on their superiors for updating, but appear to depend less heavily than other professionals on their peers.

The findings of the work by Strasser are worth reporting in some detail as some of her aims are very relevant to the study being presently being undertaken. Her objective was to test a number of hypotheses. Those of particular interest are:

1. that nurses perceive a need for improved quality of information in certain areas.

2. that nurses use verbal and other non-documentary sources most frequently in attempting to satisfy information needs.

3. nurses working in management and educational settings use all sources of information more frequently than those working in clinical practice.

4. hospital-based nurses differ significantly from community-based nurses in their use of certain information sources.

5. most of the information needs of nurses must be met the same day
   or sooner.

Strasser sampled nurses whose names and addresses she was able to obtain, but in common with many researchers in this area, found it difficult to obtain up to date lists. Lists were obtained from three sources with the numbers sampled from each list ranging from 11 - 33.3%. No explanation is given of this variation of sampling sizes.

The intention of the study was to determine basic information needs and use of sources, rather than to focus on use of libraries. Data was collected via a mailed questionnaire. From a total of 500 questionnaires distributed, a reponse rate of 54.4% was achieved.

Respondents indicated greatest "need to know" in new developments in their area of specialisation and in drug information. Improvements needed in quality of information available was most marked in areas of specialisation and in government regulations relating to health care. The best fit between "need to know" and "quality of information available" was in the areas of cardiovascular disease, cancer and office organisation.

An interesting, and perhaps unexpected outcome of the responses was that hospital-based nurses feel less "need to know" than their community-based colleagues. This may be a reflection of the community nurses' isolation from

other colleagues and therefore perhaps a greater need to feel 'self-sufficient' than her hospital-based colleagues.

In looking at use of specific information sources, there was surprisingly no discernible pattern to the verbal vs. documentary source preference. Although personal contacts ranked highest with respondents as a whole, this was not true for every group. Three printed sources - articles, books and papers also ranked highly, with educationalists being particularly partial to books. The hypothesis was not supported in this case.

The hypothesis that nurses working as managers or educationalists use all sources of information more frequently than other nurses was also unsupported by the evidence in the case of managers. Use of three sources (seminars, abstracts of papers and catalogues) were significantly higher for the group, but in five other areas (out of a total of nineteen) use was lower than average.

The hypothesis however was supported for the educationalist respondents who reported significantly higher use of almost all sources.

The study was able to identify two areas in which there was a marked difference between use of sources by hospital and community-based nurses. Community nurses use registers/directories and personal information collections more frequently than hospital nurses. Hospital nurses used personal contacts and audiovisual resources more than average but in every case except audiovisual material, community nurses were above average in use.

Strasser however identified that almost twice as many hospital nurses were interested in improved availability of journals and books. This was interesting given that they indicated less percieved need for information. Strasser suggested this may relate to hospital nurses lower use of personal information files.

It has been thought by many practitioners that information needs of health care practitioners are urgent and that a high proportion must be fulfilled on the same day. Strasser found in 1976, what has been confirmed by later research (? Vilkin 1981) that most information needs of nurses are not urgent. She reported that the time delay acceptable to all groups was "within one week", with over 25% willing to wait even longer. 25% wanted the information need met on the same day and 11% wanted most of their needs met immediately. Managers indicated the greatest number of needs which must be met immediately (17%) and nurse educationalists indicated the fewest (9.5%).

The first British study was carried out by Gilbert (1976) who tried to assess the information needs of a group of nurses in Shropshire, with a view to obtaining information useful in designing a library service. All grades of nurses (including students) were sampled, a total of 78 (or 5%) being interviewed using a structured approach. Questions were asked in 4 main areas:

    a) what sources of information were used

    b) how had the information been obtained

    c) the extent to which respondents felt able to keep up to date

    d) comments on desired improvements of the library service - using a

checklist.

Some interesting results and recommendations are given. However, the validity of the results as a whole may be in some doubt as the sample was so small. The study gives no indication as how the sample was selected and what the total response rate was as a percentage of the nurses approached.

The study falls into the trap indicated by Line (1974), Brittain (1977) and others, in that although entitled "information needs of nurses" it concentrates on information uses and information seeking behaviour. One questions relates to information needs but is couched in very general terms i.e. "what type of information do you need in your work? (e.g. specific facts, background information). Please give examples". Such a wide ranging question could be difficult to answer particularly for a group not used to thinking in terms of information needs. The survey is also very much biased towards use of documentary sources. People as information sources feature as one possible answer to one question.

Teachers and students, ranked highest in their use of books, but managers were the heaviest users of journals. Ward Sisters and Managers make the heaviest use of government publications such as health circulars, though many were not happy with the procedure for distributing these documents through line management.

In relation to the needs of individual groups, Ward Sisters were most positive about the usefulness of a current awareness service, but do not make heavy use

63.

of libraries through lack of time, poor availability of resources and because they are not perceived as particularly relevant.

Managerial staff were shown to have different needs- for more internally generated information, government publications and up to date management information. Community staff were reported to be more literature conscious but suffer from the poorest provision. Specific information needs for these staff lies in the areas of local community data, sociology and psychology.

Those staff who had access to a bench collection used it regularly, but felt it to be out of date. Community staff had no such collections avilable to them. Most managers built up their own collections and felt there was a need for bench collections on all wards.

Overall conclusions were that use of literature is limited by lack of time, by lack of readily available resources and lack of knowledge about how to use literature effectively. Gilbert (1976) concludes that nurses information needs would best be served by small bench collections, with a good central collection from which an active information service is provided.

Walker's study (1979), carried out as part of a British Library Resesarch & Development project (Ford et al 1980) was intended to provide comparisons with the work of Gilbert, and to compare findings from rural Shropshire with those from urban Sheffield.

Data was gathered by means of a mailed questionnaire. A response rate of 72.5% was achieved, but as the distribution of respondents was significantly different from the distribution known to exist in the general population ($p < 0.01$), findings cannot be said to be representative. Despite this, results from the two surveys are surprisingly alike.

Colleagues within the place of work were cited as the most important source of information by 52.4% of respondents, meetings within the place of work by 37%, and trade literature by 36%. Meetings were cited by one third of Nursing Officer grade and above, but by only 16% of other grades. All other sources were referred to by less than 12% of respondents.

96% of respondents said they sought information in order to keep up to date, with 76% of them needing information in relation to patient care and 13% needing it in relation to courses being undertaken.

The most recent study located was carried out by Thomas(1983) who studied the information needs of two groups of Occupational Health nurses - one group of 13 in Sheffield and a group of 16 in London. Thomas commented that the sample was too small for the results to be statistically significant but would provide in-depth information.

Thomas concentrated on 3 areas

    a) the work of Occupational Health nurses

b) the use of formal/published sources of information

c) the use of personal contacts

In nine out of ten types of information source cited, the use of personal contacts was higher than use of formal sources. The exception was in the case of obtaining information about regulations and standards where use was equal. Few Occupational Health nurses reported having information problems, though those who did report the problem remarked on the difficulty of knowing where to look. As is to be expected, ease of access is the most important factor in deciding which sources will be used.

All respondents said they spent time reading to keep up to date, with over half saying they spent a few hours each week doing so. This finding appears to contrast with the previous finding that only in one area did documentary sources of information outrank personal contacts. It may be explained by readers interpretation of the questions asked. Reading to keep up to date may equate to Krikelas' (1983) concept of information gathering and be dealt with in a different way from information needs which arise during the course of a working day, which need to be answered fairly promptly and may be more easily dealt with through interpersonal communication (information seeking).

The sparse amount of, and in two out of the cases cited, relatively old research into information needs of nurses justifies the undertaking of the present study as a means of updating findings and providing a base from which further work can be carried out.

INFORMATION NEEDS RESEARCH METHODLOGY

One of the many problems which has bedevilled information needs research has been lack of an acceptable methodology to guide the research process. This has resulted in a wide range of techniques being used, some more appropriate than others, which result in a large number of studies which cannot be usefully compared to produce an overall picture of information needs. Wilkin (1981) said that non-comparability of results was a major problem, arising from the different "methods and techniques used, purposes of investigation; response rate and presentation of results." She also discusses the problem of interchangeability of terms such as 'information needs' and 'information uses', saying that a number of studies which purport to be about user needs in fact concentrate on information uses.

Qualitative vs. Quantitative Debate

According to Stone & Harris (1984) quantitative research methods "seek objective explanation by statistical description and manipulation" whilst qualitative research "seeks understanding of an event from the 'actor's' perspective." In practice this means that qualititative research uses statistical sampling and highly structured methods, such as questionnaires and interviews whereas qualitative research uses different sampling techniques and much less structured methods. Qualitative methods are useful when the behaviour of an individual in a particular context is of interest.

Quantitative methods are perhaps best typified by the research design which sets out to test one or a number of hypotheses, by means of rigorous sampling

and in-depth statistical analysis of the data collected. At the conclusion of
the study, the researcher hopes to be in a position where he can state that
such-and-such a hypothesis is supported by the data. This approach involves
creation of "theory" prior to the research. Poole (1985) contrasts these two
methodologies by reference to the work of Karl Popper and Francis Bacon. Popper
(1963), in the style of the 'grand theorists' who have been so influential in
sociology, e.g. Comte and Spencer, " advocates the 'theory-then-research
strategy' wherein knowledge is advanced by the development of new ideas
(theories) which are then subjected to tests for verification". Poole quotes
Bacon as saying that an alternative method

> "......derives from the senses and particulars, rising by gradual and
> unbroken ascent, so that it arrives at the most general axioms last of
> all. This is the true way but as yet untried".
>
> (Bacon 1863)

Qualitative methods are perhaps best typified by the work of Glaser and Strauss
(1967) who following Bacon's approach, use research to create theory, rather
than using research to test the accuracy of a theoretical statement. Their
methodology is usually referred to as 'grounded theory' because it is a theory
which is grounded in the reality of the data they have collected.

Whilst the study in hand borrows most heavily from the quantitative approach,
in its use of structured data collection methods, it does also borrow from
quantitative methods in that the environment of the user is seen to have
importance. The research is not guided by preconceived theory but hopes to draw
out of the data some patterns of information need and use, which may or may

not fit in with existing theory, but which can be used as pointers in the design of information systems for the group of users under study.

A number of writers have attempted to classify the varying approaches adopted in user studies. Menzel (1966) categorizes four approaches.

1. Preference, Demand & Experimental studies

   *preference and evaluation studies

   *demand studies

   *experimental studies

2. Use studies

   *information channels used

   *critical incident studies

   *utility of 'inefficient use' studies

3. Dissemination Studies

   *professional communication processes

4. Comprehensive Study Programmes

   *contain all of above approaches

Writing in 1977, Brittain had a number of criticisms of user studies. He felt that the days of global surveys were over and that future studies should consider the following points. Firstly, that questions should reflect the priorities of the user, not of the researcher and that questions should only be

asked which the respondent could answer. Secondly that the objectives of the study should be clearly stated and only significant results reported, and finally that longitudinal studies are to be preferred over single studies.

Methodologies Commonly Used

Kunz (1976) listed the three methodologies most commonly used in information needs research as:

1. Questioning

2. Observation

3. Secondary analysis

In addition, he commented that some studies are combinations of all of the above (Combined Technique Studies).

A brief survey of the literature on methodologies indicates the following advantages and disadvantages of these methods. (Kunz 1976; Lancaster 1974; Stone & Harris 1984; Herner & Herner 1967).

1. Questioning.

Kunz states that this is by far the most common technique used. He quotes Heidtmann (1971)as saying that if questioning procedures are seen as being the 'best' way of collecting data, it is only because they are a good substitute for better methods which are more complex and expensive to

apply. Written questionnaires can be administered face-to-face or more commonly, by mail. They are cheap and can be administerd to a large group more than once if necessary. The same questions are asked in the same way and in the same sequence to all respondents. The drawbacks are that a response rate of little over 50% is common; there tends to be bias in that only people who are interested in the topic will reply; the validity of the answers is often in doubt because:

* questions which may put the user in a negative light are at best answered negatively

* questions which the respondent is not interested in may be answered as they think the questioner wants them answered

* respondents may be insufficiently informed

* respondents may have no opinion on a topic and so give a random answer

* it is impossible to check whether or not the respondent has understood the question correctly.

A modification of this methodology is the use of diaries to record information seeking behaviour. This method demands an exact recording of individual behaviour directly after the event which is being investigated has occured. As such it is not reliant on memory. The method however places heavy burden on the person completing the diary. Validity of data can be questionable as the respondent likely to report socially acceptable behaviour. Additionally the fact that the individual is being asked to keep a diary will influence their behaviour. The longer the study lasts,

the greater these changes are likely to be (Lancaster 1974). Most
participants will start off enthusiastically, but enthusiasm will wane
and instead of completing the diary each time an information related event
occurs,the respondent will soon only complete it once a day or even once
a week, by which time memory will begin to play them false. Because of
the level of user participation and the amount of data collected it is
usually necessary to limit the size of the sample. Lancaster (1974)
reports on two studies using this technique which had only 12 and 4
participants respectively. This severely limits the capacity for
generalisation of results. The amount and non-standardisation of data
obtained also makes it difficult to generalise responses

Some of the objections to both the above methods are overcome by the
use of critical incident technique. The most pressing problems are
overcoming tricks of memory, obtaining useful information without using
data which is based on opinion or hypothetical situations rather than
fact or actual behaviour, and of obtaining accurate reporting of
information needs from users who are not used to thinking in such terms.
A survey of studies purporting to deal with information needs reveals that
the most useful results were obtained by those studies employing critical
incident technique. (e.g.Auerbach 1967; Mullings 1981 ;

Flanagan(1954) dates the development of critical incident technique to a
series of studies carried out during World War 2 for the US Air Force,
which looked amongst other things at the problem of combat leadership.

Combat veterans were asked to report incidents which were particularly helpful or unhelpful in achieving the aims of a mission. The resulting data was anlysed to produce a number of 'critical requirements' for desirable combat leadership.

Critical incident technique is, therefore, a procedure for gathering important facts about behaviour in specific, defined situations. Flanagan points out that a main advantage of critical incident technique is that it requires only simple judgements on the part of the respondent and interviewer, and that reporting of facts concerning behaviour is preferable to collecting interpretations and opinions based on general impressions. 'The Department of Defense User Needs Study', one of the early studies to make use of critical incident technique, comments:

> "many earlier user studies suffered from the weakness of being
> based on the opinion of the user.....It was therefore decided at
> the outset to make sure the study would not become an opinion survey.
> This objective was accomplished by directing most of the questions
> to the subject of what information was actually used to perform a
> recently-completed task"
>
> (Auerbach 1967)

It is expected that individuals are able to remember and so report their behaviour on one recent, specific occasion (which becomes the 'critical incident') more accurately than if asked to report their behaviour in general. It is suggested by Martyn & Lancaster (1981) that use of critical incidents can be approached in two ways. Users can be asked either to select the most recent event, regardless of how important or trivial it was, or to concentrate on the most outstanding event (not necessarily the

most recent). The two approaches will elicit differing sets of responses.

Which is chosen will depend on the aim of the individual research project.

The inclusion of both trivial and important responses from a large group

of people will provide a more representative and typical picture of

information needs for that group, whilst inclusion of outstanding

situations only may give a biased and partial picture of the needs

of the group.

Another variant of the questioning method is the panel interview which can

be successfully used to monitor changes in need or performance of a

service over a period of time. Questions are asked of the same group of

people on each occasion. A form of this is the Delphi technique, which is

sometimes used to explain why behaviour changes rather than simply

recording that it does.

Interviews are a verbal form of the writen questionnaire and can be either

structured (the same questions asked of all respondents, in the same

order, and all respondents are given the same list of posible replies from

which to select their answer), semi-structured (in which the same

questions are asked but repondents are free to reply as they wish) or

unstructured, (which are adaptive to specific situations). Examples of this

method include face-to-face, telephone and group interviews.

Interviews are usually more precise, spontaneous and flexible than

written questionnaires. Misunderstandings about the meaning of questions

and answers can be clarified by the researcher. Additionally, the response

rate tends to be higher than with written questionnaires.

Disadvantages of the method are that it is more costly to administer in terms of time and therefore usually smaller samples are involved. Because of cost, interviews often have to be limited to one geographical location. Analysis of data, particularly from semi-structured and unstructured interview schedules is difficult and subject to bias. The objectivity of the interviewer can be in question in recording responses. From the respondents' point of view, it is more difficult to give 'socially unacceptable' replies in a face-to-face situation particularly when interviewer is also the researcher and may be known personally by the respondent.

2. <u>Observation</u>

This technique uses observation to gather information directly as it happens. It therefore places no reliance on memory. Observation may be overt or covert. The researcher may be a participant in the action taking place or may be a non-participant observer.

It is a more objective procedure in the sense that the results are essentially independent of the person who carries out the observation, i.e it is not dependent on the researchers own preconceptions to the extent that a structured questionnaire is (Kunz 1976). It can be used to observe behaviour which the participant would be unwilling or unable to answer questions about. Again this method is very costly in terms of the observer's time, who may spend a lot of time waiting for a relevant

event to occur. The researcher needs to understand what is going on in order to record the events accurately. The presence of an observer may change behaviour, particularly if the participants know they are being observed.

3. Secondary Analysis

This involves methods or procedures which do not directly question or observe the user, e.g. analysis of loans, information requests or citation counting, i.e. assessing requirements by analysing the sources which are quoted in the primary literature of the topic.

Kunz (1976) discusses some rarely used methods such as experiment and questions why this technique has been so little used. He comments that it makes little additional demand on participants - indeed often participants will be unaware that they are part of an experiment. The present researcher feels that most researcher who are additionally information professionals would be lacking in the resources required to produce experimental conditions in their units and also would be reluctant to assign one group of users to a situation which may result in them receiving a less satisfactory service than their colleagues in another experimental group.

Herner & Herner (1967) note in their concluding remarks that whilst the techniques employed in the studies they reviewed were " extremely crude and precarious" they nevertheless often produced "useful and verifiable insights" regarding use patterns and requirements. They ask whether this may be because

some patterns are so clear cut that even crude methodology will identify them, but suggest that hypotheses should be formulated to test these patterns.

CHAPTER THREE

METHODOLOGY

Study Design

The overall aim of the study is to investigate the information needs of qualified nurses in a specific central London health authority. As was noted in Chapter 1 there has been relatively little research in this area, and nothing has been traced which looks at information needs of qualified nurses as a whole since Valker's study undertaken in 1979. (Ford 1980). Major changes have occured and are still occuring in the role of the nurse during the 1980's. Primary nursing is becoming established and the burgeoning number of clinical nurse specialists and nurse practitioners is perhaps the most apparent of these changes. In view of these developments and of the lack of recent research, it was thought most appropriate to carry out a general survey which could update previous work and act as a baseline from which other more specific, and in-depth work could develop.

It is therefore not the aim of the study to develop detailed hypotheses for testing but to be concerned with general trends which may allow for the creation of useful hypotheses in later studies. It is intended rather that the study will attempt to gain an insight into nurses' information needs and into the steps which they take to resolve those needs.

Previous studies (Gilbert 1976, Strasser 1976) and the researcher's own experience have indicated that there are differences in the information needs of nurses working at different levels and in different settings. This study will attempt to indicate the accuracy of this statement.

It is perhaps relevant at this stage to re-iterate the overall purpose of the study

> " To explore the information needs which qualified nurses experience as a result of their work for Bloomsbury Health Authority; to assess how nurses attempt to satisfy these needs; and to draw conclusions about the suitability of existing formal systems in meeting those needs "

With this general aim in mind, the following more specific objectives were formulated:

1. To discover situations in which qualified nurses in Bloomsbury Health Authority have need of information in order to carry out their work

    a) by developing an understanding of the role of the nurse in general and of the specific grades/roles identified;

    b) by eliciting a range of recent, specific situations where information was needed.

    c) by discovering how frequently nurses have information needs.

2. To discover if there are identifiable differences between the information needs of different grades of nurse.

3. To discover if there are identifiable differences between the information needs of nurses working in the hospital, community or education sectors.

4. To identify any areas of need common to all nurses.

5. To ascertain which factors prevent nurses from following up expressed information needs.

6. To identify in ranked order, the information providers which qualified nurses use.

Target Population

The target population consists of all qualified nurses employed by a central London Health Authority.This does not include trained staff who are undertaking full-time post-basic courses. The total staff within the population is thought to be approximately 2100. (Exact figures are unavailable).

Lists of staff employed are not held centrally, therefore individual units were approached for details of their staffing establishments. Some difficulty was experienced in obtaining accurate, complete and up to date lists. An initial set of lists was available from which to draw samples for the pilot studies, but information provided by the pilot studies indicated that these lists were seriously out of date. To improve response rates for the main survey it was necessary to obtain a more up to date and accurate set of staff names. This

proved difficult, and necessitated the omission of one unit entirely as their lists had been lost due to computer failure.   As a result psychiatric nurses are not represented in this survey. As far as is known other staffing lists were complete. A total of 1485 names was made available. The discrepancy of approx. 600 names between the expected total and the names obtained is thought to be accounted for by the missing psychiatric nurses, and by the inclusion in the total establishment figures of nursing auxiliaries who are not part of the survey and by staffing vacancies.

Selection of Sample

As two of the objectives of the study are concerned with the differences in information need between the grades of nurses under survey it was necessary to carry out a stratified sampling procedure, to ensure that groups are represented as accurately as possible. This method is more precise, for the purpose of this study than using simple random sampling. Information from the staffing lists provided enough information to allow individuals to be assigned to the appropriate sub-group.

Discussion with colleagues indicated that the most useful sub-groups would be:

Enrolled Nurse   Staff Nurse

Vard Sister/Charge Nurse   Manager

Midwife   District Nurse

Health Promotion Staff (Health Visitor and School Nurse)

Teacher

This sub-division allows for analysis of needs of individual grades as well as comparison of the needs of hospital, community and education staff.

As the purpose of the study is to gain insight rather than to test hypotheses, it was felt appropriate to sample 20% of the population.This gave a manageable sample size of 297. For some groups, this would result in a sample size of under 30, which reduced the possibilities of using statistical tests in data analysis. However, as rigorous data analysis was not the prime concern of the study, this was not seen as a problem.

Once allocation of names to sub-groups was complete, names in individual groups were arranged in alphabetical order by surname. As one in five of the total was to be sampled, a number between 1 and 5 was randomly chosen and every fifth name following was selected. Names from the pilot studies which occurred in both sets of staff lists had previously been removed from the sampling frame.

Sampling for the interviews was less rigourous. It proved difficult to select individuals randomly as many of those approached had left, and it was inappropriate to obtain new up to date staffing lists for such a small sample. As responses from interviews were not to be included in data used for statistical analysis, this was unlikely to bias the overall results, and as the

interviews were to be used to provide insight and explanations of reported behaviour, it was decided to select names of individuals known to the researcher to be information conscious. Only 2 out of 24 individuals interviewed had been involved in the main survey.

Selection of Data Collection Tools

Five possible methods of data collection were considered, three were rejected because they were felt to be impractical in the prevailing situation and the two remaining methods were selected for use at different stages of the reseearch.

The options considered were:
1. Participation
2. Observation
3. Diaries
4. Interviews
5. Questionnaires

Participation and observation were rejected for the same reasons. i.e. that for a non-professional to be in a clinical situation for long periods of time would be potentially distressing for patients and intrusive of their privacy as well as being time consuming and distracting for nursing staff. Involvement in/observation of certain clinical procedures may also have necessitated obtaining permission from other health care professionals e.g. medical staff, which was an additional factor in the decision. Another element in this decision was the time available to the researcher to carry out the study.

The diary as a form of data collection method was rejected, as accurate and complete record keeping would demand a lot of commitment from a wide number of nurses. The researcher was unsure if this commitment would be forthcoming given all the other pressures on nursing staff at that time.

Using the interview as the main data collection technique was rejected on the basis of the time available to carry out the study; the difficulty of making appointments with a large number of people at a time convenient both to themselves and to the researcher; and the difficulty for an unskilled interviewer of dealing with each interview in the same way. This method was, however, selected as a suitable method of gathering information on individual roles and checking on findings from the main study.

The questionnaire method was selected as the main data collection method, for the following reasons. A reasonably short questionnaire could be completed in under an hour, and during the respondents' off-duty time if desired. The nurse is assured of privacy of response which may be desirable for some of the questions asked. As a result he/she is less likely to over-report socially acceptable behaviour which is a potential danger of interviews. Responses are recorded in the way which the respondent chooses not as the interviewer interprets them at the time. Additionally, a large number of questionnaires can be distributed easily and cheaply both in terms of financial and time costs.

It was recognised that there are potential problems with using questionnaires as a data collection method. Response rate tends to be around the 50% mark. It was anticipated that as the questionnaire was being sent out to members of a closed community, that a better reponse rate might be achieved.

The additional problem is that the respondents cannot ask for clarification of a question. It was hoped to reduce this to a minimum by testing the questions on a number of individuals and by piloting it at least once. Hindsight has shown that this proved to be successful. In addition by using the critical incident technique and by limiting other questions to role, responsibilties and interests,

it was anticipated that respondents would be in a position to answer all the questions accurately from their own experience.

Design of Data Collection Tools

The survey of previous information needs research undertaken had revealed the work of Kullings et al (1981) which was found to be particularly helpful in developing questions.

It was felt that a structured questionnaire using mainly closed questions would obtain the best results from respondents. Experience at the pretesting stage confirmed that length of questions and ease of answering were of importance in increasing response.In the final version of the questionnaire 10 out of 16

items were closed questions. Open questions were used in areas such as information need where the full range of possible answers could not be forseen.

An initial set of 32 items was developed. As discussed in Chapter Two, role is an important factor in understanding information needs. The number of questions which relate to personal information reflect this - 16 out of 32 asked about individuals' present role; hours worked per week; hours per week spent reading, seeking information; attending meetings. Experience and additional training in their specialism are also included.

