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RESEARCH PROTOCOL

Protocol No. 2002-020

RRC Approval: Yes / No Date: _____

ERC Approval: Yes / No Date: _____

AEEC Approval: Yes / No Date: _____

Project Title: To identify the factors influencing and determining nurses' behaviour in the delivery of hands on patient care

Theme: (Check all that apply)

- | | |
|---|---|
| <input type="checkbox"/> Nutrition | <input type="checkbox"/> Environmental Health |
| <input type="checkbox"/> Emerging and Re-emerging Infectious Diseases | <input checked="" type="checkbox"/> Health Services |
| <input type="checkbox"/> Population Dynamics | <input type="checkbox"/> Child Health |
| <input type="checkbox"/> Reproductive Health | <input type="checkbox"/> Clinical Case Management |
| <input type="checkbox"/> Vaccine evaluation | <input checked="" type="checkbox"/> Social and Behavioural Sciences |
| <input type="checkbox"/> HIV/AIDS | |

Key words: nursing behavior, hospital care, qualitative research

Relevance of the protocol:

Several studies have demonstrated that nurses spend a substantial percentage of their working hours on administrative and clerical functions and other non-nursing tasks and comparatively little time on direct patient care. However, within the Bangladeshi contextual framework of health care, nurses are essential for the proper management of patients in hospital settings. The aim of this study is to identify factors that influence nurses' behaviors in hospital settings in the delivery of direct patient care. The research findings will inform and guide the development of a national nursing planning and management strategy, with the aim of ultimately improving the quality of patient care in Bangladesh.

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Co-Investigator(s): Lauren Blum, Mohammad Ullah

Student Investigator/Intern:

Collaborating Institute(s): DFID

Population: Inclusion of special groups (Check all that apply):

- | | |
|--|--|
| Gender | <input type="checkbox"/> Pregnant Women |
| <input type="checkbox"/> Male | <input type="checkbox"/> Fetuses |
| <input type="checkbox"/> Females | <input type="checkbox"/> Prisoners |
| Age | <input type="checkbox"/> Destitutes |
| <input type="checkbox"/> 0 - 5 years | <input checked="" type="checkbox"/> Service providers |
| <input type="checkbox"/> 5 - 9 years | <input type="checkbox"/> Cognitively Impaired |
| <input type="checkbox"/> 10 - 19 years | <input type="checkbox"/> CSW |
| <input type="checkbox"/> 20 + | <input checked="" type="checkbox"/> Others (hospital patients) |
| <input type="checkbox"/> > 65 | <input type="checkbox"/> Animal |

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Revised on: 25 Jun 2002

17 August 2002

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Project / study Site (Check all the apply):

- | | |
|---|--|
| <input checked="" type="checkbox"/> Dhaka Hospitals | <input type="checkbox"/> Mirsarai |
| <input type="checkbox"/> Matlab Hospital | <input type="checkbox"/> Patyia |
| <input type="checkbox"/> Matlab DSS area | <input type="checkbox"/> Other areas in Bangladesh _____ |
| <input type="checkbox"/> Matlab non-DSS area | <input type="checkbox"/> Outside Bangladesh
name of country: _____ |
| <input type="checkbox"/> Mirzapur | <input type="checkbox"/> Multi centre trial
(Name other countries involved) _____ |
| <input type="checkbox"/> Dhaka Community | |
| <input type="checkbox"/> Chakaria | |
| <input type="checkbox"/> Abhoynagar | |

Type of Study (Check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Case Control study | <input type="checkbox"/> Cross sectional survey |
| <input type="checkbox"/> Community based trial / intervention | <input type="checkbox"/> Longitudinal Study (cohort or follow-up) |
| <input type="checkbox"/> Program Project (Umbrella) | <input type="checkbox"/> Record Review |
| <input type="checkbox"/> Secondary Data Analysis | <input type="checkbox"/> Prophylactic trial |
| <input type="checkbox"/> Clinical Trial (Hospital/Clinic) | <input type="checkbox"/> Surveillance / monitoring |
| <input type="checkbox"/> Family follow-up study | <input checked="" type="checkbox"/> Others |

Targeted Population (Check all that apply):

- | | |
|--|--------------------------------------|
| <input type="checkbox"/> No ethnic selection (Bangladeshi) | <input type="checkbox"/> Expatriates |
| <input checked="" type="checkbox"/> Bangalee | <input type="checkbox"/> Immigrants |
| <input checked="" type="checkbox"/> Tribal groups | <input type="checkbox"/> Refugee |

Consent Process (Check all that apply):

- | | |
|---|--|
| <input checked="" type="checkbox"/> Written | <input checked="" type="checkbox"/> Bengali language |
| <input checked="" type="checkbox"/> Oral | <input type="checkbox"/> English language |
| <input type="checkbox"/> None | |

Proposed Sample size:

Total sample size: 8-10 key informants
108 Informants
6 Focus Groups
21 Observations

