

Principal Investigator DR. QUAMRUN NAHAR Trainee Investigator (if any) _____
Application No. 95-032 Supporting Agency (if Non-ICDDR,B) UNIVERSITY OF WESTERN AUSTRALIA
Title of Study ANTENATAL CARE SERVICES IN DHAKA, BANGLADESH Project status:
(☒) New Study
() Continuation with change
() No change (do not fill out rest of form)

Circle the appropriate answer to each of the following (If Not Applicable write NA).

Source of Population:

- (a) Ill subjects Yes ☐ No ☐
(b) Non-ill subjects Yes ☐ No ☐
(c) Minors or persons under guardianship Yes ☐ No ☐

Does the study involve:

- (a) Physical risks to the subjects Yes ☐ No ☐
(b) Social Risks Yes ☐ No ☐
(c) Psychological risks to subjects Yes ☐ No ☐
(d) Discomfort to subjects Yes ☐ No ☐
(e) Invasion of privacy Yes ☐ No ☐
(f) Disclosure of information damaging to subject or others Yes ☐ No ☐

Does the study involve:

- (a) Use of records, (hospital, medical, death, birth or other) Yes ☐ No ☐
(b) Use of fetal tissue or abortus Yes ☐ No ☐
(c) Use of organs or body fluids Yes ☐ No ☐

Are subjects clearly informed about:

- (a) Nature and purposes of study Yes ☐ No ☐
(b) Procedures to be followed including alternatives used Yes ☐ No ☐
(c) Physical risks Yes ☐ No ☐
(d) Sensitive questions Yes ☐ No ☐
(e) Benefits to be derived Yes ☐ No ☐
(f) Right to refuse to participate or to withdraw from study Yes ☐ No ☐
(g) Confidential handling of data Yes ☐ No ☐
(h) Compensation &/or treatment where there are risks or privacy is involved in any particular procedure Yes No NA

5. Will signed consent form be required:

- (a) From subjects Yes ☐ No ☐
(b) From parent or guardian (if subjects are minors) Yes ☐ No ☐

6. Will precautions be taken to protect anonymity of subjects Yes ☐ No ☐

7. Check documents being submitted herewith to Committee:

- ☒ NA Umbrella proposal - Initially submit an overview (all other requirements will be submitted with individual studies).
☒ Protocol (Required)
☒ Abstract Summary (Required)
☒ Statement given or read to subjects on nature of study, risks, types of questions to be asked, and right to refuse to participate or withdraw (Required)
☒ Informed consent form for subjects
☒ Informed consent form for parent or guardian
☒ Procedure for maintaining confidentiality
☒ Questionnaire or interview schedule *

* If the final instrument is not completed prior to review, the following information should be included in the abstract summary:

1. A description of the areas to be covered in the questionnaire or interview which could be considered either sensitive or which would constitute an invasion of privacy.
2. Examples of the type of specific questions to be asked in the sensitive areas.
3. An indication as to when the questionnaire will be presented to the Cttee. for review.

Agree to obtain approval of the Ethical Review Committee for any changes involving the rights and welfare of subjects before making such change.

Quamrun Nahar
Principal Investigator

DECEMBER 12, 1995

A-031945

Trainee

**CHECK-LIST FOR SUBMISSION OF PROPOSALS
TO THE RESEARCH REVIEW COMMITTEE (RRC)**
[Please tick (✓) the appropriate box]

1. Has the proposal been reviewed, discussed and cleared at the Division level ?

Yes ☐

No ☒

If the answer is 'NO', please clarify the reasons: The proposal has been reviewed by the senior project staff.

2. Has the proposal been peer-reviewed externally ?

Yes ☐

No ☒

If the answer is 'NO', please explain the reasons: The proposal has been reviewed by the University of Western Australia.

3. Does the proposal address gender issues ?

Yes ☐

No ☐

If the answer is 'NO', Please give the reasons.