The second section concetrates on information needs. It seemed apparent at this stage that some clarification was needed for respondents on the meaning of information or information needs. The aim of the study was to look at information needs in general and not limit findings to information which might be provided by a formal information system. Use of the word 'library' is deliberately restricted to the later part of the questionnaire. However, it appeared necessary to have a mechanism which would filter out responses such as 'I needed to know the patient's temperature in order to record it on his chart' or ' I needed to know when Mr X was due for his next pain-killing injection' as these are questions which can be answered from the patient or his records.Formal definitions were not thought to be helpful by nurse colleagues and so guidance was limited to a short sentence in the introduction to this section:

"Please exclude situations where the information required could

be obtained from the patient himself or from his records e.g.

details of his treatment plan, or when he is to be discharged."

As far as it is possible to tell, this had has the desired result and all except a very small number of respondents gave examples which are acceptable to the researcher. A good balance of trivial and more major situations were described.

It was decided to use the critical incident technique to elicit data on information needs.(For the background to this,see Chapter One). Respondents were asked to recall the most recent situation when they had needed information, to state why it was needed, and how they had gone about trying to resolve the information need. It was thought most appropriate to use this approach rather than asking for important (but not necessarily the most recent) instances as this latter approach might suggest that nurses' information needs were, on the whole, more in-depth and time-consuming that they in fact are.

The third section dealt with the respondents' preference for individual information sources in regard to four characteristics: frequency of use; ease of use; accuracy of information obtained and accessibility. Respondents were given a list of possible sources and asked to rank them according to the characteristics previously mentionned.

<u>Pretesting and Administration of Survey Tools</u>

A first pilot questionnaire was sent out in November 1986, with a covering

letter to 43 nurses throughout the Authority. An attempt was made to replicate

the distribution of individual groups, though this was difficult because of the

small numbers involved. (Questionnaire and covering letter are attached as

Appendix 1). Questionnaires were distributed with a covering letter and stamped

addressed return envelope via the hopsital internal mail system. The name and

address of the researcher were stamped on the reverse of the outgoing envelope

with a request for the questionnaire to be returned should the addressee have

left.The time allowed for return of the questionnaire was three weeks.

The number of returns from this pilot was very disappointing. A reminder and

duplicate copy of the questionnaire were sent out immediately, but the total

response rate was still only 35%. This pilot did alert the researcher to serious

problems with the staff lists obtained. Staff returning questionnaires on behalf

of colleagues who had left employment informed the researcher of 23% of the

sample who had left their posts. This phenomenon may also account for some of

the 35% from whom no response was obtained at all.

It was considered possible that the length of the questionnaire may also have

played a part in the poor response rate, and so a reduced length questionnaire

was developed. The cuts were made in two areas. Firstly, questions relating to

preference for sources were dropped, partly because they were not central to the

aims of the survey and partly because respondents had some difficulty in

understanding the concept of ranking, even when explanations were given. Many

responses to these questions were simply a series of ticks rather than items ranked 1st, 2nd, 3rd etc. As much of the data from these questions in the first pilot was unusable it appeared that not much would be lost by excluding the section.

The second area to be cut was that dealing with previous experience and training. Although this information would have been useful, it was decided that it was the least crucial of remaining areas. The shorter questionnaire (16 items) therefore contained questions covering job title, special responsibilities, how many hours spent reading per week, plus the critical incident items and 3 items on unsatisfied information needs. These questions remained identical to those on the previous questionnaire so that material from the first pilot study could be used for analysis purposes.

This second, shorter pilot was sent out to a similar number of nurses in February 1987.(See Appendix 2). The response rate from this questionnaire was 52.5% after a reminder. The increase in response was felt to justify the continued use of the shorter questionnaire.

Administration of the main questionnaire was held up for some time because of difficulty of obtaining more accurate staffing lists, but was finally sent out in October 1987, following the same procedure as for the pilot studies.

Once the main survey had been analysed, interview schedules were developed.The first section was identical for all interviewees and concerned the role,

responsibilities and information needs of the individual. Interviews allowed face-to-face discussion, in order to check impressions gained from informal conversations and from extensive reading. Questions in the second half, in which the interviewee was asked to comment on the results of the questionnaire from his/her peer sub-group and to provide clarification and explanation of them where possible, differed in detail depending on which sub-group the interviewee belonged to. However, they covered similar areas. (See Appendix 3 for interview schedule).

The interview schedule was pretested with two volunteer teacher colleagues and found to provide useful information. It was therefore used unchanged for the main interviews.

It was decided to interview 3 members of each sub-group, a total of 24 in all. This was practical in terms of researcher time and in terms of contacting staff members who would be willing to participate. Each interview was tape recorded with the permision of the interviewee and later transcribed by the interviewer. Information obtained from the interviews was not used in the main analysis but was used to provide personal experiences of role and to attempt to provide some explanations for the results of the main survey.

CHAPTER FOUR

RESULTS OF SURVEY

Results obtained from the questionnaire survey are reported in this chapter and some initial conclusions drawn. The bulk of data is drawn from responses to the questionnaire. Material obtained via the interviews was found to be most useful in confirming and clarifying the role of individual grades. Interviewees felt at ease and confident in discussing their own role and its relationship to other grades of nursing staff. Many interviewees, however, felt unable to comment on findings from the questionnaire. Where useful remarks were made these are reported, but these are very few in number. The reasons for this are thought to be that interviewees were a) inexperienced in discussing information needs; b) unwilling to report their own information needs and seeking patterns as typical and c) unwilling to comment unfavourably on colleagues responses to questions. The lack of experience of the researcher in carrying out this sort of interview may also have reduced the usefulness of material obtained from interviews.

Responses to individual questions are reported in the same order as they appear in the questionnaire. The application of this information to nursing library services and final conclusions will be found in Chapters 5 and 6. In order to obtain appropriate representation of sub-groups of interest, a stratified sample was drawn from the population. This has resulted in some groups having many more respondents than others. In order to clarify comparisons between these groups, results are given as percentages of each group giving a particular reply, rather than actual numbers of responses. Percentages are rounded to the nearest whole figure, with the exception of .5 which remains. This may result in totals being slightly less or more than 100% on occasions. Exceptions to this procedure will be noted.

Population Surveyed

The exact number of nurses employed by Bloomsbury Health Authority at the start of this study was unknown, but was estimated at 2100. A list of 1881 names was obtained from Unit Nurse Managers. This included 108 Nursing Auxiliaries who do not form part of the population being studied and 288 posts were identified as vacant. 1485 usable names remained. The shortfall of approximately 219 names was thought to account for psychiatric nurses who do not form part of the population studied, for the reasons discussed earlier.

Response to Questionnaire

A total of 377 questionnaires were distributed, inclusive of the two pilot studies. Of these 71 (19%) were returned by colleagues reporting that the individual was no longer in post. It is possible that individuals who did not respond to the questionnaire may also have left but in the absence of any evidence to that effect, it must be assumed that they received the questionnaire but chose not to reply. 297 questionnaires are therefore thought to have reached their destination and it is on that figure that all calculations have been based. By utilising material from both pilot studies it has been possible to maintain the sample size at 20% of the population.

42 or 14% of questionnaires were returned uncompleted. Nine individuals included a covering note giving their reasons for not wishing to participate. Two were

leaving within the next two weeks, two were on long-term sick leave, one cited lack of time, one was on maternity leave, one had only started in post 3 weeks ago, one was away on a course, one had retired, and one did not wish to participate. It is possible that of the remaining 33, some were returned by colleagues on behalf of an individual who had left, but did not explain this. No response at all was received from 92 (31%) of those sampled. Again, it is possible that some of those individuals may have left. The known inaccuracy of the staff lists obtained provides a tempting explanation of the low response rate, but a number of other factors may have been involved which are not known. Figure 4.1 shows the response rate from those who are thought to have received the questionnaire. The overall response rate was 53%, a disappointingly low figure given the closed environment in which the research was carried out. This may be an indication of a lack of cohesiveness in the Authority as a whole; it may be an indication that information has a low profile in the daily life of nurses or of the failure of information resources to successfully meet the needs of many trained staff. The overall response rate was affected by the particularly poor response from Enrolled and District Nurses. There was a feeling from some questionnaires that respondents felt that their daily experiences were too trivial to be of interest to a research project. This may have been a factor in the low reponse rate of these two groups.

Sub-group	Total Sent	Reply Received	% Response
District Nurses	19	8	42%
Health Promotion	25	17	68%
Managers	19	10	53%
Teachers	25	20	80%
Sisters	48	29	59%
Staff Nurses	98	54	55%
Enrolled Nurses	48	13	27%
Midwives	24	11	46%
Total	306	162	53%

Figure 4.1: Analysis of Response Rate

Question One   "What is your official job title?"

Figure 4.2 indicates the percentage which each sub-group is thought to form of the total population compared to the percentage which the sub-group forms according to replies to Question One. (Percentages are given to one decimal place to permit more accurate comparisons to be made).

Sub-group	Total Population	%of Total	% of Responses
District Nurses	73	4.9%	4.9%
Health Promotion	81	5.4%	10.4%
Managers	89	6.0%	6.1%
Teachers	79	5.3%	12.2%
Sisters	241	16.2%	17.7%
Staff Nurses	625	42.08	33.12%
Enrolled Nurses	220	14.8%	8.5%
Midwives	77	5.2%	6.7%

Figure 4.2: Representation of Sub-groups in Sample compared to overall Population

It can be seen that representation of groups is variable. Administration of the χ^2 test confirms that the percentage which District Nurses, Ward Sisters, Managers and Midwives form of the total respondents does not significantly differ from their occurence in the population as a whole (at the $p<0.05$ level), but that Health Promotion staff and Teachers are over represented in the sample and Enrolled Nurses and Staff Nurses are under represented.This should not affect analysis of results by sub-group but may bias results for the group as a whole.

Question Two "Formal job titles often hide special interests, responsibilities or

unusual aspects of a job. Are there any such features in your

job?.

Sub-group	Yes (%)	No(%)
District Nurses	37.5% (3)	62.5% (5)
Health Promotion	59% (10)	41%(7)
Managers	60% (6)	40%(4)
Teachers	75% (15)	25%(5)
Sisters	41% (12)	59%(17)
Staff Nurses	20% (11)	80%(43)
Enrolled Nurses	15% (2)	85%(11)
Midwives	54.5% (6)	45.4% (5)
Total	41% (67)	59%(95)

Figure 4.3: Special Job Interests of Sub-groups

Four respondents who answered YES to this question have been re-allocated to
the NO category as they simply enumerated those items which appear on a
standard job description for their grade. Where there was any doubt as to the
appropriateness of the response, the respondent has been left in the category
to which they allocated themselves. This was a feature of 2 replies.

As might be expected, Managers and Teachers score highest overall on this question, 60% of Managers and 75% of Teachers having some special interest involved in their job. Health Promotion staff and Midwives also score highly. At the lower end of the scale are Enrolled Nurses, Staff Nurses and District Nurses. What is more surprising is the relatively low showing of Ward Sisters. Given their ward management responsibility, and their clinical expertise, one might have expected a higher score. It may be that Ward Sisters feel that their wide range of responsibilities leaves them without enough time to develop skills and interests outside their immediate sphere of responsibility. Research has indicated that the Ward Sister role is among the most pressured in nursing (Pembrey 1980, Redfern 1981, Runciman 1982).

The 67 respondents who answered YES to this question reported a total of 124 special interests or a mean of 1.9 each. The sub-group reporting the highest number of interests per capita was the District Nurse Group. The small number of respondents to this question (2) and the fact that one of these reported 7 areas of special interest requires this finding to be treated with caution. The next highest scoring group was Managers with an average of 2.5 and Ward Sisters with an average of 2. Somewhat surprisingly teachers were third with 1.9.

Figure 4.4 indicates the types and proportions of special interest areas reported by respondents.
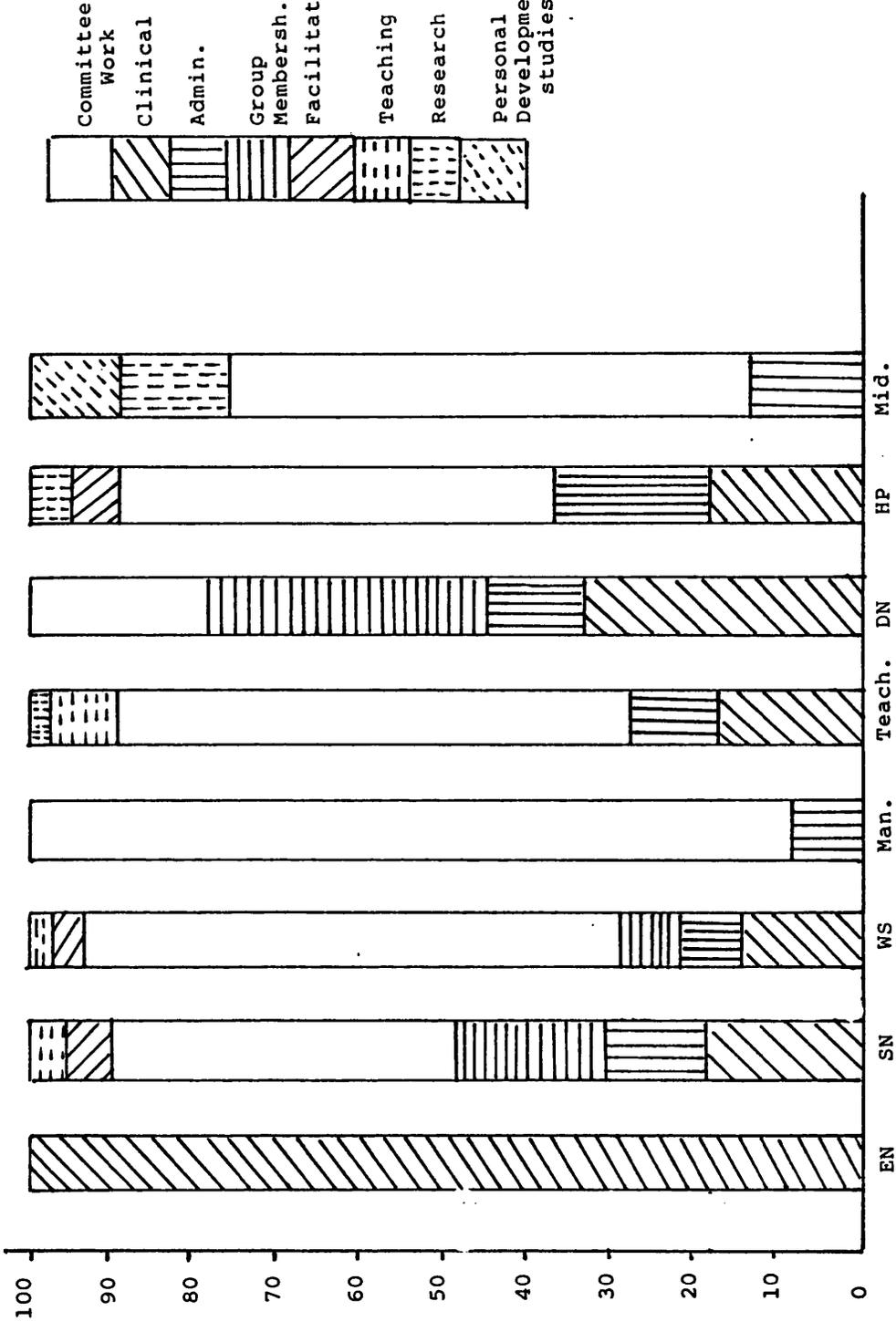
Figure 4.4:   Percentage and types of Special Interests Reported

Legend categories:
Committee Work
Clinical
Admin.
Group Membersh.
Facilitat
Teaching
Research
Personal Developme studies

Committee work, which scores 72 mentions overall, is the most prominent single factor in all groups with the exception of Enrolled Nurses and District Nurses, with 14 out of 15 special interests quoted by managers being committee work, and 18 out of the 29 special interests quoted by teachers. These findings suggest that there may be some justification to the often heard complaint of managers and teachers that increasing committee work duties takes up most of their working day. Only Enrolled Nurses do not mention committee membership at all.

Special interests relating to Clinical work receives a further 20 mentions, accounting for all the replies from Enrolled Nurses and for 18% of the replies from Staff Nurses, Teachers and Health Promotion staff and 17 % of replies by ward sisters but not figuring at all in the responses of Managers or Midwives, again a somewhat unexpected result from Midwives. Again the figure of 30% given by District Nurses must be regarded with some doubt due to the low response rate to this question.

Interests in administrative areas receives 13 mentions and covers areas such as staff rotas/off duty and translating books for foreign patients. Membership of groups of particular interest is listed 8 times; patient teaching is mentioned 4 times (twice by teachers and twice by clinical staff), research and having the role of facilitator for new staff are each mentioned 3 times, and following a nursing degree course is mentioned by one respondent.

Only Enrolled Nurses and Managers special interests could be predicted by the nature of their jobs. All other grades showed some unexpected results.

Of the 20% of Staff Nurses who reported a special interest, only 18% relate to an area of clinical interest, which is surprising given their predominantly clinical role. About 40% showed an involvement in committee work - perhaps a reflection of the attempt by some chairmen to have committee members who are basic practitioners rather than managers where possible.

Midwives reported the greatest interest in research of all the groups. This may be a reflection of the greater emphasis placed by midwives on continuing education and formal professional updating than by their nursing colleagues. Less easily explained is the non-reporting of special interests in clinical matters. Midwives as a group are vocal advocates of the patient's right to appropriate care and the right to choose the place of birth. To report no special interest in any aspect of clinical care is so unlikely that the only conclusion that the researcher can draw is that midwives regard interest and development of skills in this area to be fundamental to their role and therefore in no way 'special'.

District Nurses reported the biggest incidence of Group/Association membership (e.g. British Diabetic Association). District Nurses may see Group membership as a way of counteracting professional isolation and of keeping abreast with current developments.
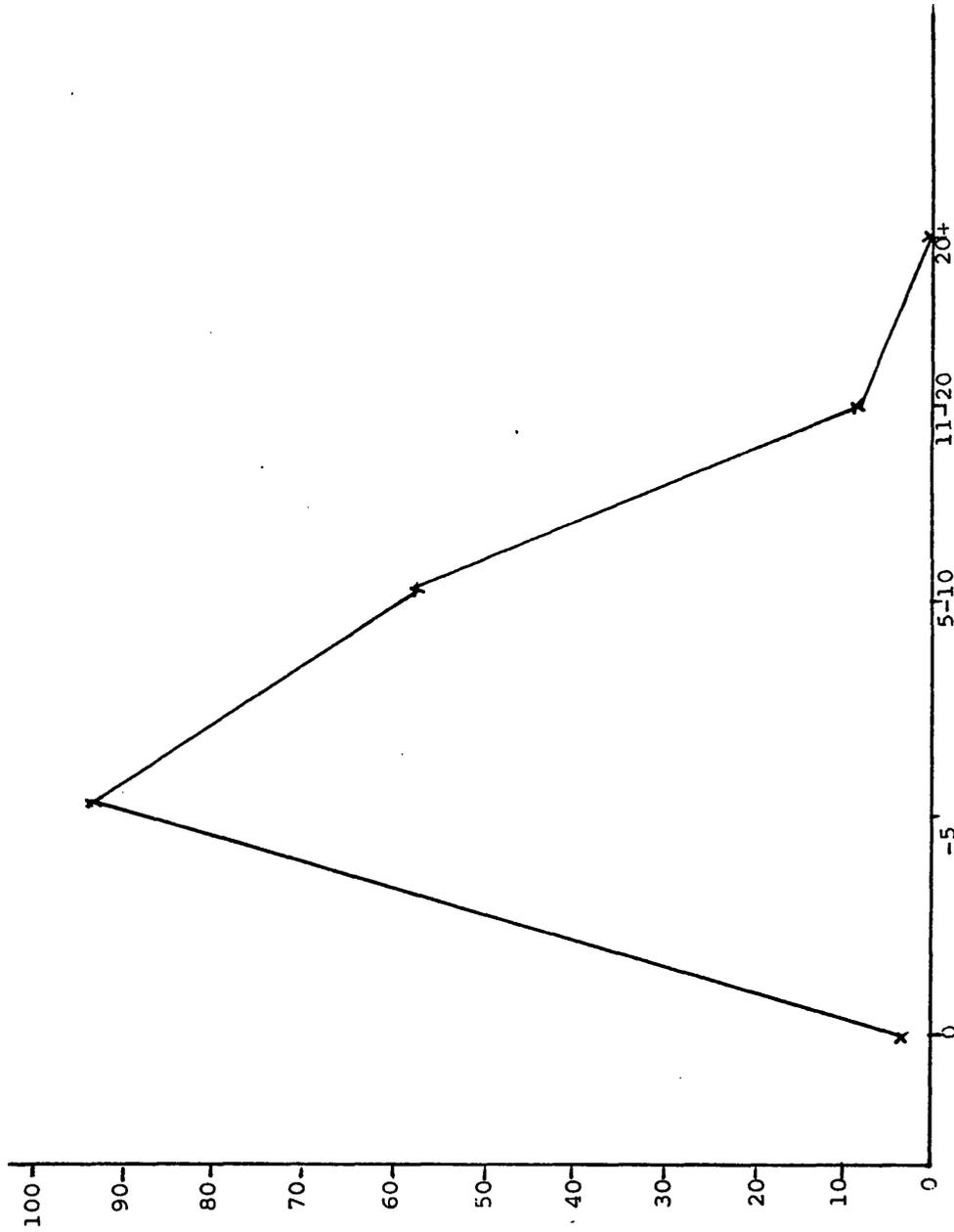
Figure 4.5: Hours per week Reading Books, Journal Articles, Internal and External Reports relating to Work (total group)

Question Three "Please indicate how many hours a week you typically spend reading books, journals, internal and external reports relating to your work?

Figure 4.5 shows responses for respondents as a whole, and Figure 4.6 indicates results from sub-groups. The most frequently reported response was under 5 hours per week (93 reponses or 58%) with 57 (36%) respondents reporting reading for 5 - 10 hours per week. Only 10 (6%) respondents reported reading habits which lay outside these two figures. All groups are more likely to spend under 5 hours reading per week rather than over five hours with the exception of managers (50%) and teachers (58%) who reported a higher incidence of spending between five and ten hours per week.No-one reported reading more than 20 hours per week. 5.5% of Staff Nurses reported no reading on a weekly basis. 23% of Enrolled Nurses reported reading for 5-10 hours per week.

Sub-group	None	-5 hours	5-10 hours	11-20 hours	20+ hours
Managers	0%	20%	50%	30%	0%
Teachers	0%	42%	58%	0%	0%
District Nurses	0%	50%	50%	0%	0%
Health Promotion	0%	62.%	37.5%	0%	0%
Midwives	0%	73%	27%	0%	0%
Sisters	0%	58%	27.5%	14%	0%
Staff Nurses	5.5%	63%	31%	0%	0%
Enrolled Nurses	0%	77%	23%	0%	0%

Figure 4.6: Hours per week spent reading books, journals, internal and external reports in relation to work, by Sub-group

Question Four   "When was the last time you needed information in order to resolve a problem at work?

Figure 4.7 shows results from the respondents as a whole and Figure 4.8 shows responses by sub-group. 16 respondents (10%) had an information need on the same day; 18 (11%) had needed to look for information within two days and 56 (34%) nurses reported having an information need within the last week. This suggests that 55% of qualified nurses experience a need for information at least once a week.

90% of Managers in the survey reported needing information within the last week; 77% of Enrolled Nurses; 70% of Teachers; 62% of Sisters; 54% of Midwives; 56% of Health Promotion staff; 52% of Staff Nurses; 37.5% of District Nurses also reported needing information within the last week. The percentage of staff needing information this frequently appears to correlate with the seniority of the staff in question, although again Enrolled Nurses and District Nurses do not fit the pattern. More staff involved in planning and management needed information in the previous week than those more junior grades whose work is of a more reactive, routine nature.