Determination of Risk: Does the Research Involve (Check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Human exposure to radioactive agents? | <input type="checkbox"/> Human exposure to infectious agents? |
| <input type="checkbox"/> Fetal tissue or abortus? | <input type="checkbox"/> Investigational new drug |
| <input type="checkbox"/> Investigational new device?
(specify _____) | <input type="checkbox"/> Existing data available via public archives/source |
| <input type="checkbox"/> Existing data available from Co-investigator | <input type="checkbox"/> Pathological or diagnostic clinical specimen only |
| | <input type="checkbox"/> Observation of public behaviour |
| | <input type="checkbox"/> New treatment regime |

Yes/No

- Is the information recorded in such a manner that subjects can be identified from information provided directly or through identifiers linked to the subjects?
- Does the research deal with sensitive aspects of the subject's behaviour; sexual behaviour, alcohol use or illegal conduct such as drug use?
- Could the information recorded about the individual if it became known outside of the research:
- a. place the subject at risk of criminal or civil liability?
- b. damage the subject's financial standing, reputation or employability; social rejection, lead to stigma, divorce etc.

Do you consider this research (Check one):

- | | |
|--|---|
| <input type="checkbox"/> greater than minimal risk | <input type="checkbox"/> no more than minimal risk |
| <input checked="" type="checkbox"/> no risk | <input type="checkbox"/> only part of the diagnostic test |

Minimal Risk is "a risk where the probability and magnitude of harm or discomfort anticipated in the proposed research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical,

psychological examinations or tests. For example, the risk of drawing a small amount of blood from a healthy individual for research purposes is no greater than the risk of doing so as a part of routine physical examination".

Yes/No

Is the proposal funded?

If yes, sponsor Name: _____ Funded by DFID but commissioned by the British Council, Shapla programme SRN.

Yes/No

Is the proposal being submitted for funding ?

If yes, name of funding agency: (1) _____

(2) _____

Do any of the participating investigators and/or their immediate families have an equity relationship (e.g. stockholder) with the sponsor of the project or manufacturer and/or owner of the test product or device to be studied or serve as a consultant to any of the above?

IF YES, submit a written statement of disclosure to the Director.

Dates of Proposed Period of Support

(Day, Month, Year - DD/MM/YY)

Beginning date _____ September 2002 _____

End date _____ March 2003 _____

Cost Required for the Budget Period (\$)

a. 1st Year 2nd Year 3rd Year Other years

b. Direct Cost : \$ 25,446 Total Cost : \$31,808

Approval of the Project by the Division Director of the Applicant

The above-mentioned project has been discussed and reviewed at the Division level as well by the external reviewers. The protocol has been revised according to the reviewer's comments and is approved.

Name of the Division Director

Signature

Date of Approval

Certification by the Principal Investigator

I certify that the statements herein are true, complete and accurate to the best of my knowledge. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. I agree to accept responsibility for the scientific conduct of the project and to provide the re-

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 17 August 2002

Signature of PI

Date:

Name of Contact Person (if applicable)

quired progress reports if a grant is awarded as a result of this application.

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Check here if appendix is included

Principal Investigator Mary Hadley

Project Name: To identify the factors influencing and determining nurse's behaviour in the delivery of hands on patient care

Total Budget US \$31,294

Beginning Date: September 2002

Ending Date: March 2003

The Health and Family Planning Program has made remarkable progress over the last two decades with respect to a reduction in fertility and maternal and childhood morbidity and mortality. Yet, the progress was inadequate and unsatisfactory in the areas of government health services utilization, cost-effectiveness, sustainability and quality of medical and nursing care (MOHFW 1998). Because the doctor-population ratio is estimated at 1:4870, it is neither possible nor desirable for doctors to provide care whenever a patient needs clinical assistance. However, there are over 17,000 nurses of various categories working in hospital settings who are qualified to deliver direct patient care during hospitalization. Nurses are therefore critical for the management and delivery of proper care to patients in hospital settings.

Research conducted in the 1980s and 1990s shows that nurses spend a substantial percentage of their working hours on administrative and clerical functions and other non-nursing tasks, such as inventorying hospital supplies, and a comparatively small proportion of their time on direct patient care (see Harun et al. 1986; Robson and Bradshaw 1990). More recently, studies have demonstrated a further reduction of nurse's involvement in direct patient care (Anderson et al. 1996; Hadley 2001).

The Directorate of Nursing Services, Ministry of Health and Family Welfare now recognizes that the present structure and workforce of nursing does not adequately respond to the needs of the patients/clients in the different levels of hospitals in Bangladesh. However, as yet no attempt has been made to systematically identify the factors that influence nurses' behaviors in giving (or not) hands on care to patients in hospitals. This study aims to identify determinants of nurses' behaviors in the delivery of direct patient care both in the public and private hospital settings. The research findings will inform and guide the development of a national nursing planning and management strategy, with the aim of strengthening the role of nurses and ultimately improving the quality of patient care in Bangladesh.