In contrast 26% of nurses reported experiencing an information need during the previous 30 days and 15% needed information less frequently than that. If these results are typical, 41% of nurses appear to look for information once a month or less. A similar pattern again emerges as reported above. With the exception of Enrolled Nurses, those staff involved in direct patient care report
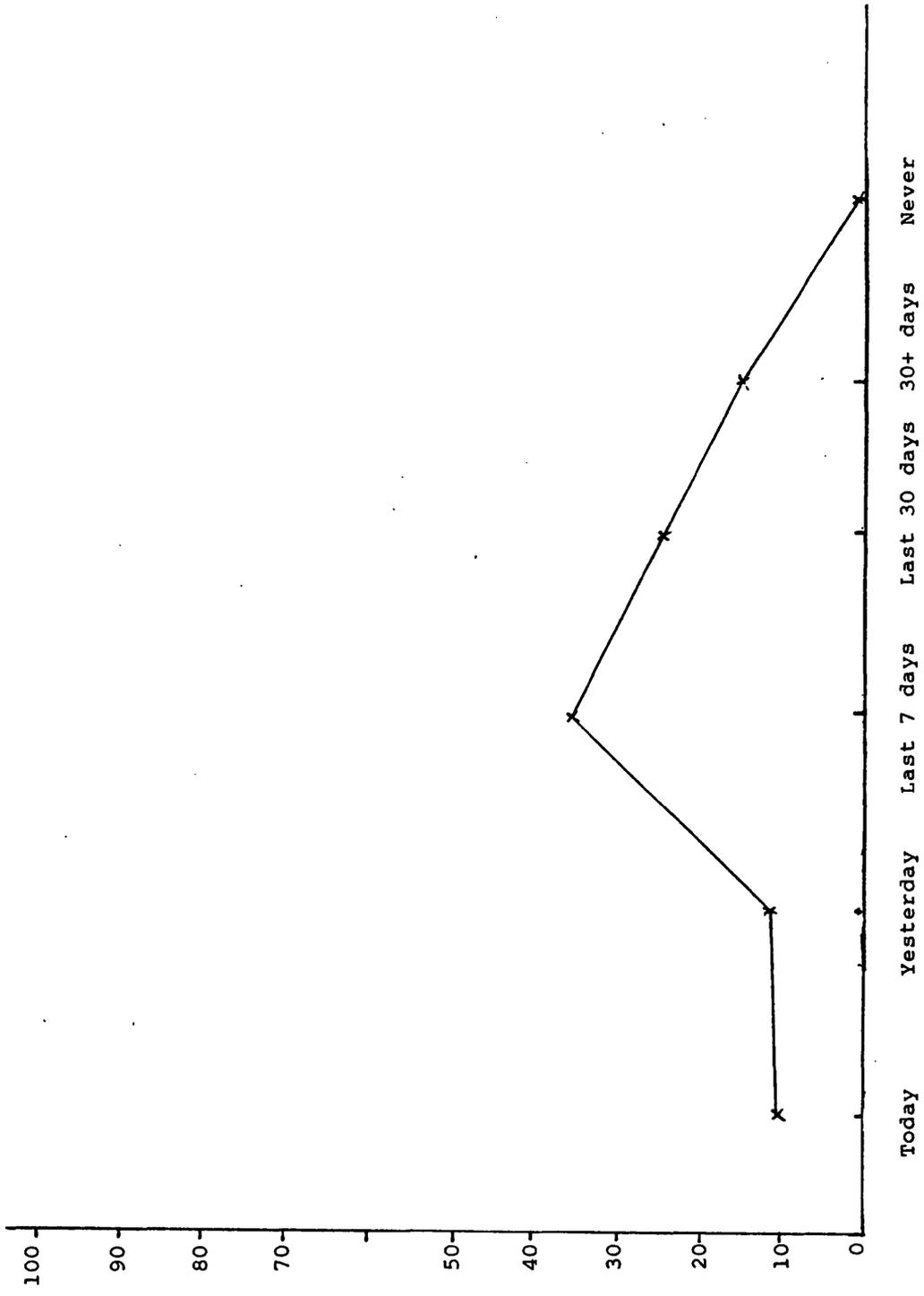
Figure 4.7: Last Time Information was Needed to Resolve a Problem at Work (total group)

needing information less frequently than those involved in management or education. One staff nurse said she never needed information and 3% of individuals gave no answer to this question.

Sub-group	Today	Yest'day	-7days	-30 days	+30 days	Never
Managers	30%	30%	30%	10%	0%	0%
Teachers	15%	0%	55%	20%	10%	0%
District Nurses	12.5%	0%	25%	37.5%	25%	0%
Health Promotion	12.5%	6.25%	37.5%	25%	19%	0%
Midwives	9%	18%	27%	36%	9%	0%
Sisters	3%	17%	41%	21%	17%	0%
Staff Nurses	10%	12%	30%	30%	16%	2%
Enrolled Nurses	8%	31%	38%	23%	0%	0%

Figure 4.8: Last Time Information Needed to Resolve a Problem at Work by Sub-group

Question Five: What was the information you needed?

Responses to this question are summarised in Figure 4.9 below.

Category	% of Responses
1. Medical/surgical information relating to a patients diagnosis i.e. non-nursing information	19%
2. Clinical nursing care i.e. information enabling the nurse to carry out nursing care	15%

3. Drug therapy	13%
4. Purchase/ utilisation of Equipment/Supplies	7%
5. Administrative policies and procedures	6%
6. Social Problems	4%
7. Nursing theories/models	4%
8. Patient/Client Education	3.5%
9. Infection Control	3.5%
10.Social Services	3.5%
11.Management	3.5%
12.Career Development	3.5%
13.Education Techniques & Resources	3%
14.Clinical Pathology (information about tests/investigations)	3%
15.Psychology	2%
16.Psychiatry	2%
17.Anatomy	1%
18.Finance	1%
19.Law	1%
20.Research methodolgy	1%
21.Sociology	1%

9 responses were unclear. 9 gave no response to this question.

Figure 4.9: What was the information you needed?

The categories of information need shown above were developed by the researcher
following analysis of the replies received. Fewer and broader categories could
have been developed but this would have disguised some of the smaller
groupings. It was anticipated that the study would provide information to
improve stock provision in the library service, and so having broad categories
was felt to be unhelpful.

Topics covered in the Medical/Surgical category included interpretation of ECG
abnormalities; causes, signs and symptoms of thalassaemia and its effect during
pregnancy; up to date research on the complications of diabetes; surgery of the
temporo-mandibular joint.
Clinical nursing contained a number of topics which might have been divided
into smaller categories e.g. four replies related to wound healing; three were
concerned with tube feeding and its side effects; two related to mouthcare for
patients with carcinoma; two were concerned with pre and post-operative care.
Some other areas mentioned were recent advances in the care of CVP lines;
research into urine testing; and the policy for resuscitation of an HTLVIII+
patient.

The drug therapy category, as might be expected, was divided between
information on administration, side effects and pain control.

Information on Equipment and Supplies was needed in relation to the purchase of
new equipment, where to send equipment for repair; availability of supplies from
central stores and correct use of equipment in patient care.Three out of four of

these areas should be the responsibility of the Authority's Supplies Department and their inclusion here may indicate a lack of knowledge on the part of ward staff as to how that department operates. It may also indicate a lack of information provided by the Supplies Department as to its role and function and the procedures which should be followed in obtaining equipment and supplies.

The low showing of psychology and psychiatry was unexpected but may be explained partly by the fact that psychiatric nurses as a whole were missing from the population surveyed. The figures therefore represent the need for information in these areas felt by general nurses and by the two psychiatric teachers included in the sample. Even taking this into account,the results suggest that general nurses appear to be much more concerned with the physical rather than the psychological care of their patients.

A full list of the areas of information need reported in answer to this question is attached as Appendix 1.

Information need in relation to medicine and surgery was reported as the area of greatest need by Staff Nurses, Teachers and Midwives.

Clinical nursing information was the area of greatest need for Ward Sisters,Enrolled Nurses and was joint top with drug therapy for District Nurses.

Drug therapy was the most reported area for Health Promotion staff whilst Managers showed no overall greatest need but were equally concerned with Management Information, Administrative Policies and Procedures, and Nursing Theory.

Teachers, Managers and Health Promotion staff did not report a need for Clinical nursing information; Teachers were the only group to report a need for psychological information (and two out of three of these were teachers specialising in Psychiatry); Midwives appeared to be unconcerned with information on Equipment & Supplies, as were Health Promotion staff and Enrolled Nurses.

Figure 4.10a-h shows information needed according to sub-group.

WARD SISTERS AND STAFF NURSES

Ward Sisters expressed the broadest range of need, listing 13 categories in all. This may be another indication of the fragmented and pressured nature of the Ward Sister's role. Staff Nurses demonstrate a similar range of needs, reporting information needs which fall into 12 categories. Ward Sisters demonstrate a greater need for clinical nursing information which may be related to their role as resource person and nursing expert, whilst Staff Nurses appear to have a greater need for Medical and Surgical Information. This may be an indication of the Staff Nurses' relative lack of experience and their need to familiarise
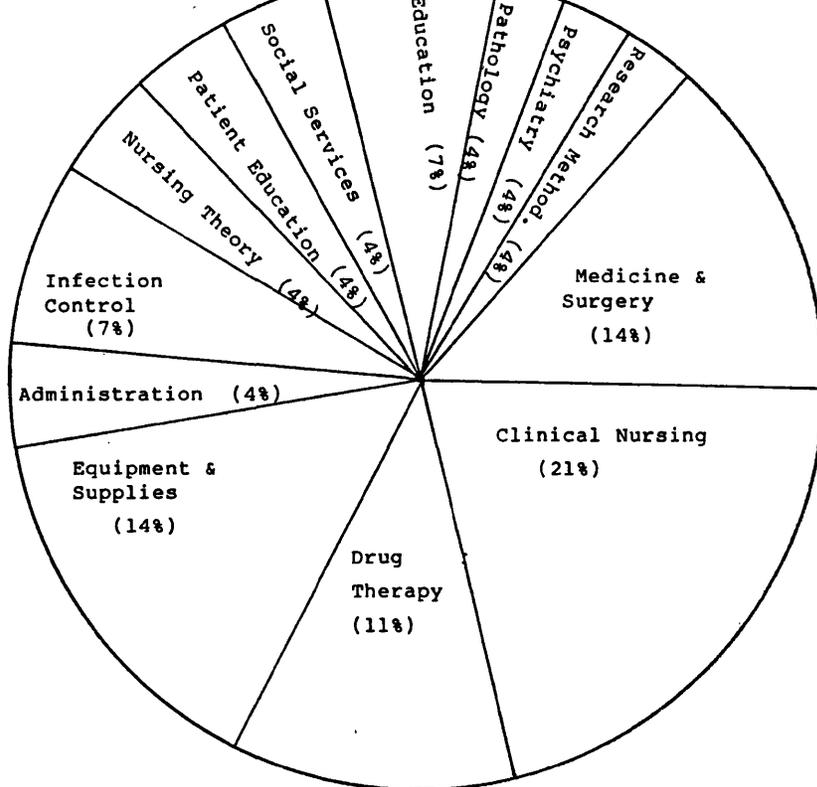
Figure 4.10a: What was the Information that you needed? (Ward Sisters Sub-group)
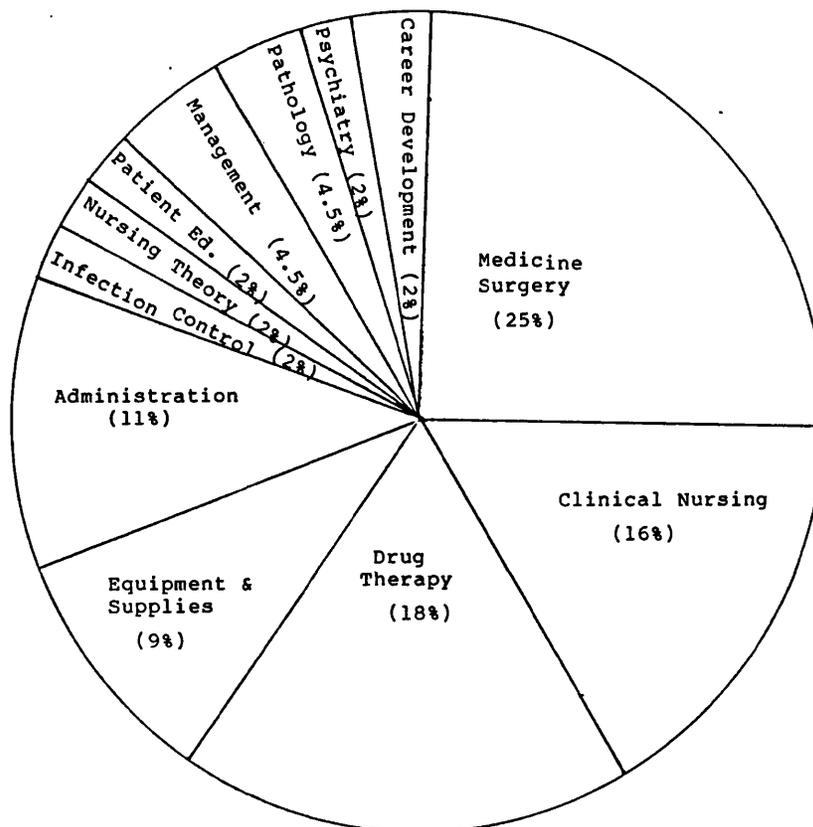
Figure 4.10b: What was the Information that you needed (Staff Nurse Sub-group)

themselves with the sorts of conditions and problems which their patients
present with. Ward Sisters on the other hand will be more experienced in their
specialist field and will therefore meet unfamiliar conditions and problems less
frequently. Having said this, medical and surgical information needs still
account for 14% of Ward Sisters' information needs. Ward Sisters demonstrate a
range of information needs which reflects the broad range of work
responsibilities which they are concerned with. In addition to medical/surgical
and clinical nursing information, they cover information on access to social
services; on obtaining and getting equipment repaired; on education; on research
methodology and on methods of planning nursing care. As previously noted, many
of these areas are also reported by Staff Nurses, though in differing
proportions. Staff Nurses did not report a need for information relating to
social services or on research methodology, but did demonstrate a limited need
for information which would aid career development, e.g. how to resign and apply
for another post, and the regulations for working in the USA.

TEACHERS AND MIDWIVES

Teachers reported 11 categories of information need in all, on a broad range of
topics. This may be a reflection of the broadening coverage of the nursing
curriculum. They demonstrated a need for medical/surgical information but no
need for clinical nursing information. Teachers may maintain their clinical
expertise by working with students in clinical areas, but may find it more
difficult to keep up with medical/surgical developments in their specialist
area. Only 10% of Teachers' information needs were concerned with matters
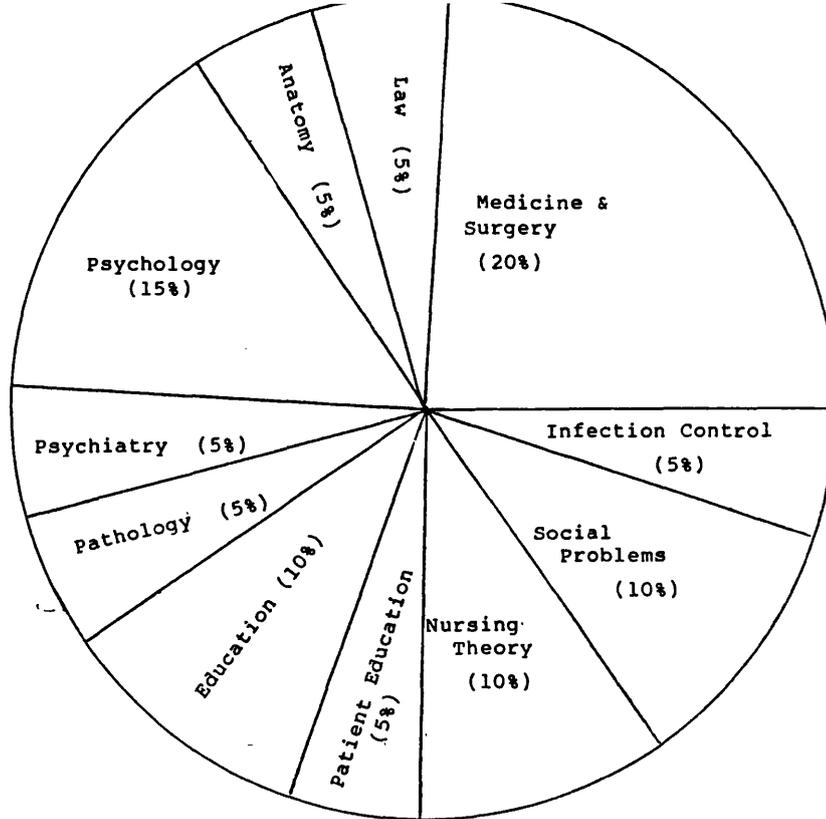
Figure 4.10c: What was the Information that you needed (Teachers Sub-group)
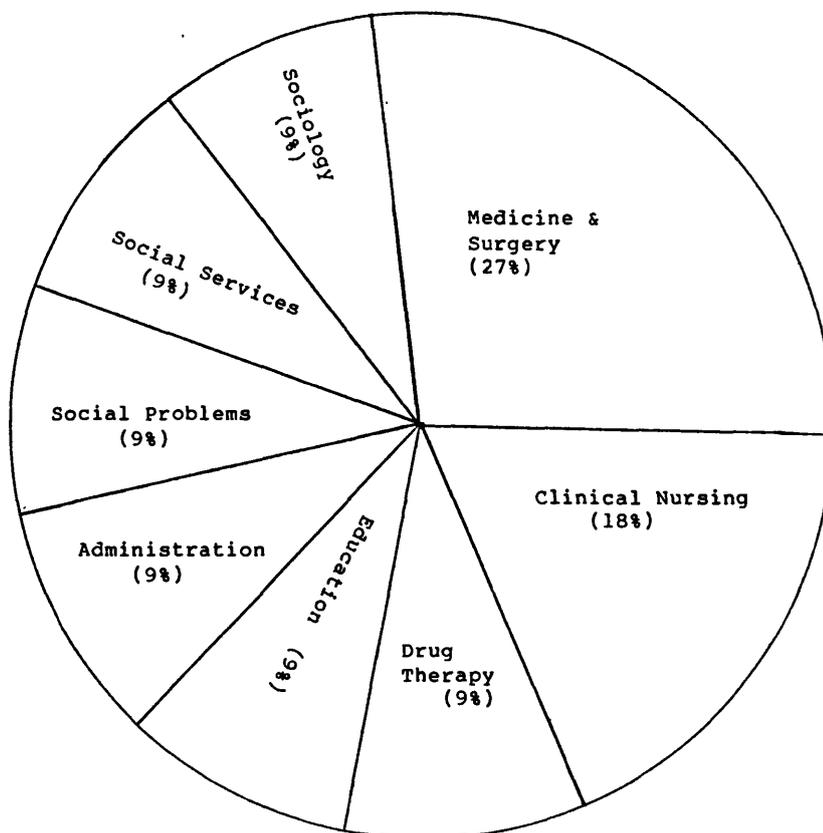
Figure 4.10d: What was the Information that you needed (Midwives Sub-group)

relating to education, and none of these was about educational theory, but they were concerned with future developments in nurse education and availability of audiovisual resources. Information on child abuse and on poverty accounted for a further 10%. Teachers were the only group to mention a need for information on legal matters.

Midwives reported a need for information in 8 categories, their greatest single need being for information on medical/surgical topics. Clinical nursing needs (accounting for 18% of total needs) were specifically related to care of the mother an baby before and during labour. An equal need was expressed for information on social aspects of patient care as a whole. These were represented by needs such as the current regulations on maternity benefit and care of an addicted baby whose mother was a heroin addict. Administration, education and drug therapy were all mentioned by one respondent.As there were only 10 respondents in all in this group,each of these replies accounts for 9% of the total information needs expressed by midwives.It is unclear therefore if these individuals represent a common need or if they are misleading in the impression they give.

MANAGERS AND HEALTH PROMOTION STAFF

Neither Managers nor Health Promotion staff indicated a need for Clinical Nursing information. This is not an unexpected result given their roles. There, however, the similarity ends. Not surprisingly, Managers expressed a need for
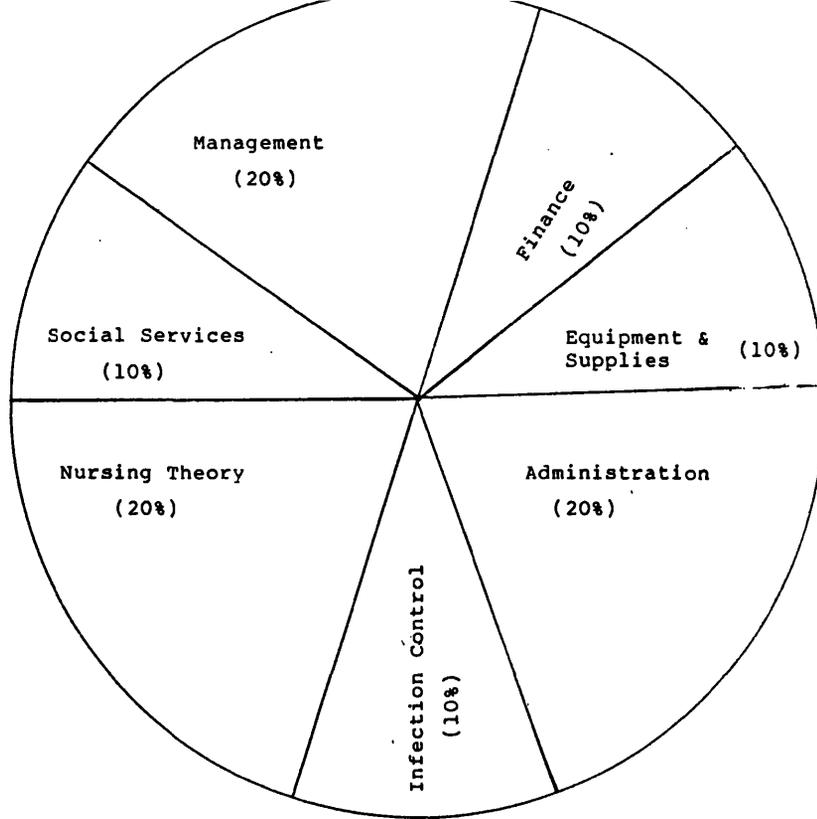
Figure 4.10e: What was the Information that you needed? (Managers Sub-group)
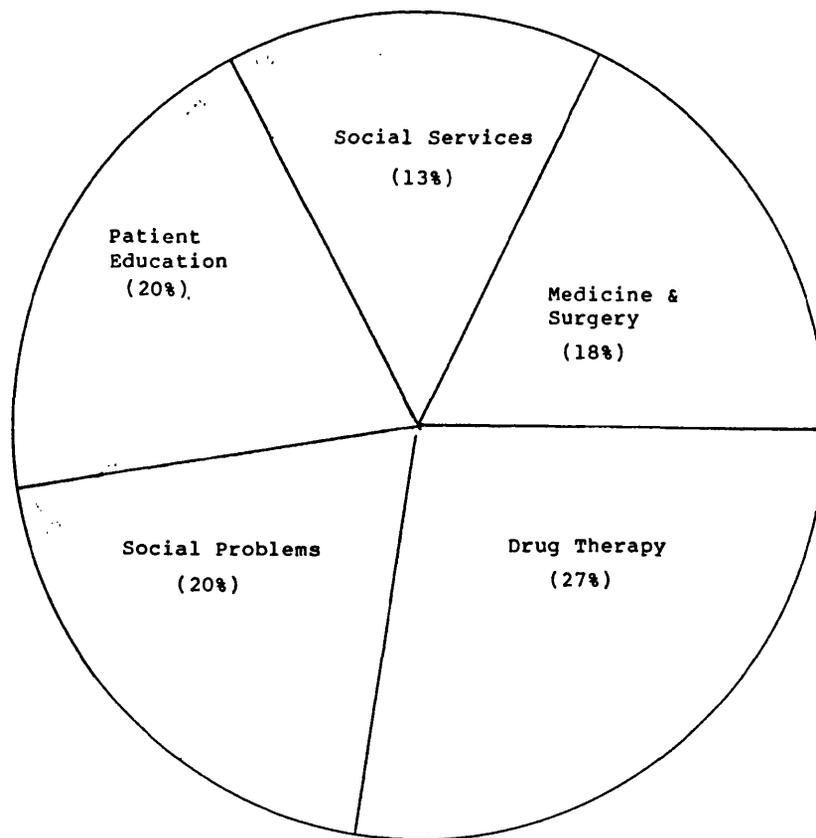
Figure 4.10f: What was the Information that you needed (Health Promotion Sub-group)

116.

information relating to the planning and provision of nursing services (e.g. implementation of primary nursing in a short stay ward; how to make better use of midwives' skills), implementation of policy (e.g. 'No Smoking' policy) and personnel management (e.g. sick leave records and procedure to follow in case of a violent attack on a member of staff). Less prominent needs are for infection control, financial and social services information.

Although only reporting 5 types of information need, Health Promotion staff appear to have clear cut needs which could be easily predicted from their job description.The most prominent need of Health Promotion staff is information relating to drug therapy. The strength of this need (27%) was, however, unexpected. Two responses were related to immunisation.The remaining replies give too little information to permit further anlaysis. Part of the Health Visitor's role is advice to families with handicapped children and so a need for Medical and Surgical information relating to those conditions is in evidence.In some areas the Health Visitor job title is changing to Health Adviser and as a reflection of this information need relating to patient education accounts for 20% of reported information needs. The remaining areas of information need are concerned with help in dealing with social problems and in utilising social services.