The International Centre for Health and Population Research (ICDDR,B) has extensive experience in the field of health systems research in Bangladesh. The Centre employs a wide range of skilled researchers including clinical scientists, social scientists, epidemiologists, and experts in the field of nursing. The research team has a good rapport with the nursing and other health professionals of the government and non-government hospitals in Bangladesh. All of these factors are conducive to the timely completion of a quality study.

KEY PERSONNEL (List names of all investigators including PI and their respective specialties)

Name	Professional Discipline/ Specialty	Role in the Project
1. Mary Hadley	Nursing Specialist	Principal Investigator
2. Mridu Thanki	Social Scientist	Co-Principal Investigator
3. Lauren Blum	Medical Anthropologist	Co-Investigator

DESCRIPTION OF THE RESEARCH PROJECT

Hypothesis to be tested:

The study is intended to *generate* hypotheses related to the factors that are identified to influence and determine nurse's behaviour in the delivery of hands on patient care using predominantly qualitative research methods. The hypothesis given below will act as a guideline to the study and is based on previous report findings.

- 1) The role of nurses is strongly influenced by the socio-cultural hierarchy within the health care system.
 - 2) The presence of patient attendants who provide care to their relatives in the hospital setting in Bangladesh affects the extent to which nurses are involved in hands-on care and influences the delivery of patient care by nurses.
 - 3) The internal hospital management and the system of training and promotion de-motivates nurses.
-

Specific Aims:

Describe the specific aims of the proposed study. State the specific parameters, biological functions/ rates/ processes that will be assessed by specific methods (TYPE WITHIN LIMITS).

The overall objective of the proposed study is to identify the factors that determine and influence nurses' behavior in the delivery of hands-on patient care both in the public and private hospital settings in Bangladesh.

The specific objectives of the study are:

1. To examine current curricula of nursing education, particularly to assess if and to what extent it emphasizes the role of nurses in direct patient care.
2. To examine in-service education and on the job training programs of nurses in both public and private hospitals.
3. To review current nursing management and administration in public and private sector hospitals to assess how supportive it is for direct patient care.
4. To examine the existence and nature of job descriptions of nurses working in public and private sector hospitals, and to assess their influence on direct patient care by the nurses.
5. To identify the provision of logistic support for nurses to deliver patient care in the public and private hospitals.
6. To assess nursing and non-nursing activities carried out by the nurses in their daily routine.
7. To observe nurses' behavior and interactions with patients, attendants, and colleagues of various categories in the public and private hospitals.

8. To identify socio-cultural factors which influence the delivery of direct patient care by nurses in the public and private hospitals of Bangladesh.

Background of the Project including Preliminary Observations

Bangladesh has a long tradition of urban oriented health care and the current health system is being operated by three sectors including government, not for profit non-government and for profit non-government. The public sector is not only the main health service provider in the country, it is also responsible for training the majority of doctors and nurses. A significant number of tertiary hospitals are run by NGOs, and some NGOs are also involved in the provision of primary health care in both rural and urban areas. In the public sector there are 13 Medical College Hospitals and 28 Specialized Hospitals (tertiary care), 60 District Hospitals (secondary care) and 400 Upazila Health Complexes (primary care). In the private sector there are 15 tertiary care hospitals and 483 secondary care hospitals. There are 41,514 hospital beds in Bangladesh, of which 30,143 beds are in the public sector and the remaining 11,371 beds are in the private sector. As of June 1999, a total of 17,203 nurses of various categories were employed in the different hospitals of Bangladesh. Among them 10,262 Senior Staff Nurses are working in public hospitals and 4058 are in private hospitals (DNS 2000, MOHFW 1999).

The Health and Family Planning Program has made remarkable progress over the last two decades with respect to a reduction in fertility and maternal and childhood morbidity and mortality. Yet, the progress was inadequate and unsatisfactory in the areas of government health services utilization, cost-effectiveness, sustainability and quality of medical and nursing care (MOHFW 1998). The Directorate of Nursing Services, Ministry of Health and Family Welfare realizes that the present structure and workforce of nursing does not adequately respond to the needs of the patients/clients in the different levels of hospitals in Bangladesh.

While research on nursing conducted in Bangladesh is limited, the studies conducted thus far clearly show that nurses spend a very low percentage of their time on direct patient care. In 1986, research conducted by Harun et al. reported that nurses working in the Upazila Health Complexes, District Hospitals, Medical Colleges, and Specialist Hospitals of four Divisions spend 50 percent of their duty time on administrative and clerical functions, 46 percent on direct patient care and 4 percent on teaching and supervision of student nurses. A study conducted by Robson and Bradshaw (1990) also demonstrates that in Bangladesh nurses generally spend substantial time on non-nursing jobs such as counting linen, pillows, mosquito nets, furniture, equipment, and inventorying drugs and food items. The researchers concluded that actual bedside nursing care, including wound dressing, checking blood pressure, removal of sutures, feeding, medication and bathing, is neglected or done by auxiliary staff. In most circumstances "Ayas" (female support staff) and patients' relatives provided much of the patient care expected to be carried out by the nursing staff, such as feeding, bathing, sponging, washing the hair, applying mouth wash, and giving oral medication. The research also illustrates that nurses are more often engaged in such activities as assisting doctors with laboratory specimens and distributing patients records and files to the appropriate bedside.

More recently, two studies have been conducted to assess nursing activities in hospital settings. These findings clearly indicate that there is a gradual reduction in nurses involvement in direct patient care in hospital settings in Bangladesh. In 1996, Anderson et al. found that nurses spend only 13 percent of their time on direct patient care. More recently, Hadley (2001) conducted an observational study which revealed that only 10 percent of nursing time is actually spent on direct patient care. These findings illustrate that nurses are primarily engaged in activities that are actually contrary to what would be deemed fundamental to nursing, which should involve 'hands on' care.

However, as yet no attempt has been made to systematically identify the factors that influence nurses' behavior in giving (or not) hands on care to patients in hospitals. Therefore, this study aims to identify determinants of nurses' behaviors in the delivery of direct patient care both in the public and private hospital settings. The research findings will inform and guide the development of a national nursing planning and management strategy, with the aim of ultimately improving the quality of patient care in Bangladesh.

Research Design and Methods

The Dhaka Division will be the study site, as it provides a full range of government, specialized, NGO and private hospitals, allowing for a good scope for random selection. The number of health facilities in each category still allows random sampling for individual health facilities in each category. To capture variations, this study will be carried out in all types of public as well as private hospitals in the urban and rural areas across the Dhaka Division of the country. Furthermore, the Division has a very good communication network, with easy access to a variety of health facilities.

METHODOLOGY

The nature of the study demands that a combination of quantitative and qualitative research techniques is employed, with an emphasis on qualitative research. In order to ensure that the overall objectives are accurately and adequately addressed, it will be crucial at the outset of the project to establish the working definition of terms such as 'basic nursing care' and 'physical contact with patient' stated in the terms of reference. Terms will be established by the research team in consultation with the Reference Group. Close liaison with the Reference Group within the SRN (Strengthening the Role of Nurses, DFID), particularly at the outset of the project, will be necessary to guarantee that the research design and content meet the overall goals of the project. Preliminary work will therefore involve in-depth discussions with key members in the organization in addition to a thorough literature review to appraise the available data on nursing policy and practice within Bangladesh and when relevant from countries similar to Bangladesh or from historic data from other countries at a similar stage of development in the hospital/nursing sectors. To address the main objective of the project, which involves identifying factors influencing and determining nurses' behaviour in the delivery of "hands on" patient care, the following methodology is proposed:

Selection of study sites

To capture variations, this study will be carried out in all types of public as well as private hospitals in the urban and rural areas across the Dhaka Division, with a total of six study sites, which will be selected randomly.

1. Medical College Hospital* (*n-1*),
2. District Hospital (*n-1*),
3. Upazila Health Complex (*n-1*),
4. Private Hospital (*n-1*),
5. NGO Hospital (*n-1*),
6. Specialized Hospital (*n-1*).

*In the Medical College and District hospitals only male and female general medical and surgical wards will be included in the study.

Design tools to conduct the study

- Based on the ToR requirements and information obtained through previous data collected, research indicators will be constructed to inform the development of various instruments designed to carry out a mix of methods including field observations, key informant interviews, focus group discussions and semi-structured questionnaires in each selected site. For example, previous studies suggest nurses are reluctant to go to patients' bedsides. Based on this information observation of length of time spent at the bedside compared to at the nurses station etc. will be conducted. Following this non participatory observation, interviews to explore why the nurses spent so little time at the bedside, both from the nurses, their colleagues, the patients and their attendants will be conducted. The findings will be presented to focus groups of nurses, patients, attendants and nurses hospital colleagues. Further discussion on the topic will be conducted with key informants.
- Exploratory research will be carried out at the field level with key informants, which will include nurses, hospital administrators and patients to guide the development of the research tools. During these interviews, free-listing exercises will be conducted to collect an initial list of perceptions of the roles of nursing staff and factors influencing nursing behavior, and to establish a working list of appropriate terminology that will guide the development of the research instruments.
- Semi-structured questionnaires, observation guidelines and focus group discussion agendas for the different categories of personnel will be drawn up based on the findings of previous studies and literature and the exploratory research with key informants.
- Each of the field instruments will be piloted in a hospital setting outside the sampling frame. The aim is to ensure that the meaning of the questions to be carried out are consistently understood by respondents and that the questions elicit relevant and adequate data. Observational guidelines, which will be used to collect data that will broaden our understanding of the nursing working environment and nursing/patient interactions, will be tested to assess that the data collected can expand our knowledge of the nursing role and can be used to validate information collected through other research tools. In addition, a demographic form will be developed to obtain critical information including data on gender, age education, employment, household composition, religion, and income from respondents as well as other information (i.e. utilization of health services from patients), which will vary according to the type of informant. An example of the need for this information would be to further understanding whether there is a reluctance of nurses from various backgrounds, to treat patients of varying backgrounds or whether it is an 'across the board' phenomena. Particular attention will be paid to the observation of nurses treating patients in cabins and paying beds in comparison to those on the general wards. Necessary modifications will be made before the implementation of the study.