DISTRICT NURSES AND ENROLLED NURSES

As with Health Promotion staff, District Nurses and Enrolled Nurses reported only 5 categories of information need.
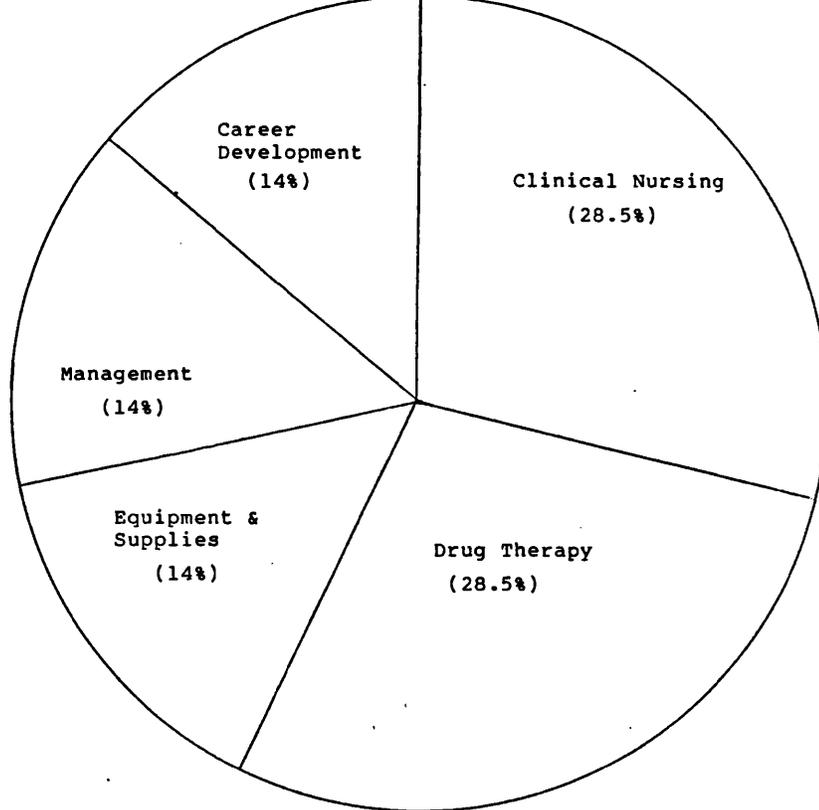
What was the Information that you needed? (District Nurse Sub-group)
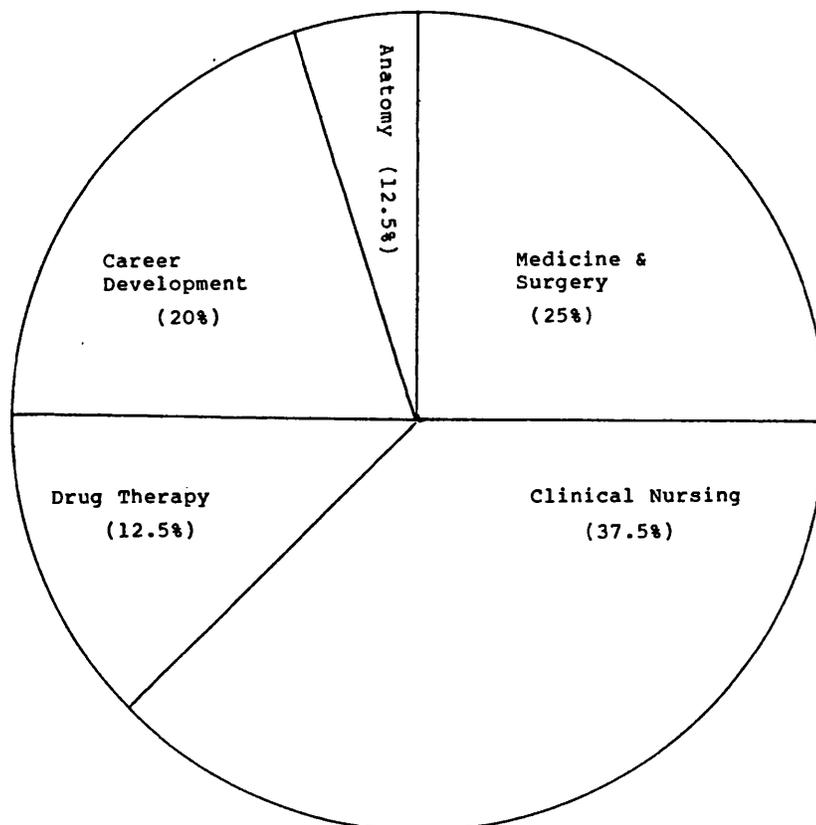
Figure 4.10h: What was the Information that you needed? (Enrolled Nurse Sub-group)

118.

It should be noted here that whilst District Nurses are accurately represented in relation to their proportion of the population as a whole, there were only 8 respondents, and this may affect how representative the results presented are. District Nurses' two most pressing needs appear to be for information relating to clinical nursing and drug therapy. Neither of these should be surprising as much of the District Nurses' work relates to wound care and administration of drugs. Given the relative isolation in which they work, the lack of need for medical/surgical information was unexpected. It may be that information provided by general practitioners provides all the information needed in this area. Obtaining equipment and supplies for patients is also a part of the District Nurse's role and figures as such in the list of reported information needs. Career development is also represented. This relates to a single need from a respondent who needed to know how to obtain funding to attend a conference. This need could equally have been allocated to the Finance category and as such, the appearance of career development should not be given too much weight here. However, it should be noted that knowing where to find funding for such events is an information need for some people.

As might be expected given the nature of their role, most of the information needs of Enrolled nurses are focussed on direct patient care. The most important group relates to clinical nursing information, and covers topics such as the procedure for setting up a splint and pre- and post-operative care of a patient admitted for pituitary ablasion. Information relating to their patients' condition is also needed (haemolytic uraemia and brachial plexus injury). Career

development represents a major concern for Enrolled Nurses, whose future is uncertain as a result of forthcoming changes in nurse education. Enrolled Nurses are the only group, other than Teachers, who indicated a need for anatomical information. This may be a reflection of their less rigorous, practice based training.

Figure 4.11 shows the reasons given for needing the above information. Responses to this question were analysed according to the predetermined categories from which respondents made their own selection. In common with the previous question, a very limited number of categories account for the majority of answers. In this case 60% of information is needed to resolve either a clinical nursing or teaching problem with the remaining 40% of needs divided between the other 7 categories.

Needing information to solve a clinical nursing problem is the most common reason given (36% overall). At first glance this does not tally with the previous question's findings which indicated that medical/surgical information is most commonly sought. However, it is not unreasonable to suppose that nurses seek medical and surgical information in order to clarify the nursing care which needs to be given to individual patients.

District Nurses figure most prominently in this category with 71% of their information needed to assist with a clinical nursing problem. Indeed District Nurses exhibit the least variety of reasons for needing information of any of the groups under investigation, checking only three of the nine categories provided. Administrative problems and financial problems were indicated by one respondent each. The poor response among District Nurses has been noted elsewhere and so this apparent overemphasis on clinical nursing problems should be treated with some caution, but may be confirmed by the role which District Nurses play.

Sub-group / Reason Information Needed	Enrolled Nurses	Staff Nurses	Ward Sisters	Managers	Teachers	District Nurses	Health Promotion	Midwives	Totals
Clinical Nursing Problem	27% (3)	40% (18)	52% (13)	11% (1)	0% (0)	71% (5)	50% (7)	25% (2)	36% (49)
Teaching Problem	18% (2)	18% (8)	20% (5)	11% (1)	72% (13)	0% (0)	21% (3)	12.5% (1)	24% (33)
Admin. Problem	9% (1)	14% (6)	4% (1)	55% (5)	0% (0)	14% (1)	7% (1)	12.5% (1)	12% (16)
Special Interest	18% (2)	2% (1)	4% (1)	0% (0)	11% (2)	0% (0)	7% (1)	37.5% (3)	7% (10)
Other	0% (0)	9% (4)	5% (2)	0% (0)	5.5% (1)	0% (0)	14% (2)	0% (0)	7% (9)
General Nursing Developments	9% (1)	7% (3)	4% (1)	0% (0)	5.5% (1)	0% (0)	0% (0)	12.5% (1)	5% (7)
Legal/ Ethical Problem	9% (1)	4.5% (2)	4% (1)	11% (1)	5.5% (1)	0% (0)	0% (0)	0% (0)	4% (6)
Financial Problem	0% (0)	0% (0)	4% (1)	11% (1)	0% (0)	14% (1)	0% (0)	0% (0)	2% (3)
Interview Preparation	9% (1)	2% (2)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	2% (3)
Unusable/ No Reply	2	10	4	1	2	1	3	3	27

Figure 4.11: Reason Information was Needed

122.

All clinically based sub-groups (Enrolled Nurses, Staff Nurses, Ward Sisters, District Nurses and Health Promotion staff) report clinical nursing problems as their main reason for needing information, although for Enrolled Nurses the association is less strong than might have been expected. Enrolled Nurses carry out care under the direction of Registered Nurses and as such may have less input into the planning of the care which they give. This may account for them reporting that only 27% of their information is needed to resolve a clinical nursing problem.

Midwives, Managers and Teachers all show a greater need for information in another area. The two groups not involved in direct patient care -Teachers and Managers- predictably show the greatest need for information in resolving teaching problems (72%) and administrative problems (55%) respectively. Indeed Teachers alone report no need for information to resolve clinical nursing problems. Midwives' main need appears to be in areas of special interest (37.5%).

The second most common reason for seeking information is to resolve a teaching problem (24%). This result is somewhat biased by the overwhelming need of teachers (72%) to find information to solve teaching problems. District Nurses report no needs in this area and all other groups report this as a need in 20% of cases or less. However, Enrolled Nurses, Staff Nurses, Ward Sisters and Health Promotion staff all cite this as the second most common reason for needing information, demonstrating again some cohesiveness between the needs and problems faced by clinically-based nursing staff regardless of grade. However, District Nurses do not follow this pattern, giving Administrative problems as their second most common

123.

reason for needing information. District Nurses carry out clinical care in patients' homes and rely on the patient or his/her family to perform minor treaments in between visits (which may be daily or much less frequently) and so one might expect teaching problems to arise, but this appears not to be so. It is possible that District Nurses do not pereceive this aspect of their work as "teaching". Again it must be remembered that the number of District Nurses returning questionnaires was very low and this may account for such unexpected differences being reported. The frequency with which this happens, however, suggests that there may be real differences between District Nurses and their hospital-based clinical colleagues which would bear further investigation.

The third most common reason for needing information is subject to a similar bias, in this case caused by Managers' need for information to solve administrative problems (55%). Although the association is less strong than in the previous example, all other groups reported it in 15% of cases or less and Teachers made no report of it at all.

Five groups reported a single information need which accounted for 50% or more of the total for their group. These were Vard Sisters (52%), District Nurses (71%) and Health Promotion staff (50%) - all concerned with resolving clinical nursing problems - Managers who were mostly concerned with resolving administrative problems (55%) and Teachers whose overriding interest was in resolving teaching problems (72%). Whilst the other information needs expressed by these groups should be treated with some caution as only one or two individuals reported many of them, these main

needs, whilst telling us nothing unexpected, do give positive confirmation of the main concerns of the individual groups.

The results from the remaining three groups - Enrolled Nurses, Staff Nurses and Midwives are less clear cut. Enrolled Nurses' relatively low need to resolve clinical nursing problems has been remarked on already. Teaching problems and Special interests account for 18% of needs each , with remaining needs divided equally between Administrative problems, Legal/Ethical probelms, Interview preparation and keeping up with General Nursing developments. As this last group were reported by only one individual each, it is not possible to make any firm statements about the reasons Enrolled Nurses need information, except to say that their needs appear to be fairly broad based.

Staff Nurses show a somewhat stronger need for information to resolve clinical nursing problems (40%) than other problems, perhaps because they are more likely to be involved in planning individual patient care.The second and third most common reasons for needing information expressed by this group are Teaching problems (18%) and Administrative problems (14%) whilst other areas cited account for 10% or less of total reasons given. The only reason not given by Staff Nurses is needing information to solve a Financial problem, presumably because Staff Nurses have little financial responsibility in terms of ward management, in contrast to Vard Sisters who have indicated a need in this area, albeit only a limited one.

Midwives demonstrate a very different pattern of information needs from their nursing based colleagues.They demonstrate no overriding reason for

needing information. Their greatest need appears to be for information to follow up their own special interests (37.5%). This confirms the impression gained by the researcher and quoted by Midwives themselves, that they are more independent practitioners than their nursing colleagues which implies that their information needs are less predictable. Clinical midwifery problems are reported as second most important (25%), with Administrative problems, Teaching problems and keeping up with General Developments all cited by one person.

Question Seven: Please explain how you searched for the information to solve this problem from the beginning to the end of your search even if you did not find the answer.

Figure 4.12 indicates the sources which the total group used in trying to answer their information need. The results are a simple count of all the instances reported for using a particular source i.e. books reported as a first choice counts equal to books reported as a third or fourth choice. This provides an overall picture of the relative use of the various sources cited.

Books rank highest of all information sources cited (22%) though only slightly ahead of nursing colleagues (21%). Along with journals (14%) and medical colleagues (11%) they account for 68% of the information sources cited. The remaining eleven sources cited account for 32% of information sources used. The four most popular sources are of a general nature and can

be referred to for a wide variety of information, which may account for their popularity. A number of the remaining sources such as district reports, government publications, manufacturers' literature and newspapers are specialist and provide answers to very specific information needs. As such one would expect them to have a fairly low showing in the ranks of preferred sources. Those information sources relating to library service also have a low showing, accounting for only 8.5% of total sources used.

Books	22%
Nursing Colleague	21%
Journals	14%
Medical Colleague	11%
Hospital Dept	7%
Manufacturers' Literature	5%
Indexes & Abstracts	4%
Outside Organisation	4%
Current Awareness Bulletin	2.5%
Government Publications	2.5%
District Reports	2%
Library Staff	2%
Newspapers	1%
Other	1%
Subordinate	0.5%

Figure 4.12: Overall use of Sources by Respondents

Figure 4.13a-h shows the sources used by individual sub-groups. There is much variation among groups as to the range of sources used and the proportion in which they are used. District Nurses use the least variety of

127.

Subordinate (2%)
District Reports (2%)
Library Staff (2%)
Curr. Awareness Bull. (3%)
Outside (7%) Organisations
Hospital Departments (10%)
Manufacturers Lit. (8%)
Medical Colleagues (10%)
Journals (12%)
Books (19%)
Nursing Colleagues (24%)
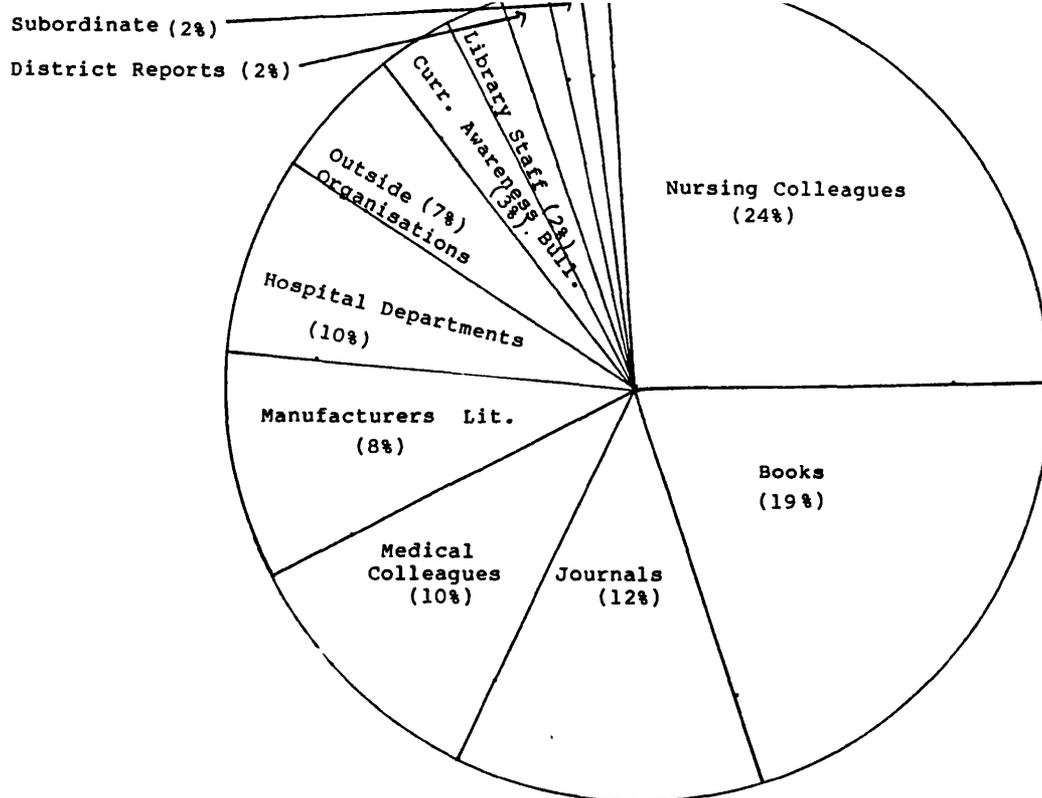
Figure 4.13a: Please explain how you searched for the information
                 (Sisters Sub-group)

Subordinates (1%)
Library Staff (1%)
Outside Organisations (1%)
Current Awareness Bulletin (2.5%)
Indexes & Abstr. (2.5%)
District Reports (4%)
Manufacturers Lit. (6%)
Hospital Departments (8.5%)
Medical Colleagues (14%)
Journals (14%)
Books (20.5%)
Nursing Colleagues (25%
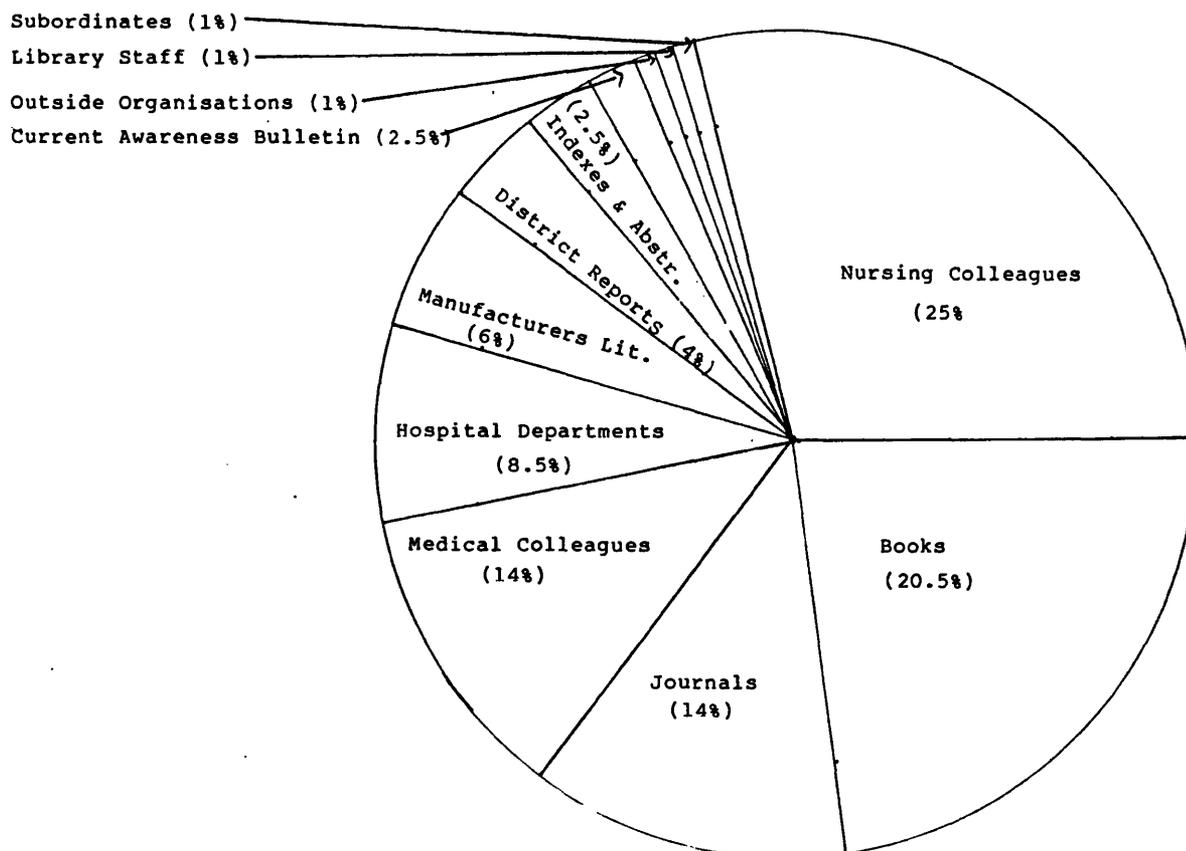
Figure 4.13b: Please explain how you searched for the information
                 (Staff Nurses Sub-group)

128.

Medical Colleagues (2%)

Hospital Departments(2%)

Books
(27%)

Other (2%)

Library Staff (4%)

Newspapers (4%)

Govt. Publ. (4%)

Outside
Organisations (4%)

Current Awareness
Bulletin
(5%)

Nursing Colleague
(11%)

Indexes
& Abstracts
(11%)

Journals
(24%)
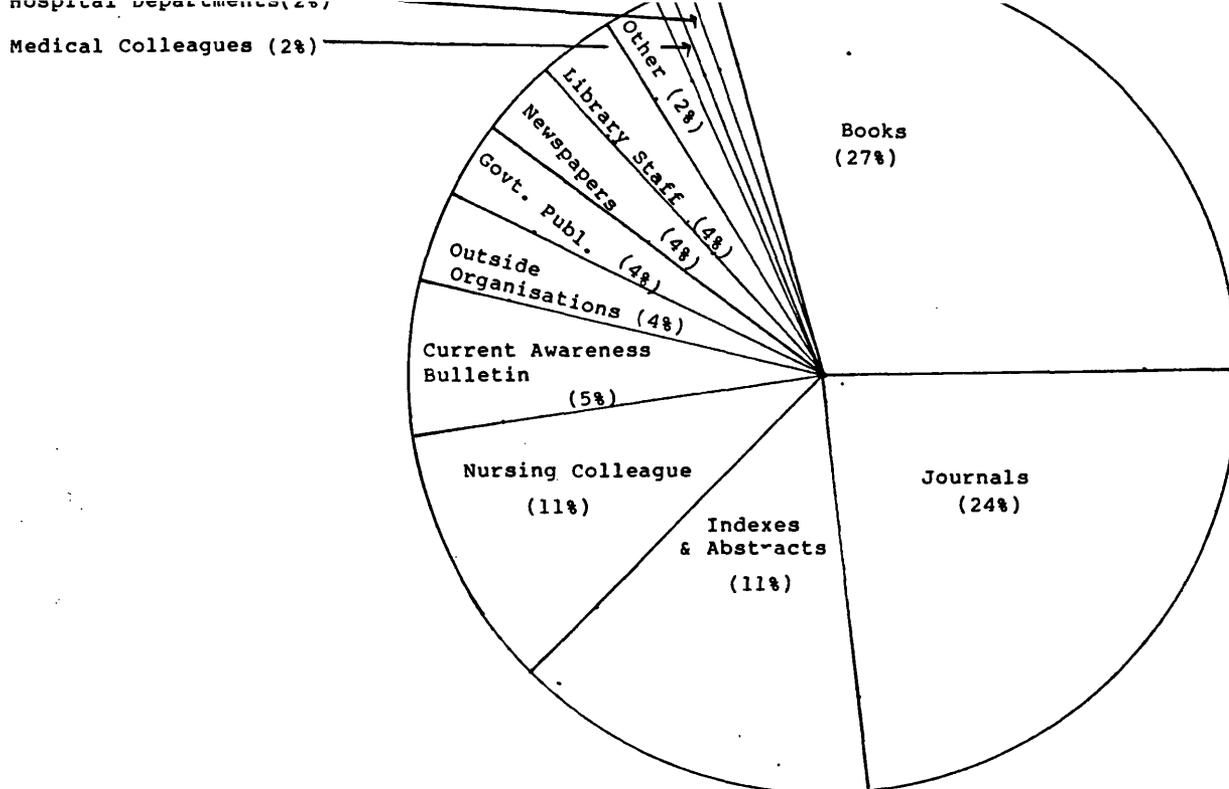
Figure 4.13c: Please explain how you searched for the information
(Teachers Sub-group)

Indexes & Abstr. (6%)

Journals
(6%)

Library Staff (6%)

Outside Organisations
(6%)

Books
(23.5%)

Hospital Departments
(12%)

Nursing
Colleagues
(18%)