Data gathering (secondary)

- Thorough literature review of previous and current reports on nursing in Bangladesh to aid in hypothesis generating.
- Review of the current training curriculum and job descriptions for various categories of nurses.
- Identification by the research team in consultation with the Reference Group of key criteria for selection of institutions for the study and determination of the study sites.

Data gathering (Field level)

Fieldwork will provide the main source of data related to theoretical (i.e. what nurses are expected, trained to do) as well as practical aspects of nurse activities on the wards (i.e. what they actually do). The data collected will also help to identify gaps and shortcomings of nursing care as well as positive aspects of nursing behavior. Research methods will involve:

- key informant interviews with nurses, medical staff and patients
- observations of nurses in ward setting and on duty for cabin patients
- interviews with selected nurses, medical/health staff and other relevant personnel, and patients
- focus group discussions with nurses and patient attendants

Permission will be obtained from the Directorate of Nursing Services through the Nursing Advisor of the SRN Project to access the selected hospitals. The Hospital Administrator or other relevant health facility in-charge and Civil Surgeon will be approached before the data collection is begun. Appointments will be made in advance for interviews with senior nursing and other health professionals. Past experience has shown that patients, their attendants and Class IV employees are more than willing to give time to be interviewed during the time they are in the hospital wards.

Key informants will be identified during the initial stages of the research and interviews will continue throughout the duration of the project. The researchers will work with eight to ten key informants, who will include hospital patients, nursing and other medical staff and hospital administrators. To identify a range of issues affecting nursing behavior, it will be important to choose both patients and nurses with different backgrounds. In regard to hospital staff, the aim is to work with key informants who are sensitive to differences in the hospital setting and are highly aware of what goes on, interact with a wide range of nurses from different backgrounds and length of service, and are able to represent the general perspective of the nursing community and factors that influence their workload and interactions with the patients. Subsequent meetings with key informants will provide an opportunity to review information gathered during the previous interview and to verify data collected through other methods. In the later phases of information gathering, it will be useful for interviewers to test hypotheses with key informants.

Direct observation of activities of nurses in the ward setting was the primary method of data collection in two recent studies (Leppard 2000, Hadley 2001). Information collected during the latter study can be used during the design of research indicators and tools. However further observation will be necessary to collect different kinds of data (e.g.. actual nursing activities, patient/client interactions, relations with other attendants) that cannot be obtained through interviews. More importantly, observations may be required to provide information that will facilitate a much better understanding of what is going on in the research setting which otherwise cannot be thoroughly understood. Ultimately, observations will allow us to speak with greater confidence about the meaning of the data.

Open-ended, semi-structured interviews will provide a large part of the data. Semi-structured interviews will be conducted with nurses, patients and other medical staff to describe opinions, attitudes and behaviors related to nursing activities and care as they exist in the study population. Specifically, the interviews will be carried out to collect information which includes but is not limited to the following:

- 1) to assess perceptions of the roles of nurses in the hospital setting and to examine their roles in relation to physicians and other skilled and non-skilled attendants;
- 2) to describe the logistical support for patient care provided to nurses;
- 3) to determine actual activities carried out by nurses in their daily routine;
- 4) to understand the nurse/patient relationship and
- 5) to identify some social and cultural factors influencing patient care.

Towards the end of the data collection period, focus group discussions will also be used to explore in greater detail a wide range of issues relevant to the research question and to confirm preliminary findings.

This wide mix of methods will facilitate the use of triangulation to verify information and hypotheses, enhancing our understanding and interpretation of the data results.

Study Population: The sampling frame are the health care personnel working in the health care facilities randomly chosen from the selection of facilities in four categories (see selection of study sites). A range of health care personnel is responsible for the delivery of patient care in hospitals. Therefore, doctors, nurse managers, nurse teachers, Senior Staff Nurses, Assistant Nurses and student nurses, ward masters, ward boys and ayahs and patients and their attendants will form the study population for the research.

Sample size estimation: Random sampling will be used initially to select nurses working on the wards (as per ward duty rota list) and patients as per bed number on each ward. However purposive sampling will be used to verify information and hypotheses during the course of the study especially for the focus group discussions and in-depth interviews. Estimates of the sample size will be adjusted according to the patterns that evolve during the data collection phase. Samples in the Specialized hospitals have been lowered since many facilities in this category are small in size. The number will be adjusted when selection has taken place. Initial sample estimates are as follows:

Research Instrument	Respondents	Numbers	Total <i>N</i>
In-depth Interviews	Key Informants	5 Respondents (JS, DNS, Line Director, SRN, Registrar, BNC and Principal, NI, hospital patients)*	8-10
In-depth Interviews	Nurses	8 Nurses x 5 study sites	40
In-depth Interviews	Patients	8 Patients x 5 study sites	40
In-depth Interviews	Health Care Colleagues	2 Respondents (doctor and ward boy or aya) x 5 study sites	10
Focus Group Discussions (FGD)	Nurses (8-10 participants)	1 FGD x 2 Study Sites	2 Groups
FGD	Patients' attendants (8-10 participants)	1 FGD x 2 study sites	2 Groups
Direct Observations*	Nurses	5 nurses over 3 shifts x 5 study sites	15
In-depth Interviews Specialized Hospital	Nurses (8), patients (8) and health care colleagues (2)	18 respondents	18
FGD Specialized Hospital	Nurses and patients (8-10 participants each)	2 FGD (1 with nurses, 1 with patients' attendants)	2 Groups
Direct Observations* Specialized Hospital	Nurses	6 nurses over 3 shifts	6

JS = Joint Secretary; DNS = Directorate of Nursing Services; SRN = Strengthening Role of Nurses; BNC = Bangladesh Nursing Council; NI = Nursing Institute.

*Observational information collected during a previous study may reduce the time required for direct observation during this study in the design of research indicators and research instruments.

Duration of Study: The duration of the study is about 6 months. We anticipate starting the study at the beginning of September 2002 and finishing in by the beginning of March 2003

Limitations and anticipated difficulties

Until the data collection has been started and later during the analysis phase the limitations of this study cannot be wholly predicted. From past experience, however, we anticipate the study requiring special attention to be given to move beyond the negative attitude of nurses, patients and other health care professionals that exists implying that nurses are not doing the work they are 'supposed' to be doing. The sample size may appear ambitious but the use of the previous studies, particularly in the area of observation of nursing activities is expected to make the workload more appropriate.

ACTION PLAN

Major Activities of the study	Duration in Weeks
1. Preparatory work of the study	4
2. Development and finalization of research instruments	4
3. Training of interviewers	1
4. Data collection and compilation	12
5. Data processing and editing	10
6. Publication of quarterly report	2
7. Coding and analysis	6
8. Preparation draft report for review	4
9. Incorporation of comments and observations	1
10. Preparation of final report and submission	1

Working weeks are non-exclusive

Facilities Available

The International Centre for Diarrheal and Disease Research, Bangladesh (ICDDR,B) has a long history of carrying out research with collaboration from national institutions. For the proposed study, the Centre has the necessary reputation and contacts to facilitate links with the hospitals that will be included in the study. Several presently employed field research officers will be recruited to participate in the study. Additional field staff will need to be hired and all field workers will be trained in the various data collection techniques used to carry out the study. Strong supervision of the quality of the data collection will be maintained, which will include ongoing review of the field notes.

Data Analysis

Qualitative

Qualitative data analysis is an iterative process, involving ongoing data collection and analyses. As data is collected, a coding system will be developed by the investigators for the qualitative data analyses. The coding system will be based on the initial research questions and objectives, as well as emergent themes.

Qualitative interview data will be entered into a word processing program compatible with use in Atlas.ti, a text-organizing program and texts will be coded in Atlas.ti. In order to ensure the validity of the coding, during the initial stages all coded texts will be reviewed by a second individual. Subsequently, a sample of texts will be double coded by two individuals with the same coding frame. Clippings of codes will be analysed always with the broader research objectives and socio-cultural context in mind.

Quantitative

Quantitative analysis will involve simple descriptive statistics including frequencies, means, standard deviations, and ranges of responses to describe the basic demographics, conditions and attitudes of the respondents. Cross-tabulations will also be used to describe variations across groups within the population in regard to socioeconomic differences of the patients, work conditions, and attitudes of the nurses. EPI-INFO 2000 will be used for this analysis.

Ethical Assurance for Protection of Human Rights

Respondents will be enrolled in the study after giving informed consent (see consent form, Appendix 1). Efforts will be made to ensure that all respondents are properly informed about the study and thoroughly understand what their participation in the study involves. Data collection will only be conducted with patients who can talk without experiencing any discomfort. Any respondent may withdraw from the study or any component of the study at any time. Maintenance of confidentiality of the data will be strictly followed and restrictions on access to data forms will be enforced. Ethical approval for this study will be obtained from the institutional review board at ICDDR,B prior to the implementation of the study.

Use of Animals

The proposed study does not involve the use of animals.

Literature Cited

Anderson S. et. al. 1996. A study of nursing practice in four medical college hospitals and eight associated Thana health complexes in Bangladesh. Dhaka: SNESP, DNS.

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MOHFW 1999. Bangladesh Health Bulletin 1997. Dhaka: MOHFW.

MOHFW 1998. Health and Population Sector Program 1998-2003, Part-I. Dhaka: MOHFW.