Medical Colleagues
(23.5%)
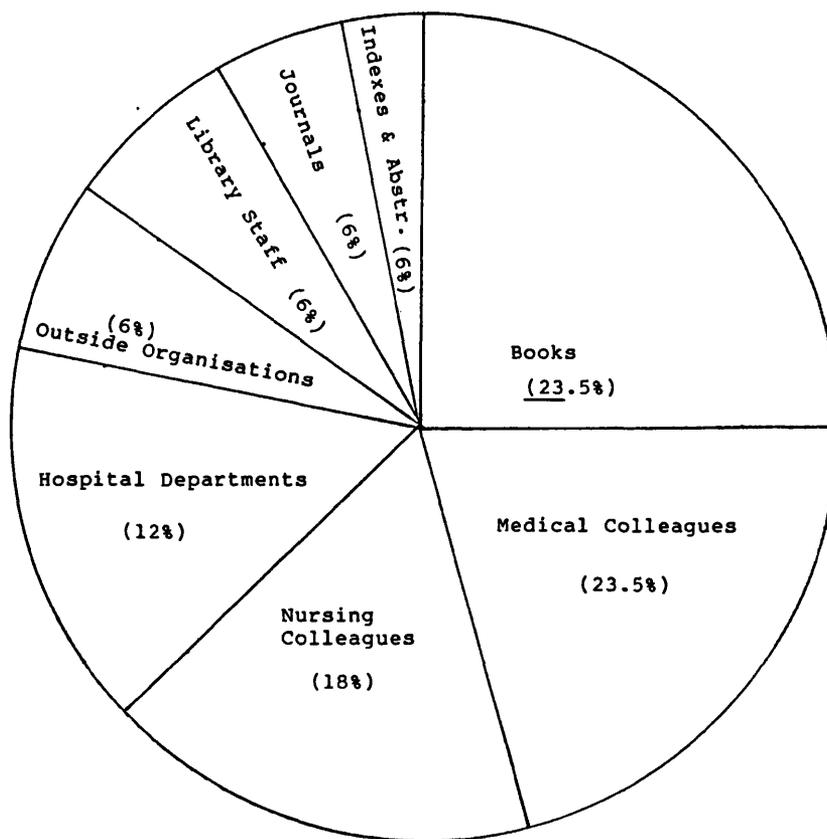
Figure 4.13d: Please explain how you searched for the information
(Midwives Sub-group)
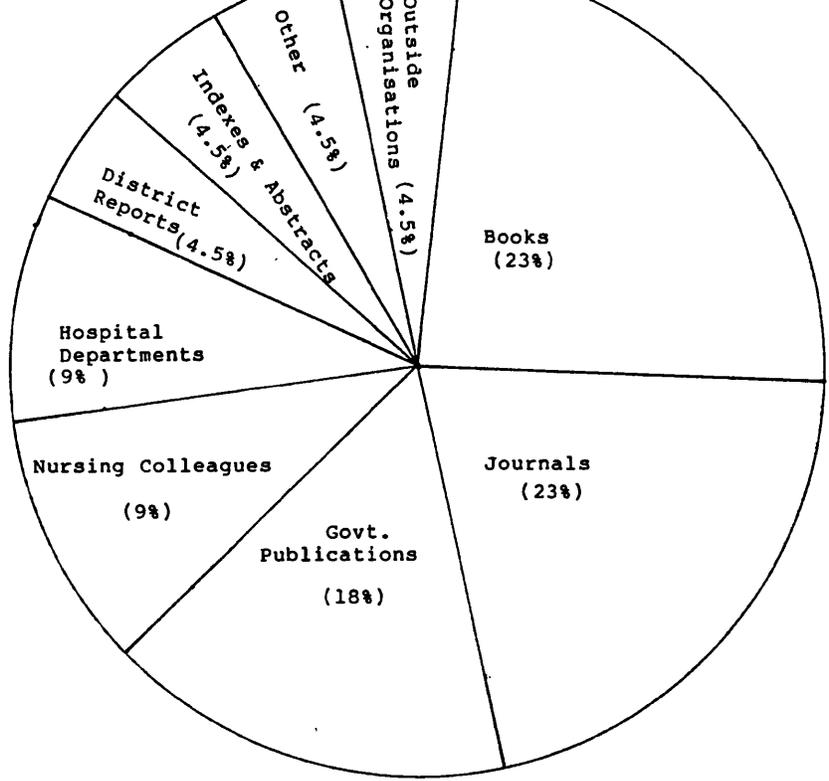
Figure 4.13e: Please explain how you searched for the information (Managers Sub-group)
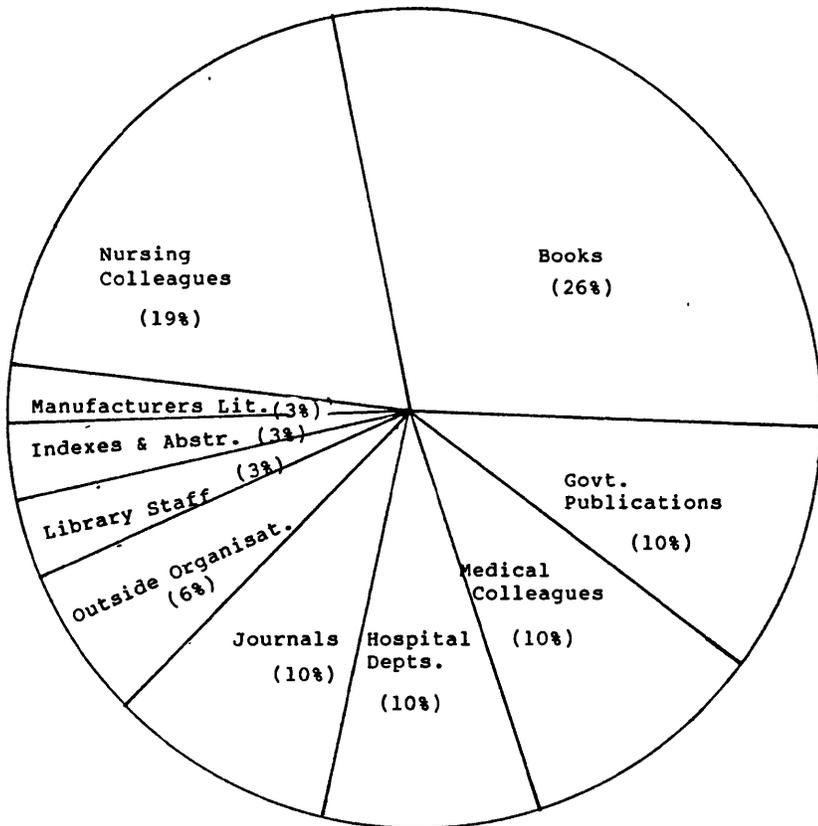
Figure 4.13f: Please explain how you searched for the information (Health Promotion Sub-group)

130.
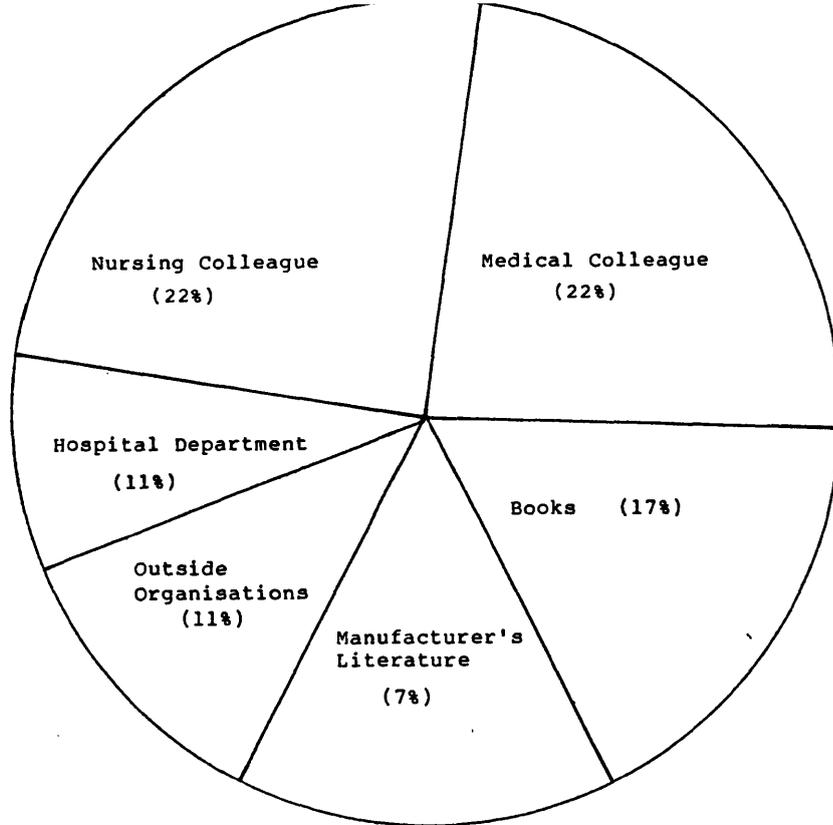
Figure 4.13g: Please explain how you searched for the information
(District Nurses Sub-group)
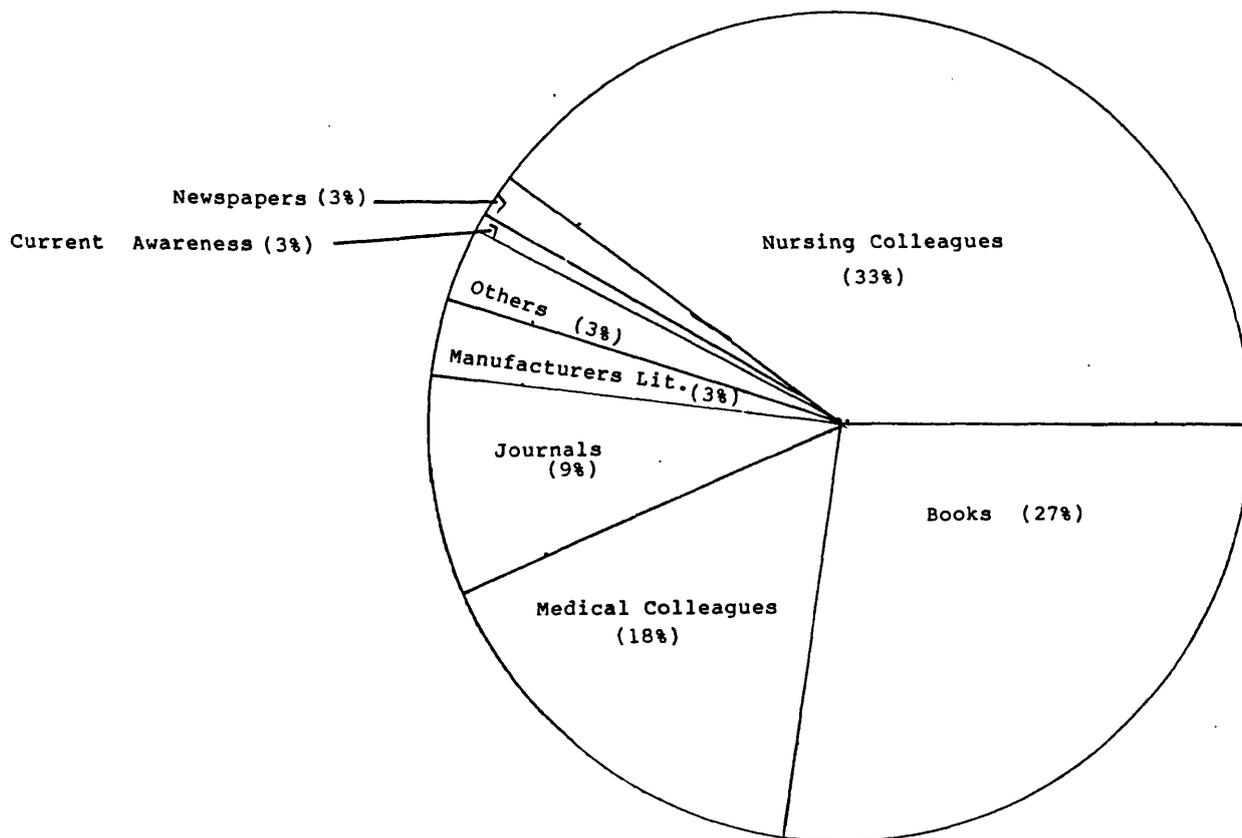
Figure 4.13h: Please explain how you searched for the information
(Enrolled Nurses Sub-group)

sources, reporting only 6 types of source.   Teachers use more than twice as many, reporting thirteen sources in all. Sisters and Staff Nurses report 12 sources each, whilst Health Promotion staff report 10 sources. Managers reported using nine sources and Enrolled Nurses and Midwives each reported eight sources. This variation in number of sources used may be an indication of any of a number of phenomena - the range of sources to which individuals have access; the range of sources which individuals have skills in using; the lower number of sources cited may indicate greater skill in selecting appropriate sources for the particular need than those who used a greater number of sources. This may become clear in answers to Question Ten.

All groups with the exception of Managers and District Nurses used the four most popular sources (nursing and medical colleagues, books and journals) . District Nurses reported no use of journals and Managers did not report using medical colleagues as information sources. District Nurses may have limited access to journals because of their isolation in the community. Nurse managers tend not to have medical colleagues in managerial roles to whom they could turn for information. Enrolled Nurses are the heaviest users of nursing colleagues as information sources whilst Teachers and Managers place least emphasis on them. Enrolled Nurses and Teachers place equal reliance on books at 27% of total sources used whilst District Nurses use them least (17%). Staff Nurses, Ward Sisters and Managers are the only groups to use District reports. Enrolled Nurses and Teachers alone reported use of newspapers as information sources.

Midwives, Health Promotion staff, Ward Sisters, Staff Nurses and Teachers all report using library staff to a limited extent in resolving their information needs. All groups with the exception of District Nurses utilise information sources provided by the library service (either Indexes & Abstracts or the Current Awareness Bulletin), though again only in small numbers. Many of the books and journals used may also have been obtained via the library service. The extent to which this is the case will be shown in analysing the answers to Question Eight.

Figure 4.14 indicates which information source individual sub-groups of nurses go to first. This may be an indication of two things. Either that the source has proved to be most useful in the past or that the source requires least effort to use. Again books, journals, nursing and medical colleagues are shown to be the most popular first choices.

Nursing colleagues are shown to be the most popular first resort for Enrolled Nurses, Staff Nurses and Ward Sisters, surely a case of going to the most accessible and easily used source first. Books are the most common first choice for Teachers and Managers, again perhaps for reasons of accessibility. Most Teachers and Managers have a collection of books relating to their areas of responsibility and in addition most Teachers are based near to a library.

Medical colleagues have a very slight lead over nursing colleagues as the first choice of District Nurses. Journals are the preferred first choice for Health Promotion staff and for Midwives.
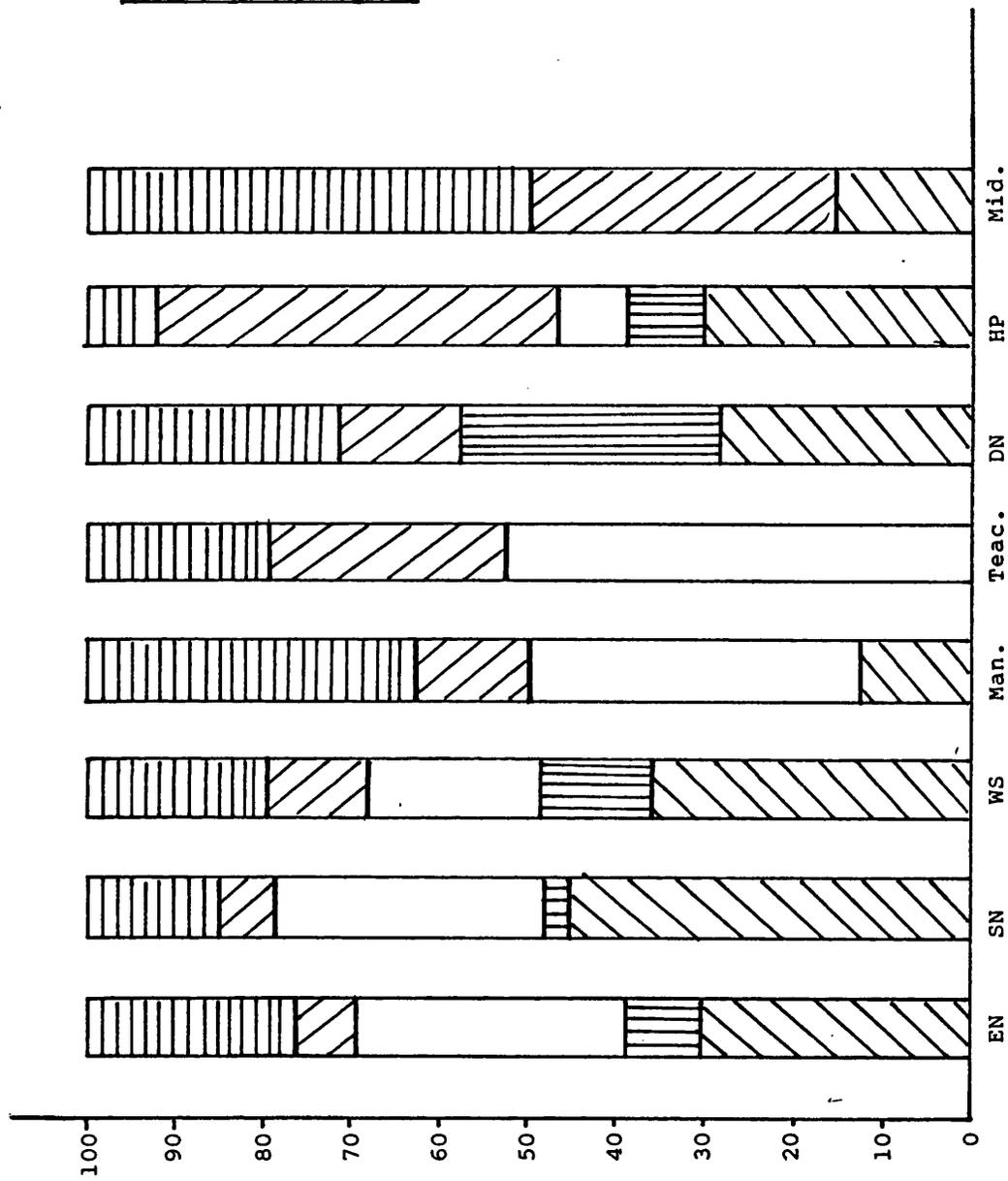
Figure 4.14: First Choice of Information Source by Sub-group

Figure 4.15 shows the second choice of individual sub-groups. It should be noted that 26 individuals (16% of total respondents) gave no second choice. A count revealed that 21 (13%) of total respondents) of these individuals found all the information they needed from their first choice of source.

The most common second choice for Enrolled Nurses and Health Promotion staff was books, for Staff Nurses and Midwives it was medical colleagues, for Ward Sisters books and journals were equally popular and for Teachers journals were most commonly reported. District Nurses and Managers showed no overall preference -nursing and medical colleagues and books were equally reported by District Nurses; nursing colleagues, books and journals were equally reported by Managers.

Figures 4.16 and 4.17 indicate overall use of all books and journals as opposed to use of nursing and medical colleagues by first and second choice.

These Figures clearly demonstrate that seven of the eight groups surveyed tend to stay with the same overall type of source for their second choice as they did for their first choice i.e. if a print based source was chosen first, another print-based source is most likely to be chosen for the second attempt. The exception to this is Ward Sisters who having chosen personal contact for their first approach appear then to change to print-based sources for a second attempt.
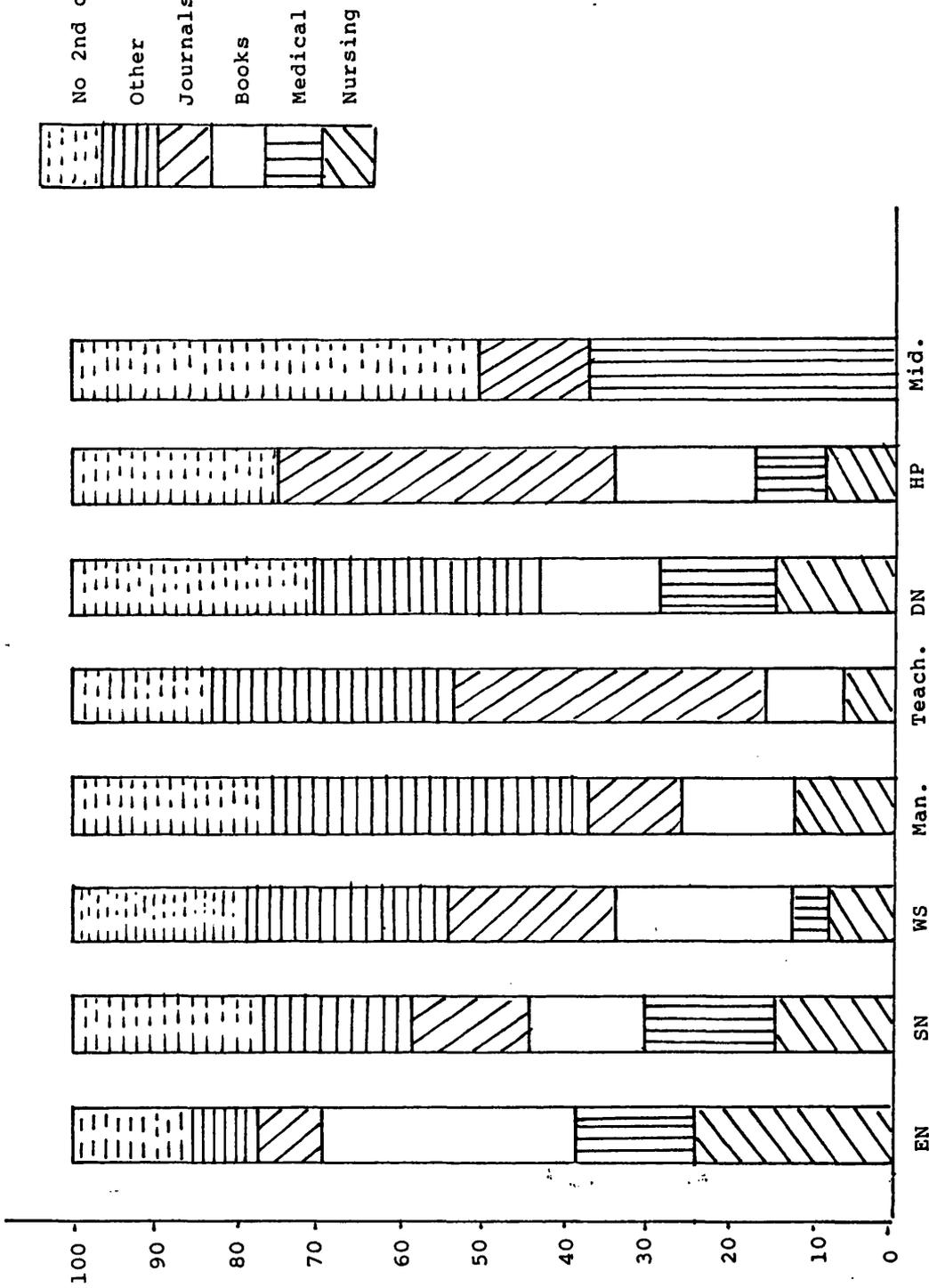
Figure 4.15: Second choice of Information Source by Sub-group

136.
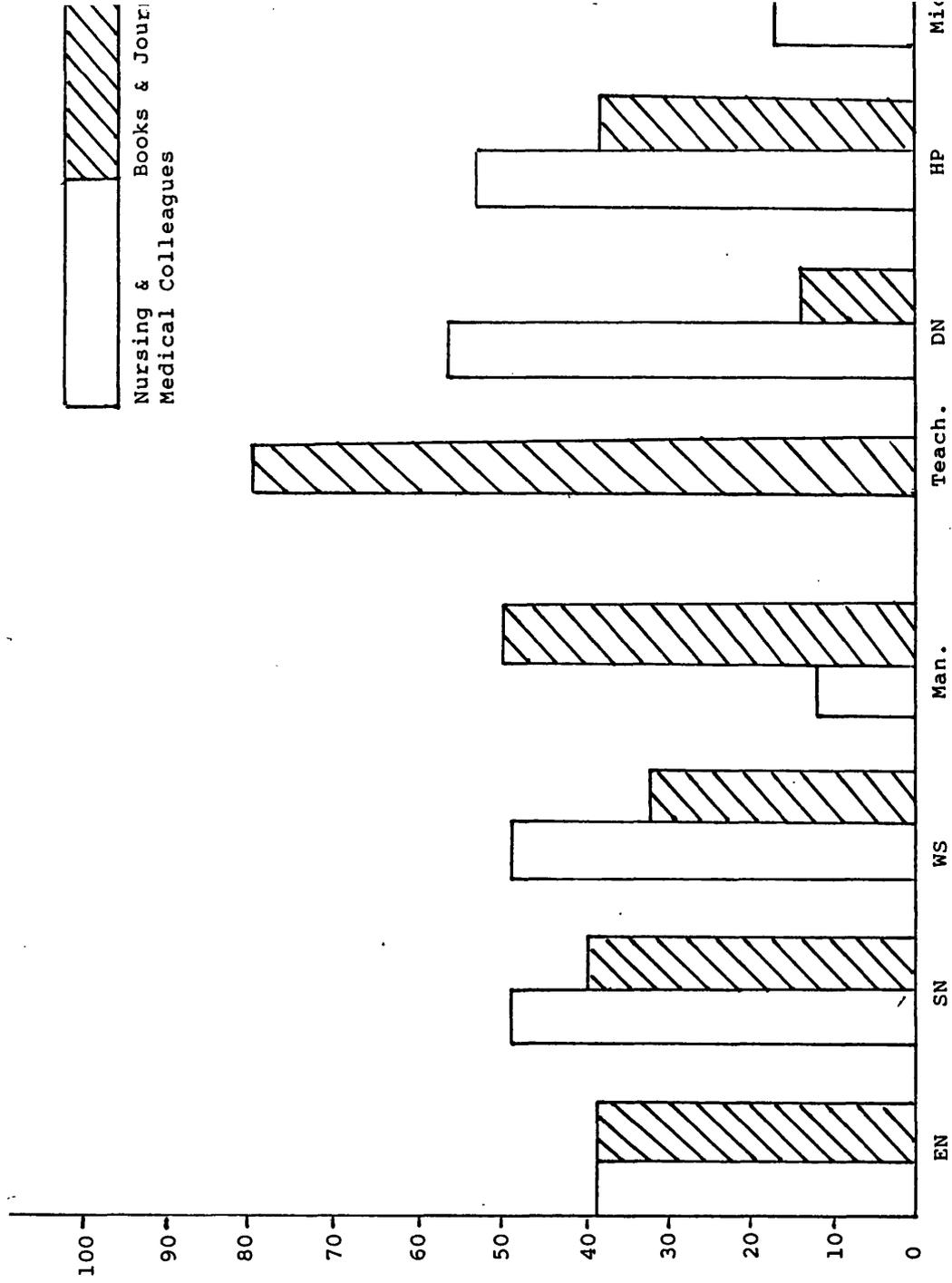
Figure 4.16: First choice of Nursing/Medical Colleague or Books/Journals by Sub-group
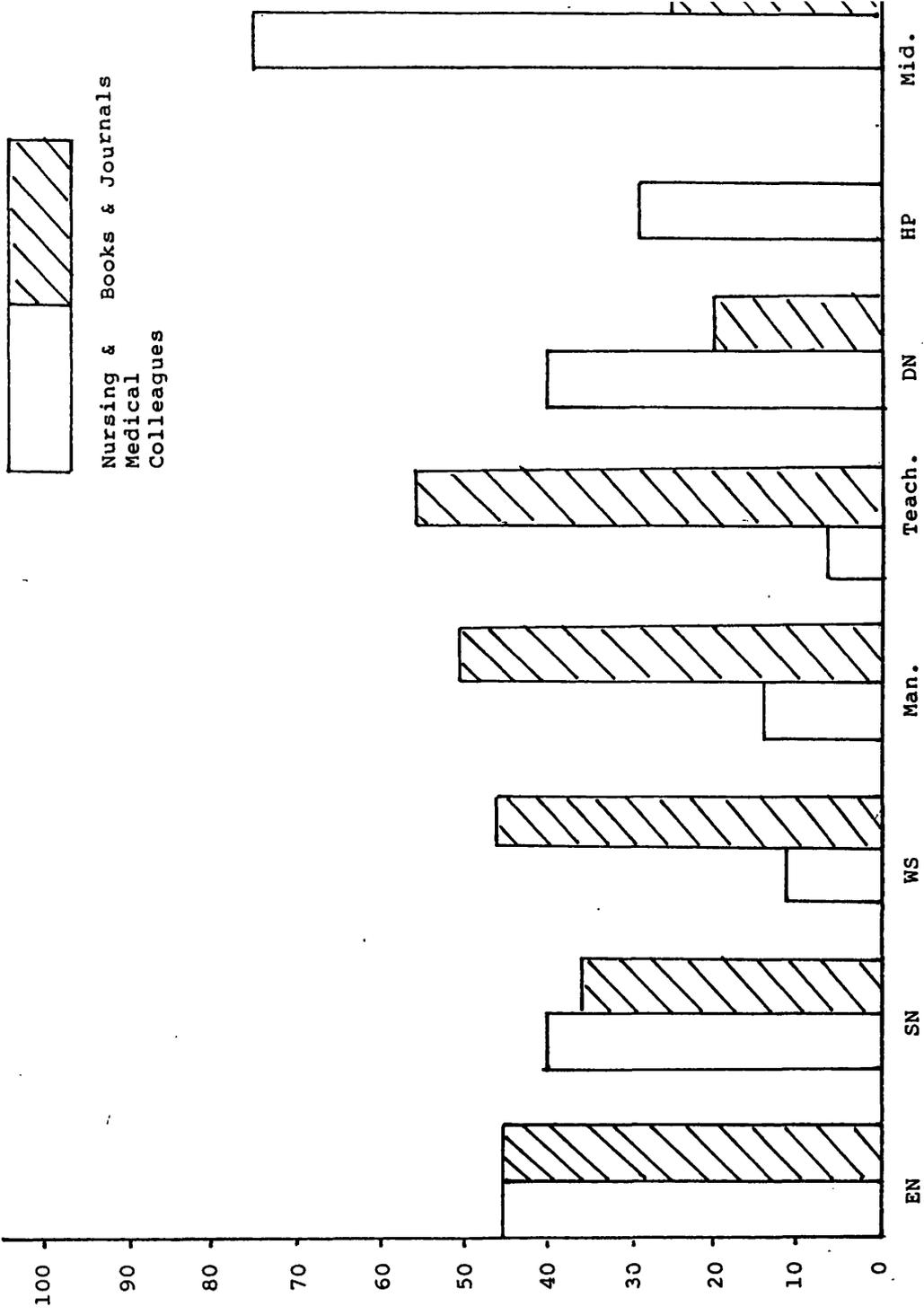
Figure 4.17: Second choice of Nursing/Medical Colleague or Books/Journals by Sub-groups

The results suggest that the preferred source in most cases may be the most accessible one. Teachers possibly have easiest access to books and journals of all groups, Managers show a similar tendency although their use of books may be a consequence of their need to make or follow policy and so be familar with existing guidelines in specific areas which may not be the remit of colleagues. District Nurses, Health Promotion staff and Staff Nurses all show a marked preference for personal contact both as first and second choice. Midwives preferred first choice is books or journals but this is dramatically reversed for their second choice when personal contact is used by 80% of respondents. In the case of Midwives these individuals are exclusively medical colleagues. It has been suggested by one Midwife who was interviewed as part of the study that this may be a particular feature of the maternity unit in Bloomsbury, and that "a lot depends on the doctors you are working with". Accessibility of medical staff was also thought to be a factor. 55% of midwives who replied to the questionnaire are working on the Labour Ward or in the Neonatal Unit where doctors are always present, unlike most other areas of the hospital.