Robson P. and P.L. Bradshaw 1990. Nurse education in Bangladesh. Edinburgh: ODA, British Council.

Dissemination and Use of Findings

A mid-term and final report will be produced in English. The final dissemination strategy will be agreed upon in consultation with the commissioning agency. Important results and conclusions will be disseminated through working papers, journal articles and presentations at national and international conferences and meetings.

Collaborative Arrangements

The investigators will collaborate with the Directorate of Nursing Services, within the Ministry of Health and Family Welfare, and the Strengthening the Role of Nurses programme under DFID. We will also establish close links with the Bangladesh Nursing Council.

Biography of the Investigators

- 1 Name : Mary Hadley
- 2 Present position : Project Co-ordinator FHRP
- 3 Educational background : LSHTM, MPH,
OU, UK, BSC (Hons) Social Sciences,
Institute of Health Services Management: Certificate in Health
Services Management

List of ongoing research protocols
(start and end dates; and percentage of time)

NIL

5 Publications

Types of publications	Numbers
a) Original scientific papers in peer-review journals	1
b) Peer reviewed articles and book chapters	2
c) Papers in conference proceedings	4
c) Letters, editorials, annotations, and abstracts in peer-reviewed journals	
d) Working papers	10
b) Monographs	2

6 Five recent publications including publications relevant to the present research protocol

- 1) Hadley, M. 2001. Nursing activities in government of Bangladesh Health Facilities: An Observational Study. Dhaka: DFID.
- 2) Hadley, M. Rahman, M. 2001. The potential for a role of a nurse below Upazilla level. Nursing activities in government of Bangladesh Health Facilities: An Observational Study. Dhaka: DFID.
- 3) Hadley, M. Thanki M. 2002. Making choices for Nursing Education: A review of the SRN Curriculum Dhaka: DFID.
- 4) Hadley M, Maher D, 2000, Community Participation in Tuberculosis Control: Lessons from other Health Programmes: IJTBLD, 305:6-10
- 5) Hadley M, Mills A, 2001, Health Reforms in the Carribbean, (four country studies) Health Policy Unit Publications, LSHTM.

- 1 Name : Lauren S. Blum
- 2 Present position : Medical Anthropologist
- 3 Educational background : University of Connecticut, Ph.D
Columbia University, M.P.H.

List of ongoing research protocols

As Principal Investigator

Protocol Number	Starting date	End date	Percentage of time
2001-012	August, 2001	August, 2003	15%

4.1. As Co-Principal Investigator

Protocol Number	Starting date	End date	Percentage of time
2001-020	April, 2002	April, 2004	15%

4.2. As Co-Investigator

Protocol Number	Starting date	Ending date	Percentage of time
2000-025	2000	2005	20%
1999-009	April, 2002	April, 2004	20%
Poverty and Health	November, 2001	November, 2006	5%

5 Publications

Types of publications	Numbers
a) Original scientific papers in peer-review journals	1
b) Peer reviewed articles and book chapters	2
c) Papers in conference proceedings	12
c) Letters, editorials, annotations, and abstracts in peer-reviewed journals	
e) Working papers	5
c) Monographs	2

6 Five recent publications including publications relevant to the present research protocol.

- 1) Blum, L.S. and G.H. Peltó. 2002. "Coping with a Nutrient Deficiency: Explanatory models of vitamin A deficiency signs and symptoms in a northern Niger community. Accepted in Medical Anthropology.
- 2) Blum, L.S. and P. Nahar. "Contextualizing Malnutrition: Social influences and cultural perspectives on childcare and nutrition in the urban slums of Dhaka". Submitted to PHSD as Working Paper.
- 3) Blum L. 1999. The Cultural Context of Vitamin A Deficiency: A Comparative Study of Two Hausa Communities. University of Connecticut: Doctoral Dissertation.
- 4) Blum L. G. Peltó, H. Kuhnlein and P. Peltó 1997. Guidelines for Conducting Community-Based Ethnographic Studies of Vitamin A Consumption. Boston: International Nutrition Foundation for Developing Countries.
- 5) Blum, L. 1997. Community Assessment of Natural Food Sources in Niger: Hausas of Filingue. In H. Kuhnlein, G. peltó, and P. Peltó (eds.) Culture, Environment and Food to Prevent Vitamin A Deficiency. Boston: International Nutrition Foundation for Developing Countries

- 1 Name : Mridu Thanki
- 2 Present position : Independent Consultant

- 3 Educational- background :
- (
- MA Social Anthropology and Religious Studies (1991)
School of Oriental and African Studies
University of London
 - BA (HONS) Sociology (1984)
Middlesex University, London
 - Post Graduate Certificate in Education (1994)
Institute Of Education
University of London

List of ongoing research protocols
(start and end dates; and percentage of time)

SRN National Leadership Programme for Nurses (DFID)
(May 2002 to December 2003 - 75 days)

5 Publications

Types of publications	Numbers
a) Original scientific papers in peer-review journals	1
b) Peer reviewed articles and book chapters	
c) Papers in conference proceedings	
c) Letters, editorials, annotations, and abstracts in peer-reviewed journals	
c) Working papers	1
d) Monographs	

6 Five recent publications including publications relevant to the present research protocol

- 1) Hadley M, Thanki M. 2002. Making choices for Nursing Education: A review of the SRN Curriculum Dhaka: DFID
- 2) Thanki M, 2001, A suitable Place - Improving Counselling Services for Asian People - Joseph Rowntree Foundation, UK.