Enrolled Nurses show equal use of print and personal sources as both first or second choice. Once more, accessibility may be the crucial factor. The replies to Question Eight will demonstrate that the print-based sources used by Enrolled Nurses are obtained entirely from their own or colleagues books or from ward or departmental collections. Enrolled Nurses do not demonstrate use of libraries or other outside sources in obtaining books or journals as a first or second option.

Ward Sisters do show overall a greater use of books or journals, although their first choice is usually a colleague. This may be a reflection of the Ward Sister's senior clinical role the "resource person" to whom other people turn, but who has few more experienced clinical colleagues to whom she can turn for help, although this is changing with the introduction of the clinical nurse specialist role. Having failed to obtain advice from more senior colleague, the Ward Sister may have to turn to printed sources as her only alternative.

Question Eight: If you used writen or printed sources where did you find them?.

Figure 4.18 indicates the locations used by nurses to obtain print-based materials. Most heavily used overall is the individual's own collection of books, with books/journals held on the ward or in the department slightly less popular. The School of Nursing Library is the third most heavily used source. This indicates an expected progression which demonstrates the "principle of least effort" starting with the most easily accessible material and searching in ever widening circles. Colleagues collections of books, other libraries and departments and outside sources account for the remaining 23% of locations tried. All libraries used account for 24% of locations reported.

Again there is some cohesion between the findings for clinically based staff- who report finding from 65% -100% of their book based material in eithe or their own, their colleagues' or the ward/departmental collections.

Printed Material Obtained –	Enrolled Nurses	Staff Nurses	Ward Sisters	Managers	Teachers	District Nurses	Health Promotion	Midwives	Totals
Own Collection	19% (3)	19% (10)	30.5% (11)	41% (5)	36% (14)	100% (2)	44% (8)	29% (2)	30% (55)
Colleagues Collection	12.5% (2)	6% (3)	8% (3)	8% (1)	10% (4)	–	5.5% (1)	–	8% (14)
Ward/Dept. Collection	69% (11)	46% (24)	28% (10)	17% (2)	–	–	22% (4)	14% (1)	28.5% (52)
Another Dept.	–	8% (4)	5.5% (2)	17% (2)	2.5% (1)	–	5.5% (1)	–	5% (10)
School of Nursing Library	–	17% (9)	14% (5)	8% (1)	41% (16)	–	–	29% (2)	18% (33)
Another Library	–	4% (2)	8% (3)	–	8% (3)	–	17% (3)	–	6% (11)
Elsewhere	–	–	5.5 (2)	8% (1)	2.5% (1)	–	5.5% (1)	29% (2)	4% (7)
No reply/ Unusable	–	3	2	–	–	3	1	1	10

Figure 4.18: Location of Printed Sources Used

District Nurses appear to find their print-based material exclusively from their own collections, which may indicate particularly strong personal files or limited searching skills or limited time. Enrolled Nurses report using easily available sources - their own and colleagues' material and books or manuals held on the ward or department. Out of the eleven nurses in this category who reported using printed sources one used manufacturers' literature to find out about a specific drug; three found relevant information in the Nursing Procedure Manual kept on every ward and two surprisingly reported finding information about the future of the Enrolled Nurse grade in the ward collection. Staff Nurses and Ward Sisters and Health Promotion staff show some similarity in the locations they use, although Health Promotion do not report using the School of Nursing Library unlike the other two groups.

Teachers are the heaviest users of the School of Nursing Library using it in 41% of cases to obtain printed material, but also relying fairly heavily on their own collection of material (36%). Managers are more than twice as likely to use their own material than to go to any other source. This marked preference may be confirmation of the strength of their own collections as suggested earlier.

Midwives again exhibit a marked difference in the places they locate their printed material from their nursing colleagues. They report three main sources - their own collections, the School of Nursing library and other outside sources (each in 29% of cases). Indeed they exhibit a noticeably wider network of outside sources than any other group and are the second heaviest users of the School of Nursing Library after Teachers.

<u>Question 9: If you asked people for the information, please indicate their</u>
<u>occupation and grade/organisation</u>?.

Figure 4.19 shows the personal contacts made by nurses in attempting to satisfy their information needs. This is divided into peers (i.e. nurses on the same grade), other nursing colleagues within the Authority, usually a more senior colleague; nursing colleagues from outside the Authority; medical colleagues; other health care professionals; other individuals (which may include administrators, medical records staff and so on) and other individuals from outside organisations.

Nursing colleagues from within the organistion are the most commonly approached contacts, with Medical colleagues the second choice. Enrolled Nurses, Staff Nurses and Ward Sisters demonstrate these overall preferences, although other groups show a different pattern of contacts. Managers first choice is also a nursing colleague, and as second choice a nursing colleague from outside the organisation. Teachers as a group overwhelmingly favour using their peers as information sources (50%) with no other group scoring more than 10%. The community nurses - District Nurses and Health Promotion staff - for once demonstrate similarities with both groups using medical colleagues as their first choice followed by their peers, although Health Promotion staff show a much broader range of contacts overall. Midwives tend to use their peers and medical colleagues to an equal extent with nursing colleagues and other health service staff ranking in joint second place.

Personal Contact	Enrolled Nurses	Staff Nurses	Ward Sisters	Managers	Teachers	District Nurses	Health Promotion	Midwives	Total
Peers	5% (1)	14% (9)	11% (4)	9% (1)	50% (5)	33% (4)	23% (6)	30% (4)	18% (34)
Nursing Colleague	60% (12)	40% (25)	30.5% (11)	36% (4)	–	8% (1)	15% (4)	15% (2)	31% (59)
Nursing Colleague – outside	–	–	5.5% (2)	27% (3)	10% (1)	–	8% (2)	–	4% (8)
Medical Colleague	25% (5)	24% (15)	22% (8)	–	10% (1)	41% (5)	27% (7)	30% (4)	23.5% (45)
Other Healthcare Professional	5% (1)	13% (8)	11% (4)	–	–	8% (1)	11.5% (3)	8% (1)	9% (18)
Other NHS staff	5% (1)	6% (4)	17% (6)	9% (1)	10% (1)	–	4% (1)	15% (2)	8% (16)
Other – outside	–	3% (2)	–	18% (2)	10% (1)	8. (1)	8% (2)	–	4% (8)
Library Staff	–	–	3% (1)	–	10% (1)	–	4% (1)	–	1.5% (3)

Figure 4.19: Personal Contacts used as Information Sources

Info. Obtained Source	All	Part	None
Books, Manuals	22%	69.5%	8.5%
Nursing Coll.	16%	67%	17%
Journals	14%	76%	10%
Medical Coll.	23%	67%	10%
Hospital Depts	38%	48%	14%
Outside Organisations	28.5%	62%	9.5%
Manufacturers Literature	47%	53%	-
Goverment Documents	25%	42%	33%
Indexes & Abstracts	18%	81%	-
Current awareness Bulletin	11%	77%	11%
District Reports	28.5%	43%	28.5%
Subordinate	33%	50%	17%
Library Staff	-	100%	-
Newspapers	-	100%	-

Figure 4.20: Amount of Information Found by Source

<u>Question Ten: What result did you get from the sources which you consulted?</u>

Figure 4.20 shows the relative success rates which respondents had in using the various sources consulted. The most successful source as far as respondents were concerned is manufacturers' literature which provided the total answer to an information need on 47% of the occasions on which it was consulted. As has been previously noted, this type of source is specific to a particular product and as such is the obvious source to consult for a certain type of information need. Although in 53% of cases it only provided a partial answer this source never failed the information seeker completely. The results would indicate, however, that if a seeker wishes to get at least a partial answer the best sources to approach are library staff or newspapers!

Overall, more specific sources score more highly in providing the whole answer to problem than do more general sources. The ten sources which respondents found to be most successful are ranked in Figure 4.21 showing the percentage of cases in which they provided all the answer to a information seeker's needs.

1. Manufacturer's Literature	47%	6. Government Documents	25%
2. Hospital Departments	38%	7. Medical Colleagues	23%
3. Subordinate	33%	8. Books, Manuals	22%
4. Outside organisations	28.5%	9. Indexes & Abstracts	18%
4. District Reports	28.5	10. Nursing Colleagues	16%

<u>Figure 4.21: Ten sources most most likely to provide complete answer to an information need as reported by respondents.</u>

The findings from this question appear to give weight to the suggestion

that information seekers go to the most convenient sources rather than to a

source which has been proven to be the most sucessful. Medical colleagues,

books and nursing colleagues, which are reported as three out of the four

most heavily used sources, rank 7, 9 and 10 out of 14 possible options.

Question 11: "If you did not get all the information you needed from the
             sources which you have indicated above, what will you do?"

Results from this question are shown in Figure 4.22.

An overwhelming 78% of respondents will try again to find the answer to their

information need. 18.5% will wait for an answer to be received and 4% will give

up. This last figure may be a reflection of those who commented that unless

information was forthcoming quickly it was useless as the patient who needed

the information would have been discharged. The 78% who are going to try again

may indicate that most information needs of nurses are not so urgent and that

getting an answer is more important than getting it quickly. The only Mamager

who failed to resolve her information need immediately reported she would try

again - perhaps a suggestion that Managers' needs must be satisfied unlike

other groups the satisfaction of whose needs may not be so imperative.

Question 12: "Please indicate below, as accurately as possible, how long you
             spent in gathering the above information?".

Figure 4.23 shows how long groups spent in trying to answer the information

need reported in the questionnaire. 78% reported spending less than five hours,

147.
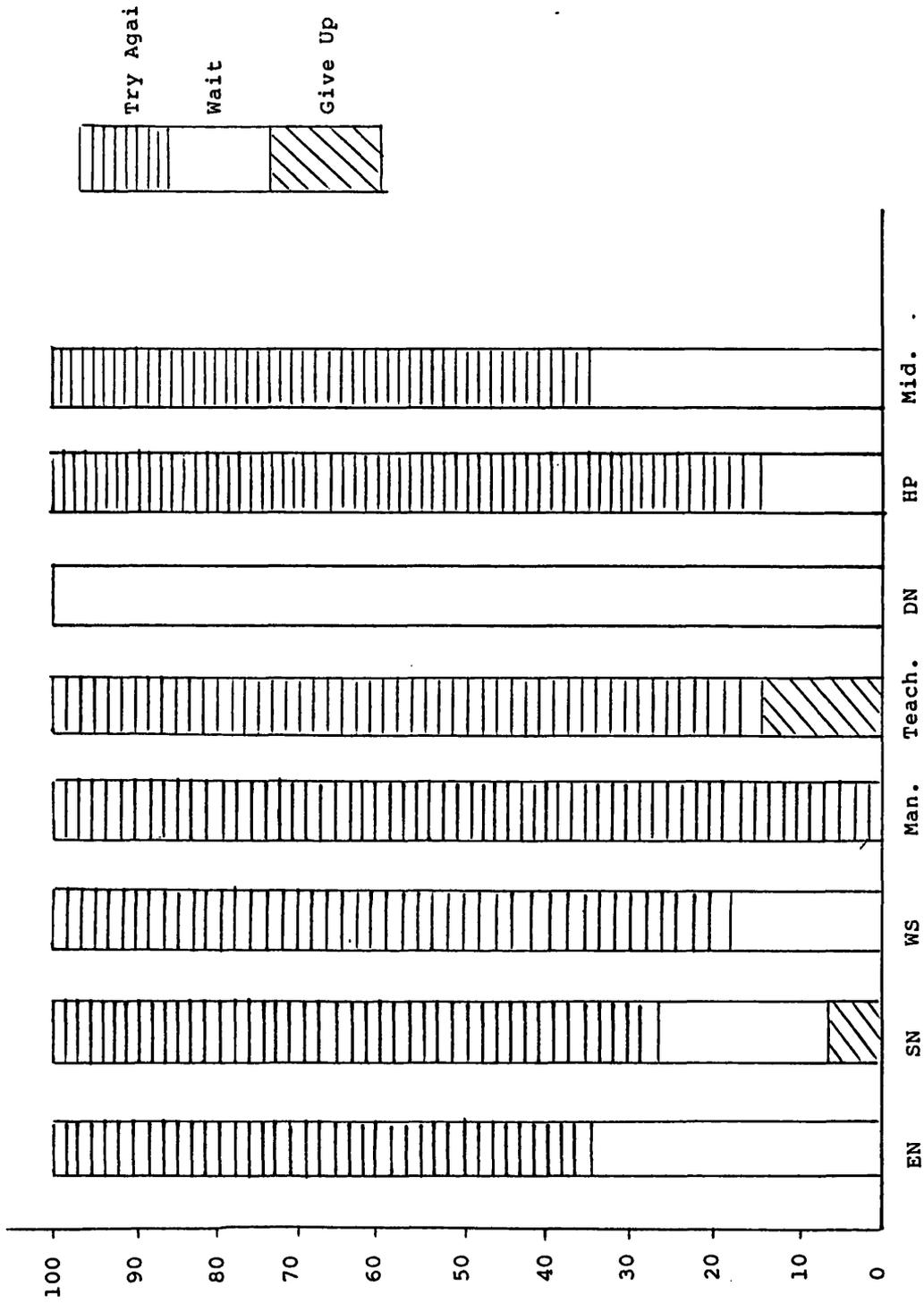
Figure 4.22: If you did not get all the information you needed from the sources which you have indicated above, what will you do?

Sub-group Time spent gathering information	Enrolled Nurses	Staff Nurses	Ward Sisters	Managers	Teachers	District Nurses	Health Promotion	Midwives	Totals
Less than 5 hours	83% (10)	78% (36)	70% (19)	88% (8)	75% (15)	50% (4)	93% (14)	80% (8)	78% (114)
5 - 10 hours	8% (1)	15% (7)	22% (6)	0% (0)	15% (3)	25% (2)	7% (1)	20% (2)	15% (22)
11 - 20 hours	8% (1)	2% (1)	7% (2)	11% (1)	5% (1)	0% (0)	0% (0)	0% (0)	4% (6)
More than 20 hours	0% (0)	4% (2)	0% (0)	0% (0)	5% (1)	25% (2)	0% (0)	0% (0)	3% (5)
Unusable/ no reply	1	8	2	1	0	0	2	1	15

Figure 4.23: Please indicate as accurately as possible, how long you spent in gathering the above information.

149.

15% spent 5 - 10 hours; 4% spent 11-20 hours and 3% spent over 20 hours. Given

the problems caused by lack of time it is unexpected that 22% report spending

longer than five hours trying to satisfy their information need. It also appears

to be out of proportion to the amount of time which needed to be spent on most

of the information needs reported, although it is not possible to be sure of

this given the brief descriptions of information need which most respondents

provided. This may be an indication again of poor or inappropriate information

seeking skills, but more detailed questioning needs to be carried out before

this can be stated with any certainty.

Question 13: "Most of us have times when we need information on a particular

subject, but for a variety of reasons are not able to follow it

up. Does this happen to you?."

Figure 4.24 shows results for this question. 47% of nurses from all sub-groups

replied that this situation arises for them occcasionally and 13% say this

never happens.All Managers and Teachers reported having instances when they

were unable to follow up information needs - the only groups where this was so.

The remaining 40% have this problem on a scale ranging from daily (5%), weekly

(20%) to monthly (16%). Staff Nurses, Ward Sisters and Teachers are the groups

reporting daily problems, all groups except District Nurses reported having the

problem weekly and all groups experienced this difficulty at least once a month.

Sub-group / Frequency	Enrolled Nurses	Staff Nurses	Ward Sisters	Managers	Teachers	District Nurses	Health Promotion	Midwives	Totals
Never	17% (2)	16% (8)	4% (1)	0% (0)	0% (0)	14% (1)	13% (2)	45% (5)	13% (19)
Daily	0% (0)	8% (4)	7% (2)	0% (0)	5.5% (1)	0% (0)	0% (0)	0% (0)	5% (7)
Weekly	8% (1)	18% (9)	16% (8)	40% (4)	5.5% (1)	0% (0)	27% (4)	27% (3)	20% (30)
Monthly	17% (2)	20% (10)	11% (3)	10% (1)	22% (4)	14% (1)	7% (1)	18% (2)	16% (24)
Occasionally	58% (7)	38% (19)	50% (14)	50% (5)	67% (12)	71% (5)	53% (8)	9% (1)	47% (71)
Unusable/ no reply	1	4	1	0	2	1	2	0	11

Figure 4.24: <u>Most of us have times when we need information on a particular subject but for a variety of reasons are not able to follow it up. Does this happen to you?</u>

Question 14: "Please give details of the most recent subject which you were

unable to follow up."

Out of a total of 82 replies to this question, one was unusable. Of the

remainder, two were unable to find information because of lost or incomplete

patient or departmental records. Seven respondents failed to resolve their

information need because of lack of administrative guidelines. In the opinion of

the researcher, five of these are in areas where guidelines are almost certainly

available, covering areas such as missing budget code information; disposal of

broken equipment or difficulties with supply of equipment. Failure to find the

answer might be because of poor information-seeking skills on the part of the

staff in question but may equally be poor dissemination of guidelines by the

departments concerned. Some support departments in the health service do not

see themselves as having any role in educating managers as to the correct

procedures to follow in specific situations, or of feeling it necessary to

inform them when regulations are changed. Two respondents were unable to find

information about locally held study days. Again this seems to be a problem of

information dissemination. Three respondents were looking for specific texts

which they were unable to obtain. One item was missing from the library

stock.As no detail is given about how they went about looking for the items, it

is not possible to state whether the items really were unobtainable of whether

respondents did not know to ask about the possibility of interloans.

The remaining 67 replies were concerned with clinical topics such as :- solvent

abuse in teenagers; treatments for oral thrush; quality assurance and theatres;

anaphylactic shock and allergy; stabilisation for scoliosis; lesbianism and nursing; D'Georges syndrome. It was thought by the researcher that information is available on these topics,and therefore it was decided to carry out brief literature searches on a random sample of topics cited by respondents. Some of the topics given were so broad (e.g. theatre nursing; psychiatry) that meaningful searches were not possible. Literature searches were carried out for every fifth of the remaining 61 topics. Results indicate that in 11 out of 12 of the searches information is available.

Question 15: "What was the main reason why you were unable to follow up this topic?

Eightyone respondents indicated reasons why information needs may not be followed up, providing a total of 107 examples (See Table 4.25). Two reasons were outstanding - lack of time (39%) and lack of available information (23%). In the latter case some respondents indicated that they had been unable to locate any information, others appeared more sure that no published material had been produced.

Staff Nurses, Ward Sisters, District Nurses, Midwives, Health Promotion staff and District Nurses all cited lack of time as the most common reason for not being able to follow up an information need. Enrolled Nurses, Managers and Teachers gave lack of available information as the most important barrier to following up a need. One reason for this may be that some groups are working in areas of new development, both clinical and administrative, where written

Sub-group / Reason for not following up need	Enrolled Nurses	Staff Nurses	Ward Sisters	Managers	Teachers	District Nurses	Health Promotion	Midwives	Totals
Lack of Time	12.5% (1)	43% (15)	42% (8)	17% (1)	21% (3)	40% (2)	58% (7)	62.5% (5)	39% (42)
No Information available	50% (4)	17% (6)	21% (4)	50% (3)	43% (6)	0% (0)	0% (0)	25% (2)	23% (25)
No Information Ward/Dept.	25% (2)	17% (6)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	7.5% (8)
Communication Problems	0% (0)	8.5% (3)	5% (1)	0% (0)	0% (0)	40% (2)	8% (1)	0% (0)	6.5% (7)
Information not avail. in libraries	0% (0)	0% (0)	10.5% (2)	0% (0)	28.5% (4)	0% (0)	0% (0)	0% (0)	6% (6)
Chosen Source failed	12.5% (1)	0% (0)	0% (0)	17% (1)	0% (0)	20% (1)	17% (2)	0% (0)	5% (5)
Library not open convenient hours	0% (0)	6% (2)	5% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	3% (3)
Too complex/ lack of experience	0% (0)	3% (1)	0% (0)	0% (0)	0% (0)	0% (0)	8% (1)	0% (0)	2% (2)
Geographic isolation	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)	8% (1)	12.5% (1)	2% (2)
Other	0% (0)	6% (2)	16% (3)	17% (1)	7% (1)	0% (0)	0% (0)	0% (0)	6.5% (7)

Figure 4,25:   Reasons why Information Need is not followed up

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information of any sort has not yet been circulated, and where even word of mouth has not yet alerted staff to similar work being carried out elsewhere. Another explanation, and a more worrying one, is that staff lack the skills or knowledge of available facilities to locate information which does in fact exist. The findings from the previous question give some strength to this supposition.One Staff Nurse and one Health Visitor recognised this as a problem in reporting that the problem they needed information on was more complex than they had the experience to handle.

Ward Sisters and Teachers had been able to locate information which would be useful to them but found it was either not held by the libraries they visited or was out on loan. The possibility of obtaining interloan of required material was not discussed, which may be another indication of a need for education in library skills. It might also be seen as an adverse comment on library staff who may not offer the service to users as often as they should.

Five percent of users were unable to follow up a need because the source they chose had failed to provide the answer. It is not possible to tell if the respondents had approached an appropriate source which had failed them or if they had chosen an inappropriate source and then given up.

62% of respondents gave either time or perceived lack of information as the main barrier to following up an information need. Lack of time may either be addressed by individuals in managing their time more effectively or by managers in developing more realistic role requirements.   Libraries may have

failed to help by inadequately advertising the telephone enquiry service or the fact that staff can carry out searches on behalf of users if necessary. If qualified staff expect to have to come to the library in person it may explain their reluctance to use the service. Lack of knowledge about using libraries should be the concern of librarians and of education staff.

Question 16: "Are there any comments which you would like to make about your need for information or about the questionnaire?"

Seventy two individuals replied to this question, making a total of 83 comments. The replies were divided into sub-categories with comments about the library service in Bloomsbury being the most numerous (22). Of these 13 were commenting on the efficiency of the service - two specifically commenting on the current awareness service provided by the library service. Of the remaining remarks one respondent asked for Saturday morning opening and one requested different opening hours but failed to specify what they should be.   One requested that library material should be available for long term loan to the health centres and clinics. One felt more information should be available on the holdings of the libraries and one wanted more post-registration professional information, though whether that meant clinical information or information on courses is not clear.