- 1 Name : Mohhamed Ullah
- 2 Present position : Nursing Manager,
- 3 Educational background :SSN, BSC Nursing, MSc Nursing management

4 List of ongoing research protocols
Nil

5. Publications
NIL

APPENDIX I

**International Centre for Diarrhoeal Disease Research, Bangladesh
Voluntary Consent Form**

Title of the Research Project: To identify the factors influencing and determining nurses' behaviour in the delivery of hands on patient care

Principal Investigator: Mary Hadley

Before recruiting into the study, the study subject must be informed about the objectives, procedures, and potential benefits and risks involved in the study. Details of all procedures must be provided including their risks, utility, duration, frequencies, and severity. All questions of the subject must be answered to his/ her satisfaction, indicating that the participation is purely voluntary. For children, consents must be obtained from their parents or legal guardians. The subject must indicate his/ her acceptance of participation by signing or thumb printing on this form.

Identification Number:

Assalamualaikum/Adab. We work at the Cholera Hospital in Mohakhali and we are presently conducting a study examining the role of nurses in the hospital setting and factors affecting nurses' behavior. We will use this and other research presently being conducted to guide the development of a national nursing planning and management strategy, with the aim of strengthening the role of nurses and ultimately improving the quality of patient care in Bangladesh. We would like to spend about an hour with you to learn more about your experiences and views. If you agree to participate in the study we will ask you a number of questions today. We may also need to return to ask additional questions sometime in the future. During the interview, you may refuse to answer questions or terminate the session at any time. We should also let you know that you will not be paid. Your participation is completely voluntary.

While we will be taking notes during our talk, we want to assure you that all of your answers will be kept strictly confidential. The information that we record will be kept in a secure location and only scientists will have access to this data.

Do you have any questions for us?

Are you willing to engage in this exercise?

Does not agree to be interviewed (Thank the individual for her time)

Agrees to be interviewed

Signature of the literate respondent:

Date:

For illiterate respondents:

The information in the consent form was read out loud in the presence of the witness and the respondent clearly understood the contents of the consent form.

Signature of a witness:

Date:

Are you available to talk now? Thank you

To be completed by the interviewer

Signature of the interviewer:

Date:

Budget Justifications

Please provide one page statement justifying the budgeted amount for each major item. Justify use of man power, major equipment, and laboratory services.

Manpower

The Principal Investigator will be working at no cost to the Centre. The consultant, Mridu Thanki will be paid directly by the British Council/DFID for her 60 day contribution to the study.

Lauren Blum will be required as anthropologist in advising on the development of tools for the study for 10 % of her time.

Mohammad Ullah will act as advisor-cum- investigator in the nursing services-related aspects of the study.

Statistician will be required for analysis of data and will be aided by the Data Management Assistant.

Translator will be required to inform the non Bangla speaking researchers of the interview and FGD findings

Field Research Officers and Assistants will be required for 4 and 3 months respectively for data collection

Mr Patwary will provide secretarial support.

Supplies and Equipment

A computer and printer will be required by the research team for the development of tools, literature preparation, report writing and data entry and analysis.

Audio equipment is required for FGDs and interviews.

Travel to the project areas by investigators and field staff will be required.

Other Support

NIL

Check List

1. Face Sheet Included
2. Approval of the Division Director on Face Sheet
3. Certification and Signature of PI on Face Sheet, #9 and #10
4. Table on Contents
5. Project Summary
6. Literature Cited
7. Biography of Investigators
8. Ethical Assurance
9. Consent Forms
10. Detailed Budget

To :

Date:

From :

Subject :

Interviews with key informants

Please look at the attached graph that indicates the time nurses spend on direct nursing care.

1. Why do you think this is the situation?

2. Do you think it is the role of the nurse to carry out direct patient care in a Bangladesh hospital?

3. If yes, why?

4. If not, who else should be involved?

5. Who do you think is covering these tasks at present?

6. Why do you think the nurse is carrying out patient care for the 10% of her time indicated?

7. Why do you think she is not for the remaining 90%

The interview will then continue to explore the comments raised by informants
NB all interviews of key informants will be the key investigators of the study. These people will have read and understood the issues raised by previous reports and will therefore be able to probe further, using evidence or suggestions brought forward in these studies. All interviewers understand the importance of listening and probing without introducing any bias by asking leading questions or introducing issues that have not been raised first by the interviewee.