The second most common group of replies related to the individual's perception of their need for information. Two nurses, both of whom work in Outpatients

Departments, felt that because of the nature of their work they very rarely had information needs which required solving by other than departmental colleagues. Others in the category commented on the level of information they required. A theatre scrub nurse commented that the level of anatomy and physiology in nursing textbooks is not detailed enough for her purposes, but that information in medical textbooks is too detailed.

Nine individuals remarked on the questionnaire. Two felt that the questionnaire structure did not permit them to express their information needs as they would have wished. Two could not see how the questionnaire could provide an accurate picture of nurses' information needs. One respondent thought that the critical incident questions could have been more specific and another felt that the questionnaire was very repetitive.

Lack of time as an inhibitor to information-seeking was reiterated by 6 nurses and the distance of the libraries from their workplace was commented on as a problem by 5 nurses.

Other areas where comments were made included lack of motivation as an inhibiting factor and lack of support from managers in problem solving. However, commenting against the general feeling of most colleagues, three respondents felt that information is very easy to obtain in Bloomsbury.

PROFILES OF SUB-GROUPS

The results discussed above provide detailed information about results which
were gained primarily from the questoinnaire. Whilst this information is of
prime importance, the format of the report make it difficult to follow through
results for specific groups. The following profiles are provided in an attempt
to draw together scattered findings from individual sub-group.

ENROLLED NURSES: report fewest special interests of any group; are most likely
to read for less than five hours per week and to need information at least
weekly. Clinical nursing information is their greatest information need and is
required to solve clinical nursing and teaching problems. They make use of all
the four most popular information sources but are the heaviest users of nursing
colleagues of all the sub-groups, tending to approach nursing colleagues first
and then turning to books. They locate printed material in their own books and
in ward or departmental collections. Enrolled Nurses typically spent less than
five hours seeking the answer to their problem. The majority have occasional
information needs which they are unable to follow up and cite lack of available
information as the main reason for this.

STAFF NURSES: are low reporters of special interests, and are likely to read for
less than five hours per week. Medical/surgical information is reported as the
area of greatest need although a broad range of needs are reported in all.
Information is most likely to be utilised in solving clinical nursing and

teaching problems. All four most popular information sources are used, and libraries are also used to a limited extent. The first source approached is likely to be a nursing colleague followed by a medical colleague. The ward or departmental collection is most commonly used source for print based material, plus personal books and the School of Nursing library. Five hours or less is spent on the information gathering process. A small proportion (5%) would give up trying to find the answer to a need although the majority will try again. The main reason for failing to follow up and information need is reported as lack of time, and this prevents information seeking at least monthly for most respondents.

WARD SISTERS: report special interests in 41% of cases and are likely to read for less than five hours per week. They report the broadest range of information needs, the most prominent of which are medical/surgical and clinical nursing information to be used in solving clinical nursing and teaching problems. All four of the main information sources are used, as are libraries but to a more limited extent. Information is usually sought first of all from a nursing colleague and if he/she fails to provide the answer, then the Ward Sister turns to books or journals. Personal, ward or departmental books are used as is the School of Nursing library in trying to find printed material. Typically less than five hours is spent on information gathering, and of those who fail to find the answer initially 80% will try again. Lack of time is the most important reason for not following up information needs. Over half of Ward Sisters report this happening at least monthly.

MANAGERS: are major reporters of special interests. The main area cited is committee work. They spend longer reading each week than most other groups (5-10 hours). Managers are most likely to need information at least weekly, primarily in the areas of management, policy and procedure and nursing theory. A need for clinical nursing information is not reported. Information is needed in the main to resolve administrative problems. Books and journals and nursing colleagues are utilised, although Managers are amongst the lowest users of nursing colleagues. Medical colleagues are not reported as being used. In attempting to satisfy information needs Managers turn first to books, usually from their own collection, and secondly to nursing colleagues or other books and journals. Managers report greatest use of nursing colleagues outside the organisation. All but one of the Managers found the answer to their information need at the first attempt. The remaining individual said she whould try again. All reported having occasions when they were unable to follow up information need, usually because information was not available to them.

TEACHERS: show the highest incidence of special interests, mostly committee work. They also had the highest incidence of reading for 5-10 hours per week. They commonly reported needing information at least weekly. Medical/surgical information is their greatest area of information need, but they show no need for clinical nursing information. Most of their information needs are required to resolve teaching problems. Teachers make use of all four most popular information sources although along with Managers they are the lowest users of nursing colleagues. Their first port of call is usually books, followed by

journals and these are most likely to be sought in the School of Nursing library. In seeking information from personal sources they are most likely to approach their peers. Teachers reported the highest incidence of giving up if they failed to find the answer at the first attempt. Typically they only occasionally were unable to follow up an information need, predominantly through lack of available information.

DISTRICT NURSES: are low reporters of special interests as a whole, but those who do report such an interest report the widest range of interests per capita. As a group they are equally divided between reading for less than five and five to ten hours per week. District Nurses are most likely to need information monthly or less often. Clinical nursing and drug information are the most common information needs, required to resolve clinical nursing problems. They report using books, nursing and medical colleagues but do not report use of journals. Medical colleagues and then nursing colleagues or books are the most favoured information sources. Printed material is entirely obtained from their personal collections. All District Nurses who were unsuccessful in obtaining the solution to their problem at the first attempt said they would wait for an answer, rather than actively try again. Most District Nurses reported spending less than five hours gathering the information, though 25% claimed to have spent more than 20 hours. 71% of this group have occasional needs which they are unable to follow up, most commonly prevented from doing so by lack of time.

HEALTH PROMOTION STAFF: usually read for less than five hours per week and mostly need information on drug therapy in order to solve a clinical nursing problem or a teaching problem. All of the four most popular sources are used in information seeking. Journals are the most popular first and second choice of information source.These items are sought from their own collections, from departmental collections and from libraries outside the organisation. When using personal contacts Health Promotion staff prefer to approach peers and medical colleagues. They typically spend less than five hours gathering information and lack of time is the most important reason why occasionally their information needs are not followed up.

MIDWIVES: show an average number of special interests, but the highest interest of all groups in research; they read for less that five hours per week and have the greatest need for medical/surgical information. Unlike other clinical colleagues this is not needed to resolve clinical problems but to follow up areas of special interest. There is also a recognised need for information on social welfare. All four most popular information sources are used, plus some use of libraries is made. Journals are the most commonly reported first source used followed by medical colleagues. Midwives appear to use the widest network of outside sources of all the groups, and spend less than five hours looking for answers to problems. 45% of Midwives never have needs which they are unable to follow up. Of those who do have this problem, lack of time is the main cause. There are some similarities between Midwives, Teachers and Health Promotion staff with all these groups using printed material to a great extent and using

a wide range of information sources. These findings give some weight to the opinion expressed by Midwives that they are different to their other clinically-based colleagues, not just nurses by another name.

One of the purposes of this study was to look for similarities between nurses working in hospital-based, community-based and educational settings. Results of these comparisons are given below.

Hospital-based Nurses

Hospital-based nurses i.e. Enrolled Nurses, Staff Nurses and Ward Sisters show marked similarities in their information needs and use of sources. All are fairly low reporters of special interests and read for less than five hours per week. All three groups need information to solve clinical nursing and teaching problems. The information used is likely to be of a medical/surgical nature in the case of Staff Nurses and Ward Sisters or clinical nursing information in the case of Enrolled Nurses. All four of the main information sources are used. Nursing colleagues are the first source approached by all groups. If this fails then books are the next source approached. Books are typically found in personal or ward/departmental collections. Staff Nurses and Ward Sisters cite lack of time as the main reason for being unable to follow up information needs, whilst Enrolled Nurses give lack of information as the main reason. The above summary shows a remarkable degree of cohesion between the information needs and uses of hospital-based clinical nurses.

Community-based Nurses

Community-based nurses do not display the same cohesion. District Nurses are concerned with clinical care whereas the role of Health Promotion staff is to educate and advise and so similarity of outlook is less likely. Health Promotion staff report more special interests, but report reading less than District Nurses. Some similarity is shown in the need of both groups for information on drug therapy although District Nurses have an equal need for clinical nursing information. Medical and nursing colleagues are the most popular sources used by District Nurses whilst Health Promotion staff use books and nursing colleagues, and generally show more awareness of literature and have a wider network of information sources than District Nurses, including using external libraries. This does call into question the finding that they read less than District Nurses. Lack of time is the most common reason for failing to follow up information needs. This brief summary indicates that Health Promotion staff cannnot be considered as a homogeneous group as far as planning libraery services is concerned.

Education Staff

It was not the purpose of this study to look for connections between the information needs and uses of Teachers and Managers, however as the analysis progressed some similarities became apparent, which are worth commenting on at this point. Both groups have high levels of special interests and are more likely than other groups to spend between 5-10 hours reading per week. Both groups use books as their main information source, but failing that managers

turn to nursing colleagues and teachers to journals. Both report lack of

information as the main reason for not following up information needs. As might

be expected actual information needs are different - with managers needing

information to resolve administrative problems and teachers needing

information to resolve teaching probelms. Bearing in mind this last important

difference, the way in which information is used shows marked similarities.

In this Chapter results of the research study have been reported and discussed.

Chapter Five will consider the implications of these findings for the provision

of library services to qualified nurses.

CHAPTER FIVE

INFORMATION PROVISION

AND

INFORMATION NEEDS

Development of Nursing Libraries

As nursing moves away from the non-questioning, obedient approach to an open, questioning, research-based stance, the need for appropriate, and timely information services increases. The change in patterns of training; the emphasis on research-based practice; the increase in in-service training programmes and post-registration educational opportunities involving further and higher education; and the projected compulsory periodic re-registration of nurses with mandatory updating all add to that need.

Library services for nurses have been slow to develop in the United Kingdom. In the nineteenth century, those libraries which did exist were either Society libraries e.g. the Royal British Nurses' Association library or the Trained Nurses' Club library or were in nurse training schools. (Parr 1980). Nurses who trained in the major London teaching hospitals were better served than those in the provinces, a situation which still was the case in recent times. In the twentieth century, development of libraries in many Schools and Colleges of Nursing has been patchy. Inconsistent allocation of funds and little or no funding from the District Health Authority made forward planning very difficult. Until very recently many qualified nursing staff had access to nursing libraries as a courtesy only, with little or no stock purchased for their particular needs.

This lack of direction for nursing library services is to some extent matched in the library profession itself. Nursing librarianship is seen by many as the "poor relation" of medical librarianship. Most nursing librarians are employed on National Health Service grades, unlike their medical counterparts who are employed on university or local authority scales. The latest census of library staff providing services in the NHS (RLG 1987) indicates that 78% of qualified library staff paid on NHS grades were earning less than £7500 p.a. compared to university and local authority library staff of whom only 14% and 15% respectively were paid on such low grades.

Medical school and local authority libraries usually form part of a larger library system with opportunities for career progression. Schools and Colleges of Nursing have been smaller institutions where the modal staffing level would be 1 qualified librarian with 1 unqualified assistant, and so provide no opportunity for promotion.

The projected move of Schools and Colleges of Nursing into further and higher education following the implementation of Project 2000 may improve this situation.

Such conditions will influence the ability of the nursing library to attract high-calibre applicants and may have contributed to the poor image and relative lack of development of many nursing libraries.

<u>Library Provision for Nurses in Bloomsbury Health Authority</u>

Library services to nurses in the District are based on the College of Nurse
Education. As a result of recent amalgamations and due to pressure on land in
central London, the College operates from 6 sites, each of which has a library.
The two central campus library sites are open to all nurses employed by
Bloomsbury Health Authority and are the main providers of service. Both
libraries were established in the 1890's and have been in receipt of regular
funding over a number of years. Amalgamation of the two libraries into a single
physical unit is impractical at present and so, whilst running as a single
administrative unit, each library has a separate responsibility, holding stock
for either pre-registration nurse education or post-registration /continuing
nurse education. The libraries have a joint staff of 6 WTE, consisting of 4
qualified librarians and 2 unqualified assistants. The joint holdings are 20,000
volumes plus 200 current journal subscriptions. The range of stock includes
nursing, medicine, psychology, education, sociology and management literature
which reflects the move of nurse education away from the basic medical sciences
towards social and behavioural sciences. These two libraries provide a wide
range of reader services including manual, CD-ROM and on-line bibliographic
searching facilities and production of a current awareness bulletin for
distribution to nurses working in the District. Automation of library services,
including cataloguing and loans procedures is in progress. These libraries also
serve the Schools of Radiography/Radiotherapy and Physiotherapy and the staff
of the Occupational Therapy Department.

The remaining four libraries exist because the English National Board for Nursing requires that library services are provided on each site where a nursing course is taught. In the case of Bloomsbury, these sites are between 1-15 miles away from the central libraries and therefore subsidiary collections are required. The material held in these libraries is also available to qualified nursing staff on site and, it is hoped, helps to reduce the effects of their isolation from the main libraries. Each provides stock for students undertaking a specific post-registration course (orthopaedics, mental health, urology, nephrology and ear, nose & throat nursing) and ranges in size from 600 to 2,500 volumes, with between 5 and 12 journal subscriptions each. One of the outlying libraries has a part-time qualified librarian and is gradually extending its services to readers. The remainder provide material for reference and loan only and are supervised by a nurse teacher. Readers from these sites have access to the full range of services from the central libraries. Qualified library staff from the central libraries provide advice and assistance in these libraries as requested.

Library staff are also responsible for maintaining small bench collections in some clinical areas. There are eight of these in all also relating to post-registration courses being run on site. The collections range from 50- 300 items with 0 - 5 journal subscriptions each.

Funding for library services comes from a variety of sources. Funding for pre-registration education is allocated via the Regional Education Advisory Groups. Funding for library services for post-registration courses and for qualified

nursing staff is the responsibility of the individual District Health Authority.
Bloomsbury Health Authority is more generous than many other Authorities in
that it makes an annual allocation of funds for this purpose.

User Education and Promotion in the central Bloomsbury libraries

Library policy is to teach searching skills to as many users as possible to a
level where the user can be as self-sufficient as possible. This is most
straightforward in the case of student nurses who spend 3-4 hours in the early
stages of training learning basic searching skills, which are then built on and
reinforced with each piece of project work they have to carry out. All qualified
nurses undertaking a post-registration or continuing education course spend
one hour learning about library facilities during the early part of their
course. Any further instruction is carried out on a one-to-one basis. Newly
appointed qualified nurses, not undertaking further training, and who work in
the two main hospitals visit the libraries as part of an overall orientation to
the College of Nurse Education. These staff spend about 30 minutes in each
library being shown basic facilities and services. The time allocated does not
allow for any literature searching skills to be taught, even if this was an
appropriate time to do it, which is questionable. Staff from the community and
from satellite hospitals do not receive any orientation to the library service.
It has become apparent during the course of this research that many of these
nurses do not realise that they are entitled to use the library service. As
recruitment is carried out by a number of divisions, it is not easy to obtain

accurate lists of new staff so that they can be contacted with information about the library service.

There has been no deliberate policy of advertising services to non-users, although the distribution of the Current Awareness Bulletin each month to wards and departments and to individual managers has had a promotional side-effect.

Nurses Perceptions of Nursing Libraries

Harvin (1968), in discussing the support which nursing libraries could give to continuing education, concludes that they do not figure prominently as information sources to most nurses. Gilbert(1976), in her study of information use by nursing staff found that nursing libraries were not generally thought to be relevant sources of information, with over 40% of respondents saying that they never used a nursing or medical library.

Walker(1978) found that 87% of nurses surveyed had access to a nursing library either in the same building or within a short distance. Of 60% of nurses who reported using a library for work purposes during the previous year, 35% had used a public library and 21% had used the local nursing library. That public libraries should be preferred when such a majority of nurses had easy access to a nursing library is very disturbing.

A survey carried out seven years later in 1985 by the NHS Regional Librarian's Group (RLG 1987) has shown that there were 130 qualified librarians providing library services to nurses in 1985 compared with 43 in 1978 - a rise of almost 200%. Whilst nursing libraries still have some way to go before they can compare favourably with their counterparts in further education, there has been an increase in the number of nursing libraries providing a wider range of services.

Despite this increase, work carried out by Stapleton (1983) which predated the RLG survey by only two years, reported findings which do not differ materially from those of Gilbert (1976) and Walker (1979). In her study of the continuing education needs of ward sisters and nursing officers, she reported that over 40% had not used any library during the year previous to the survey, 19% felt that none of the existing libraries met their needs. Of the remaining respondents 54% had used a health service library during the previous year for work purposes; 35% had used public libraries. Improved staffing levels do not appear to have affected percpetion or use of libraries by qualified nurses to any great extent.

Stapleton(1983) makes two very telling observations in her conclusions:

> "It is apparent that nurses' need for updating by means of libraries and journals are not being met by the facilities available.... libraries in the health service are viewed as repositories of textbooks only and not as an information resource facility."

> "For many respondents, their right to adequate library facilities was a somewhat unexpected concept"
> (Stapleton 1983)

Results of the present study suggest that nurses only turn to the library to
answer their information needs in 18% of cases.

Recommendations

It seems clear from the results reported in Chapter Four and from the comments
above that efforts to improve libraries' success in meeting nurses' information
needs should concentrate on the following areas:

1) evaluating stock provision in the areas of information need indicated
   by respondents.

2) taking services out to qualified nurses rather than requiring them to
   visit the library in order to utilise services, thus saving their time
   and reducing the effects of geographical isolation

3) improving nurses' perceptions of how libraries can help in their daily
   work; increasing awareness of library services and facilities.

The following recommendations are put forward as ways of tackling these areas.
They are made in the light of available staffing levels and resources. Funding
in particular is likely to be under additional pressure during the 1990's.

1. Evaluation of Stock

The replies to Question 5 indicated the extent to which qualified nurses need

information on specific topics. It is useful to consider which of these areas the library service should hold information on. It is important that the library service is active in those areas where it can provide useful expertise, but it should be careful not to attempt to duplicate expertise which is available elsewhere. Twentyone categories of information need were isolated. One of these areas is not seen as the concern of the library service. i.e.:

Purchase/utilisation of equipment and supplies. This is most appropriately the concern of the Authority's Supplies Department. The fact that nurses report difficulties in this area suggests that this department could very usefully provide some education/information about it's role, it's policies and procedures and an accurate telephone list of who to contact with enquiries.

In addition to the above, two other areas are only partially the concern of the library service. They are:

i) Career development. The library service holds circulars and   .
     information about new courses which have been approved by the
     statutory bodies, but does not hold prospectuses of colleges and
     schools which run the courses. Unlike other health authorities,
     Bloomsbury funds an independent counselling service (OASIS), which
     counsels and advises staff on both work and personal difficulties. As
     part of this role, it has an information room containing current

material on statutory rights and benefits and prospectuese of courses available, both within and outside the health sector. Maintaining an up to date collection of prospectuses is time consuming, and as OASIS carries out this role so well, it is now policy that the library service no longer collects this information.

ii) <u>Drug Therapy</u>

It is of course vitally important that the library holds an up to date collection of material on drug therapy, including the major reference texts such as Martindale, but it should not attempt to take over the role of pharmacy or the information pharmacist in providing specific and detailed information about particular drugs, side effects, contraindications and so on for ward-based staff.

The remaining areas are ones in which the library has a role to play. Again within each section some enquiries will more properly be answered by other departments or individuals inside or outside the organisation. The relative importance of the categories provides some useful guidance on how bookfunds provided for qualified nursing staff services should be apportioned.

In doing so, some modifications to the percentages indicated will be required:

i) Psychology and Psychiatry both have a lower showing than would normally be expected because of the unplanned exclusion of psychiatric nurses

from the study. Some allowance should be made for this. It is thought that psychiatric nurses account for approximately 10% of the total nursing population in Bloomsbury. It is suggested that 5% should be added to each of these cateogories, giving a total of 7% in each case. It should be stressed that this is untested and may need to be modified in the light of experience.

ii) Additionally, material collected in some areas is obtained free of charge i.e. local administrative policy and procedure documents, and circulars from statutory bodies on newly approved courses. When calculating funding for specific subject areas, these can be ignored.

iii) Approximately 40% of the information needs on drug therapy could have appropriately answered by the library (allowing for those responses which give too litle information for a judgement to be made). Therefore it is suggested that 5% of funds should be allocated for purchase of material on drug therapy.

Figure 5.1 suggests the proportion of a notional £10,000 budget which should be allocated to the areas reported in Question 5. The proportions suggested here may need to be modified to take into account the higher cost of books in some areas than in other and also the fact that books on some subjects date more quickly than others. However, it is recommended that the above figures are used as a base from which allocation of expenditure is calculated in future. It is

recognised that this will be complicated by the fact that material is also purchased for groups other than nurses.

1. Medical/surgical information	£2,240
2. Clinical nursing information	£1,800
3. Psychiatry	£ 820
4. Psychology	£ 820
5. Drug Therapy	£ 600
6. Social Problems	£ 470
7. Nursing Models/Theories	£ 470
8. Infection Control	£ 410
9. Social Services	£ 410
10.Patient/Client Education	£ 410
11.Management	£ 410
12.Education Techniques & Resources	£ 350
13.Clinical Pathology	£ 350
14.Anatomy	£ 120
15.Finance	£ 120
16.Law	£ 120
17.Research Methodology	£ 120
18.Sociology	£ 120

Figure 5.1. Expenditure on Subject Areas from a Budget of £10,000

2. Taking Services Out to Nurses

The way in which nurses report gaining access to printed material in Question 7 suggests that an increase in ward/departmental collections and more satellite libraries are required. This point was also made by Gilbert (1976). The problems with this solution are well known. The cost of providing a useful collection of material to each ward and department is beyond the resources of any health authority. Material which is purchased for bench collections at present is difficult to control adequately and material is constantly lost to the frustration of those staff for whom it is bought. Decreasing funds mean this is not a practical solution.

Long Term Proposals

It has already been shown in the results to Question 7 and from other research that nursing staff as a whole have a poor image of libraries and prefer to use personal contacts and personal or departmental collections of printed material to to solve their information needs. Replies to Question 15 indicate that lack of time and geographical isolation are the most usual reason for nurses not following up information needs. These are the most important factors to be taken into account in recommending changes in the provision of information services to nurses.

Introduction of computers and CD Rom technology into the central libraries recently has indicated how effective computer-based systems are in improving the image of the library. Almost all readers who are shown how

to search for information using this technology are surprised by the speed, efficiency and ease with which information can be located. This suggests a possible way of improving utilisation of, and access to, library services.

During mid-1989 conversion of library catalogues from 5" x 3" cards to On-line Public Access Catalogue (OPAC), using Head International software, was commenced. There are approximately 20,000 volumes held in the central libraries with new volumes being added at the rate of 1,200 per year. All new material is added to the OPAC and older material is converted as time allows. Loans procedures will also be automated. It is estimated that completion of the work will take a minimum of 5 years.

At present Bloomsbury Health Authority is planning for the building of a new single site hospital to replace existing scattered facilities. This will be based in central Bloomsbury and will open in about 10 years time. The College of Nurse Education along with other educational facilities will be based much closer to clinical areas than is the case at present. It is anticipated that during the building of the new hospital premises, an extensive network of computer facilities will be included. This will link all wards and departments. Pilot studies are already being run in some clinical areas using computer systems to maintain patients' records.

It is recommended that the library computer system should be linked to this network, thus allowing the individual nurse to carry out more information seeking tasks without leaving the ward/department/health centre. By accessing the library databases, which should be via the main

menu, the nurse could:

i) carry out book searches via the OPAC

ii) request loan (items posted using internal mail), renewal or

reservation of library material via electronic mail)

iii) request a literature search. Downloaded results could be
transmitted back to the individual by electronic mail

iv) have instant access to the list of journal holdings

v) request photocopies of articles from stock or interloans

vi) search the Current Awareness Bulletin database which would be
continuously updated and maintained as a single file containing
material published in the previous 6 months. (The printed Bulletin
which is sent out monthly to wards and departments at present
contains material for one month only and is often lost before
all staff have had a chance to look at it.)

vii) by looking at an electronic version of the Library Guide check on
opening hours, regulations, procedures for requesting renewals and
so on. Modifications to procedures could be easily made, and all
users informed by using a Library Bulletin Board as part of the
electronic mail network.

viii) have access to reading lists on topics of current interest

ix) be able to do any or all of the above both during and outside
normal library opening hours.

In addition the network could be used to facilitate the heavily reported use of
personal information sources by allowing individuals to ask for information
from colleagues without leaving their workstation. Using electronic mail a
message could be left for a colleague who might be out of the office, and so
would be an improvement on the telephone network which is the only alternative
at present.

Sloan (1986) discussing the development of a remote library network at
the University of Illinois, reported on an unexpected bonus:

> "remote access serves to blur the concept of the library as
> a physical location or building. This shift in perception is
> significant, as patrons begin to think of (and judge) the
> library in terms of what it offers to them -"what" the
> library is, rather than "where."
>
> (Sloan 1986)

Sloan(1986)also commented on the necessity of simple, user friendly
written instruction on using the system to be made available
to each workstation. He reports that remote access users have a much
higher incidence of errors in using the system, and on the importance of
clear instructions on who to contact with phone numbers, in case of
difficulties. Care must be taken to avoid remote users becoming so
frustrated with a system which they are unable to operate that they
refuse to use it altogether.

System Requirements

In order to implement this system, the library databases would need to be loaded on the main hospital computer, rather than on an in-house system as at present. As existing library technology will probably need to be replaced in 10 years time, this should not be an insurmountable problem, as long as planners are alerted to requirements. In fact, this may be more cost effective than purchasing new stand alone equipment. The system as outlined above will require 80-100 Mb of storage inclusive of 10% expansion space.

Particular attention will need to be given to ensuring security of data, both in the area of passwords and back up systems, as hospitals contain their share of 'hackers' like any other institution.

The existing software's capability of being networked to such a large number of stations must be considered, although developments during the next 10 years may overcome this. However, it should be noted that transfer of data to another, more powerful software package is a possible requirement. The cost of licensing the software to be networked to so many workstations must also be considered in future planning.

Resource Implications

It is anticipated that implementation of this system would result in greater use of library services by qualified nusing staff. The increased workload will be partially offset by the reduced hours spent in printing and distributing library publications. The Current Awareness Bulletin

alone takes 15 hours per month to print, collate and distribute.

It has been noted earlier that being part of a District-wide network is likely to be cheaper than replacing existing library computer equipment when it becomes obsolete.

The system outlined above could be a big step forward to meeting some of the expressed needs of qualified nursing staff. Staff could communicate with the library without needing to leave their work station and the reply could be transmitted back to their work area. It would have particular value for community based staff and those in outlying hospitals, and night staff who find it difficult to use libraries at present given existing opening hours. The amount of time required to use the library would be reduced, so helping to ensure that in those situations where the library service can help to satisfy an information need, it is approached to do so.

Inclusion of information held by the District Management library and the District Information Office, as subsets of an overall 'professional information' database would enhance even further nurses access to information.

Short Term Proposals

The above computerised netowrk, if implemented, will come to fruition in the late 1990's at the earliest. In the shorter term, the solutions to nurses reported information difficulties are less obvious. It would be unrealistic to expect that as much can be achieved without the

computerised network as can be achieved with it. Other ways of overcoming geographical isolation, shortage of time and improving nurses' perception of libraries must be found.

One option which has been much discussed in relation to medicine, and to a lesser extent in relation to nursing is the concept of the Clinical Librarian. In this scenario, the librarian joins medical staff on ward rounds noting information needs which arise in relation to individual patients. A literature search is subsequently carried out and results fed back to staff involved. Corcoran (1983) reports on modifying this process for use with qualified nursing staff. Instead of attending ward rounds the Clinical Nursing Librarian attended the afternoon report session. The innovation, which was implemented partly to attract qualified nurses to the library, and partly to compensate for the geographical isolation of the library from the main clinical areas, is reported as being successful. However, the individual librarian visited only three clinical areas once a week. Bloomsbury Health Authority has approximately 140 wards and clinical areas where qualified nurses work. Even visiting only once a week, the staffing implications of such a service are enormous, and under present economic conditions, Clinical Nursing Librarianship is impractical over such a large number of sites. However, it may be possible to implement a similar system for outlying hospitals. These are relatively small and so have a limited number of wards and departments. It is not yet decided which of these hospitals, if any are to 'opt out' under the recent Working for Patients (1989) regulations, but that should be clearer by April 1991.

A further modification of the Clinical Librarian system might also help to reduce the isolation of community staff. There are at present 8 health centres in the Authority each acting as a base for District Nurses, Health Vistors, School Nurses and Community Psychiatric Nurses. It is understood that there are regular Health Centre meetings to which all staff are invited. It may be possible for a librarian to attend those meetings on a regular basis to discuss information problems with the group or with individuals. Again, the organisation of community staff is undergoing change at the time of writing, but should be clearer by April 1991. At that point a careful look at the practicalities of providing a Clinical Librarian service, with appropriate evaluation, should be considered.

As this is not a practical solution for all wards and departments some other way needs to be found to take information services to staff on the main hospital sites. There will be some proposals for promotion of services and education of staff in the next section. As users will not have computerised links with the library, the next best option would be to utilise existing telephone links more effectively. Library systems and procedures should be looked at to see if they can be modified to allow more effective 'at a distance' use. Library staff may require additional training to help them to deal with telephone requests more effectively. Two areas of procedure which will require careful consideration are loans procedures and payment for services which involve a charge e.g. photocopying, interloans or computer printout. The implementation of the automated loan procedure in late 1991/early 1992 should permit users to request loan procedures by quoting their borrower number. Payment for

services may give rise to greater difficulties. Accounts for users can be kept, but are time consuming and inevitably give rise to disputes about payment. Some departments will be willing to pay an annual sum for services used by their staff. Individuals not covered by this system might pay a sum on enrolment from which service charges would be deducted. This is a difficult area and policy would need to be carefully negotiated.

3. Improving Nurses Perception of the Library

Raising the profile of the library will be discussed under two headings - a) promotion of services, and b) education of users. The effect of computerisation on nurses' perception of libraries has already been noted.

a) Promotion

Promotion of library services is aimed particularly at non-users. A positive policy of advertising library services should be undertaken, aimed directly at qualified nursing staff and paying particular attention to community and other geographically isolated staff. Direct mail to individual nurses is impractical in that accurate staffing lists are unavailable. Information can no longer be distributed with pay slips, which previously was a sure way of reaching all members of a particular group, because of the format of slip now used. The most promising option presently available, which has the added advantage of being relatively inexpensive, is to distribute copies of a poster and accompanying short leaflets to all wards, departments and health centres in the Authority.

Each senior nurse will be asked to display the poster and distribute the leaflet among her staff. A twice yearly mailing will help to ensure receipt of the leaflet by newly appointed staff. The leaflet should contain information on how the library can help the individual with both work-related and personal development information needs, should stress that the service is available to all nurses in Bloomsbury and that the service can be contacted by phone. The content of the poster and leaflet should vary according to its target group.

Another method of making contact with potential library users is to provide display material for use at study days/in-service training courses, and in entrance foyers of College buildings. A standard set of promotional material with display boards and sample literature searches, related books and journals specific to the study day/course should be provided. These courses will include a proportion of nursing staff who are non-members or non-active members.

Bloomsbury also produces a regular publication 'Capital Nurse' which is distributed to all nurses in the Authority. This journal accepts both editorial and advertising material. A regular slot/column would bring library services and developments to the attention of a wider audience than is possible any other way.

b) <u>Education</u>

Education of users is another method of modifying nurses' perceptions of libraries and is aimed at both existing and potential users with a view to increasing the effectiveness of their library use. The apparent lack of knowledge of formal information sources and how to use them as reported in Chapter Four underlines the need to improve the library skills of nurses. This can be achieved in two ways - orientation at the point of first contact and teaching at specific crucial points during later employment. The promotional leaflets suggested above will inform potential users that individual or small group orientation sessions can be arranged by appointment.

A programme of information seeking skills which can help to overcome negative attitudes to libraries, and which are seen by users to be relevant to their specific needs should be developed. Less dependence should be placed on the lecture/demonstration method of teaching searching skills, which because of lack of time is then followed by very limited practice. By the time the searcher needs to use the skills, they have been forgotten. An instructional package which has the following characteristics will be a first step towards this. The package may be made up from a series of units which can be put together to suit individual needs and pre-existing levels of expertise. It will be capable of being used without intervention of a teacher/librarian if necessary, and will include:

i) written/audiovisual/computer-based information about

sources.

  ii) information on external and/or alternative information

    sources

  iii) step by step guidance on the searching process

  iv) exercises which are relevant to the users' immediate

    needs, whether student or qualified nurse.

In addition to learning library skills as part of a formal educational course or in reponse to a specific individual arrangement, learning sessions will be organised at the instigation of library staff. Sessions using the information package described above or workshops designed around specific requirements will be repeated regularly throughout the year for groups of 8-10 individuals with similar interests/ needs e.g managers; staff about to commence first or higher degrees; research nurses; geriatric nurses.

Conclusion

The suggestions outlined above are an attempt to take the expressed needs of qualified nurses into account in planning library services. They take note of the need to save time, to reduce geographical isolation, to provide easier access to information and to improve knowledge of sources as reported by the nurses themselves.

Qualified nurses form the majority of the nursing workforce in the National Health Service. The currency of their knowledge and the ease with which they have access to information for decision making is crucial to maintaining standards of care in the future. Nursing libraries have some part to play in ensuring ease of access to information. If they are to fulfill this role there must be commitment to providing the service in a way which is helpful and meaningful to qualified nurses. The plans outlined above are a first step towards improving existing services. It is recommended that further work should now be undertaken to quantify the resource implications of these suggestions.

CHAPTER SIX

CONCLUSION

This study has been concerned with qualified nurses' information needs and information seeking behaviour and with how findings can be applied to planning library services.

The results have confirmed that qualified nurses, like many other professional groups are inhibited in information seeking by lack of time, geographical isolation from information sources and poor knowledge of sources and how to use them. The findings have confirmed that understanding of role is important in predicting information needs. It has been demonstrated that whilst there are differences between all grades surveyed in their need for and use of information, more clear cut differences have been highlighted between hospital-based nurses, community-based nurses, midwives and managers/teachers.

Qualified nurses, again like other professional groups, tend to use the most easily available sources most heavily and personal sources are very important to them, though it is questioned if personal sources are quite so heavily used as in some other groups.

Recommendations

Both long and short term recommendations have been given. In the shorter term emphasis has been placed on promotion of services and education of users, on promoting a 'long distance user' service by telephone, and on attempting to alleviate the worst of the effects of geographical isolation for community staff and those in outlying hospitals by advocating the adoption of a variant

of the Clinical Librarian service. It is suggested that these recommendations should be seen as immediate 'First Aid' rather than long term solutions.

More satisfactory long term solutions are suggested, which take advantage of the opportunities afforded by the proposed new hospital building programme in Bloomsbury. It is recommended that an Authority-wide library network is created as part of the Information Technology strategy for the new hospital. This would bring library databases and enquiry facilities to the workstation of all nurses in the Authority, and would reduce if not make irrelevant physical distance from the library. Ease of use could also be a major factor in saving time, and should encourage qualified nurses to use library facilities in situations where at present they would not do so. This network could also be used by nurses to contact each other and so facilitate use of personal information sources.

It is thought that the research results reported will have some applicability to other London teaching hospitals as staffing structures, staffing levels and the rapid staff turnover rates reported in Chapter One are likely to be similar. This may also apply to teaching hospitals in other parts of the country. It's applicability to non-teaching hospitals in the provinces is not known. As Gilbert (1976) and Valker (1978) found similarities in information use in their comparison of an urban and a rural setting, there is some possibility that findings are transferable to most other health authorities.

Further Research

The findings of this study are not materially different from those reported by Gilbert (1976) and Valker (1978) on points where it is possible to make comparisons. It seems unhelpful therefore to recommend further research at the same level. The exception to this would be to look at the information needs of psychiatric nurses - a group not covered by this study, as their differing role may give rise to different sorts of information need.

More practice-based research is now indicated. Efforts need to be concentrated on finding ways of providing a service which takes into account the expressed needs and problems of qualified nurses, with appropriate evaluation. Information technology allows library services to be provided in 'non-traditional' ways and this should be used to advantage. If the long term proposals of this study are implemented then it is suggested that evaluation over a period of five years should be undertaken to assess its impact and effectiveness.

Question 5: "What was the Information You Needed?"   (Arranged by Category)

1. Medical/Surgical Information   28 observations

Prognosis and condition of a baby in SCBU.

Background to patients condition for project

Signs, symptoms & possible problems caused by Henock Scholein Purpura

Information on certain medical conditions

Information on Hepatitis B+

Sickle Cell Disease/Thalassaemia/Laser Bronchoscopy

Interpretation of ECG abnormalities

Appearance of fetal tachycardia on a fetal heart trace in intra-uterine
growth retarded fetus

Info. regarding enzyme potentiating desensitization programme

Thalassaemia - causes/signs/symptoms/effect during pregnancy

Liklihood of patients developing heart disease & aneuryms if they have
Meniere's disease

Additional information about pain theory

Update on spondylolisthesis

Ectoparasites - life cycles, feeding habits etc.

Meaning of word 'procidentia'

Up to date research on complications.of diabetes

Effect of diet on neural tube defects - research

Causes of venous ulcers and treatment - normal and disordered physiology of
lower leg.

Haemolytic uraemia

Progression of cerebral palsy and special provisions required at school

Info. about hypospadins and a special form of cancer

Brachial plexus injury

Update knowledge of viral meningitis

Surgery of temporo-mandibular joint

Appropriate treatment for a patient following renal transplant

Technique of haemofiltration

Procedure for a urological operation

Procedure to carry out hysteroscopy and insertion of catheter under local anaesthesia

2. Clinical Nursing Information   21 observations

Caring for an HTLVIII+ patient in the main room, or side ward when receiving chemotherapy, and the policy for resuscitation.

Recent advances in the care of CVP lines, especially what kind of dressings should be used.

Information to enable ward to update nasogastric feeding regime

Mouthcare for a patient with Ca. tongue and candidiasis

To find a bulk forming agent for patient with diarrhoea while in Clinifeed

Mouthcare for patients undergoing radiotherapy and chemotherapy. Advs. and disadvs. of using glycerine and lemon swabsticks for patients with severe mucocitis

Info. on new Bloomsbury policies/procedures/investigations

Pre and post-op. care of patient admitted for pituitary ablasion

Procedure to carry out new treatment on an ulcer which keeps breaking down.

Post-op. care of patient following surgery for torsion of testicle.

Query use of Granuflex on an ulcer as condition not improving

How to set and swing a Thomas splint

Information re second stage of labour

Management of a patient in second stage of labour and analgesia

Nursing information about cochlear implants

Info. on long-term effect of nasogastric tube feeding

Whether it is necessary to test patients urine twice weekly or not

Research on effect of saline baths on wound healing

Research into saline baths

How to perform a rectal washout

Name of a particular procedure

3. Drug Therapy   19 observations

Usage of a drug, not in regular use, to be given by doctor intra-arterially

Drug information

Drug Information

Need information regarding preparation of vaccines

Drug Interaction

Info. on side effects and contraindications of a new drug. Patient developed side effects.

Was it feasible for a medication to have been discontinued given the patient's diagnosis

Side effects of a drug I was unfamilar with

Antibiotic therapy for "selective decontamination of the digestive tract" which was to be tried on a patient in ITU

Action of a particular drug

To ascertain whether the oral drug taken by the patient was dialysable.

Info. on drug taken in early pregnancy and its possible side effects on the developing fetus.

Why a patient had been taking ferrous sulphate tablets for so long (several years)

Patients pain control - I needed information about the drug and its effectiveness

How frequently should insulin giving sets be changed

Drug administration

Chemotherapy - new to the ward

Info. about HIV and the administration of AZT

Special immunisations for a baby going abroad

4. <u>Equipment/Supplies - Purchase and Utilisation   10 observations</u>

Preparation of a dialysis machine

Purchase of a Laser Plume Extraction Filter for use with smoke extractor in Laser Clinic

Need catalogue of ENT lamps to match ones already in use

Name of company and how to contact re repair of surgical equipment

Rules and regulations for packaging CSSD packs

How many dressing gowns are available from the dressing store each day

How to obtain an appliance for a patient

Where to send a patient to get a breast prosthesis

Appearance and description of a certain type of prosthesis used in stabilisation of a fractured femur

How a particular bed support system could be used for a patient. How to use an adapted foot rest.

5. <u>Administrative Policies and Procedures   9 observations</u>

Policy and action to take during 'red alert' on ITU

Policy of making a patient ' Not for Resuscitation' in nursing notes as opposed to using a hidden signalling code i.e. black spots of "not for 5807"

Details of implementation of 'No Smoking' policies in industrial settings as well as other health authorities

How to transfer a patient to another hospital nearer his home

How to withdraw money from the ward fund for urgent ward/patient supplies.

Needed to telephone switchboard to find out if engineer was on duty to investigate water leak in unit.

Following violent incident during which a staff member was severely injured, I needed to be fully aware of the rights of both the staff member and the patient.

Procedure for resigning and applying for another job.

How to set up a Pregnancy Testing Centre.

6. Social Problems   6 observations

Baby was heroin addict, was her mother also an addict

Secondary school project on drug abuse, dependency and effects on woman and unborn child

Factual, accurate and up to date info. dealing with problems involving equal opportunities and anti-racist child care practice.

Books and journals relating to non-accidental injury to children

Child Abuse

Information on poverty and the elderly

7. Nursing Theory and Models   6 observations

Information about the implementation of the nursing process

Implementation of primary nursing in a short stay surgical ward

Orem's Self-care model for nursing

Primary nursing - introduction on a 5 day rehabilitation ward

Comparison of nursing process and task allocation

Finding out about primary nursing

8. Infection Control   5 observations

Correct procedure for cleaning contaminated blood and faecal stained equipment used on a patient with AIDS.

Specific study on aseptic technique

Articles relating to infection control

How long should we scrub prior to surgery

To ensure we were using the correct cleaning fluid for ulcer dressings

9. Social Services   5 observations

Provisions available for travelling families who have children with special needs

New DHSS rules about paying benefits and allowances

Convalescent arrangements for an elderly gentleman who had undergone major surgery

Changes in maternity grants and allowances and social implications

Facilities for frail elderly people in the community

10. Patient/Client Education   5 observations

Is there a self help group for pancreatitis sufferers

Information about self help groups for alcoholics and people with drug problems

Information for a talk on hygiene to school children

Information suitable for discussion on AIDS with school leavers

Leaflets/statistics relating to Health Education in general and about the government AIDS campaign in particular

11. Personal Career Development   5 observations

Future as enrolled nurse

Role of Senior Enrolled Nurse

Future plans for Theatres where employed

Need transcript of training in order to work in USA

How to obtain funding to go to a conference

12. Management   5 observations

Interviewing skills. I was to be the interviewer

Sick leave records

Info. to plan for staff induction

How to make better use of midwives' skills

Knowledge of Korner Reports prior to meeting

13. Clinical Pathology   4 observations

Why salt tests on children with cystic fibrosis differed from normal levels

Published information on blood glusoce monitoring

Glycohaema - a new blood test

Concise histological definition of glomerulo-nephritis

14. Education,Techniques & Resources   4 observations

Press release from RCM concerning future education of midwives prior to TV interview

Project 2000 and its implications for nurse education and the nurse and client.

How to use aims and objectives in a teaching session

Tracing information about TV programme on residential use of the elderly

15. Psychology   3 observations

How body image is formed from birth onwards

Theories of adult psychological development

Research on the effect of communications skills teaching to the health professions.

16.Psychiatry   3 observations

Care of the mobile confused patient - risk of restraint etc

Info. on ECT for draft administration guidelines

Info. about institutionalisation, partic. Russell Barton's book

17. Anatomy   2 observations

Nerves of the bracial plexus

Anatomical diagrams to help teach self care of spinal injured patient

18. Financial Information   1 observation

Previous year's budget figures

19. Law   1 observation

Euthanasia law in Great Britain and the EEC

20. Research Methodology   1 observation

How to analyse and present qualitative data

21. Sociology   1 observation

Information to complete a sociology assignment

Library
Bloomsbury College of Nurse Education
Minerva House
North Crescent
Chenies Street
London WC1E 7ER

Tel: 01 387 9300 ext 5124

22 October 1987

Dear

Information Needs of Trained Nurses

I am researching the information needs of trained nursing staff in Bloomsbury
Health Authority, looking at the sort of information that is needed to solve
problems during the working day. It is hoped that the information gathered by
the study will enable us to improve existing library and information services
for trained nurses. This research, which has the approval of the Chief
Nursing Adviser and the Ethics Committee, is being undertaken in conjunction
with an M.Phil. degree at University College London.

You have been chosen from the total pool of trained nurses in Bloomsbury to
take part in the research. Your co-operation would be very much appreciated
as your experiences of information requirement/shortages are vital to the
success of the project. Please will you help by completing the enclosed
questionnaire and returning it to me in the envelope provided by Friday 13 Nov
1987.

I realise that the amount of time which you have available is limited, and so
I have kept the number of questions to a minimum. Experience shows that it will
take between 15 - 30 minutes to complete the questionnaire.

The information which you provide will be confidential and no-one but myself
will be able to identify your completed questionnaire. The number on the front
of your questionnaire will enable me to record returned questionnaires and
will not be used for any other identification purposes. If you require any
further information please contact me at the above address.

If you do not wish to take part in the research, please return the blank
questionnaire in the envelope provided, otherwise I will assume that it has
gone astray and send you a replacement. This will also make it clear when
all questionnaires have been returned. About 20% of the people who receive
this questionnaire may also be asked to participate in a short interview
early in 1988.

Yours faithfully,

Jane Williamson
Librarian, Bloomsbury College of Nurse Education

INFORMATION NEEDS OF QUALIFIED NURSES

BACKGROUND

In order to relate the information which you provide to the work that you do, it would be useful to have some basic details about your job.

1. What is your official job title?

2. Formal job titles often hide special work interests, responsibilities or unusual aspects of a job. Are there any such features in your job? e.g. membership of a committee, union official etc (Please circle the appropriate reply.)

   Yes

   No

   If YES, please describe these features briefly.

3. Please indicate how many hours a week you typically spend reading books, journals, internal and external reports related to your work.

None	a
Less than five hours	b
Between five and ten hours	c
Between eleven and twenty hours	d
More than twenty hours	e

INFORMATION NEEDS

In order to obtain data which is as accurate as possible, and unaffected by
tricks of memory, please think of the most recent instance when you
needed information to resolve a problem at work, and follow this situation
through in your answers to Questions 4 - 12. Please exclude situations where
the information required could be obtained from the patient himself or from his
records e.g. details of his treatment plan, or when he is to be discharged.

4. When was the last time you needed information in order to resolve
   a problem at work? (Please circle the appropriate answer code)

Today	a
Yesterday	b
Within the last seven days	c
Within the last thirty days	d
More than thirty days ago	e

5. What was the information that you needed? Please be as complete as
   possible in your description of this information.

6. Why did you need this information? (Please circle only the single most
   appropriate answer code).

To solve a clinical nursing problem	a
To solve an administrative problem	b
To solve a teaching problem	c
To solve a financial/budgetary problem	d
To solve a legal/ethical problem	e
To keep up in areas of special interest	f
To keep up in general nursing developments	g
To prepare for a job interview	h
Other (Please specify)	i

7. Please explain how you searched for the information to solve
   this problem, from the beginning to the end of your search,
   even if you did not find the answer. Please indicate the
   sequence in which you used any of the sources listed below,by
   putting 1st, 2nd, 3rd etc on the appropriate line. If you only
   used one of the sources listed below, put 1st next to it, then move on
   to the next question.

   I searched myself through:

   Books, manuals.................................
   Journal articles............................... .
   District reports..............................
   Government documents........................
   Manufacturers literature..................
   Newspapers..
   Current Awareness Bulletin................
   Indexes, Abstracts............................

   I asked a nursing colleague......................
   I asked a medical colleague......................
   I contacted another hospital department..... ..
   I contacted an outside organisation............

   I asked a subordinate to do the search for me.....
   I asked library staff to do the search for me.....
   Other (Please specify)

Skip Question 8 if you made no use of written or printed sources.

Skip Question 9 if you made no use of people as a source of
information

8. If you used written or printed sources of information, where did
   you find them?
   If you found them in more than one place, please indicate the sequence by
   writing 1st, 2nd etc on the appropriate line

   In your own collection of books, journals etc.............
   In a colleagues collection of books, journals etc........
   On the ward/ in the Department....................................
   In another Department..
   In the School of Nursing Library...........................
   In another Library (please specify).......................
   Somewhere else (please specify)............................

9. If you asked people for the information, please indicate their occupation and grade/organisation.

10. What result did you get from the sources which you consulted?
    Listed below are the same sources which you were asked to consider
    in Question 10. Please write ALL, PART or NONE
    against the items you used according to how much of the answer they
    provided.

    I searched myself through:
    Books, manuals................................
    Journal articles.............................
    District reports.............................
    Government documents.......................
    Manufacturers literature..................
    Newspapers.....................................
    Current Awareness Bulletin..............
    Indexes, Abstracts..........................

    I asked a nursing colleague...................
    I asked a medical colleague...................
    I contacted another hospital department.......
    I contacted an outside organisation...........

    I asked a subordinate to do the search for me.........
    I asked library staff to do the search for me........

If you got all the information you needed to answer your problem, please
skip to Question 12.

11. If you did not get all the information you needed from the sources
    which you have indicated above, what will you do?
    (Please circle the appropriate answer code).

    Will give up the search   a
    Will wait for an answer   b
    Will try again later   c

12. Please indicate below, as accurately as possible, how long you spent in gathering the above information.

Less than five hours	a
Between five and ten hours	b
Between eleven and twenty hours	c
More than twenty hours	d

UNSATISFIED INFORMATION NEEDS

13. Most of us have times when we need information on a particular subject but for a variety of reasons are not able to follow it up. Does this happen to you?(Please circle appropriate answer code).

Never	a
Every day	b
At least once a week	c
At least once a month	d
Only very occasionally	e

14. Please give details of the most recent subject which you were unable to follow up

15. What was the main reason why you were unable to follow up this topic?

Thankyou for answering the above series of questions which were in connection with a specific situation.

16. **Are there any comments which you would like to make about your need for information, or about this questionnaire?(Please use a separate sheet if necessary).**

Thankyou for your co-operation in completing this questionnaire. Please return it in the envelope provided to:

Jane Villiamson
Library
Bloomsbury College of Nurse Education,
Minerva House
Chenies St
London VC1E 7ER

INTERVIEW SCHEDULE

The interview schedule consisted of three sections:

    a) a standard set of introductory questions which were similar in
       character to the opening section of the questionnaire.

    b) a series of questions about results from the questionnaire
       which related to the sub-group of which the interviewee was
       a member. These questions varied with each group. Individuals were asked
       to comment on responses from their peers.

    c) a single concluding question.

Questions asked in sections a) and c) are listed below.

Section a)

1. What are the main areas of concern in your job at present?

2. Are these problems ones which could be helped by improved access to
   information?

3. If YES, what sort of information?

4. Can you give me an example of the most recent occasion on which you
   needed information, and what the information needed was?

5. How did you go about finding information on that topic?

Section c)

1. Much of the research carried out on nurses' use of libraries indicates that
   they are fairly unimpressed by nursing libraries as potential sources of
   information. Have you any opinion as to why this should be?

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