NOT APPLICABLE

4. Has a funding source been identified ?

Yes ☒

No ☐

If the answer is 'YES', please indicate the name of the donor: _____

RESEARCH AID

Research allowance from the University of Western Australia

Contd... /

5. Whether the proposal is a collaborative one ?

Yes ☐

No ☒

If the answer is 'YES', the type of collaboration, name and address of the institution and name of the collaborating investigator be indicated:

6. Has the budget been cleared by Finance Division ?

Yes ☐

No ☐

If the answer is 'NO', reasons thereof be indicated: NOT APPLICABLE

7. Does the study involve any procedure employing hazardous materials, or equipments ?

Yes ☐

No ☒

If the answer is 'YES', fill the necessary form.

31.12.95
Date

Quatkar
Signature of the
Principal Investigator

Principal investigator : Dr. Quamrun Nahar
Research Investigator
Urban MCH-FP Extension Project

Other investigator : Dr. Shams El Arifeen
MCH-FP Programme Specialist
Urban MCH-FP Extension Project

Title of the project : Antenatal care services in Dhaka,
Bangladesh

Starting date : February 1, 1996

Date of completion : April 30, 1996

Total budget requested : Australian \$2,000/-

Funding source : University of Western Australia.

Head of programme : Syed Shamim Ahsan
Head and Senior Advisor
Health and Population Extension Division

30/12/95



1.0 TITLE

Antenatal care services in Dhaka, Bangladesh

2.0 INTRODUCTION

The term 'antenatal care' (ANC) refers to health services provided to women during pregnancy (1). In general, these services fall into two categories: Western-style ANC which originated in Europe and North America and is now almost universal in developed countries, and traditional ANC provided by traditional healers which has been available for centuries all over the world.

The literature on ANC demonstrates that research in the area has mostly focused on Western-style ANC while investigation of traditional forms of ANC is almost nonexistent. Further, although some studies have documented that a western model of care, together with improvement in environmental, social, and economic conditions have been effective in improving maternal health status in developed countries (2), the benefits of this model of care when applied in developing countries are not so clear.

Reviewing the effectiveness of ANC has revealed that the studies conducted in this area have inadequacies in five major areas:

First, these studies mainly focused on relating the outcomes of pregnancy to the utilization of ANC services and provided little information about the overall nature, content, organization and process of delivery of this care (3).

Second, these studies were mostly epidemiological in nature and therefore fails to examine the very basic question of the degree to which a western model of care is appropriate in the context of developing countries. Moreover, such research has not address the social, cultural and economic contexts of developing countries which are very different from those of developed countries and affect utilization as well as effectiveness of this model of care.

Third, criticisms of the studies themselves also reveal that there are methodological difficulties relating to research design, the measurement of the outcomes, the definitions used and the lack of adequate sample size to obtain statistical power (3).

Fourth, traditional forms of ANC are mostly excluded from the effectiveness studies. The actual nature and process of delivery of traditional forms of ANC also remain undocumented.

Fifth, the evaluation studies have been undertaken from a health care provider perspective and they fail to incorporate the user's perspective.



General criticisms of investigating the effectiveness of ANC also apply to ANC studies in Bangladesh. As far as the researcher's knowledge, only two studies in Bangladesh have documented the effectiveness of ANC and both focused on Western-style care only (4,5). Both studies failed to identify any relationship between this model of care and pregnancy outcomes. The first study was retrospective in nature and, in addition to the limitations of a retrospective study, the small sample size of the study made the results difficult to interpret (4). Although the second study attempted to overcome some of the methodological problems related to first study's design, the objective of the study was not to examine the quality of services provided or the process of delivery of these services (5).

Some other studies of maternal health in Bangladesh have documented the type as well as the utilization of ANC services as a part of information collected on maternal health (5,6,7,8). One of these studies was conducted in a representative sample of rural areas and identified that 85 percent of women received some form of ANC during their pregnancies (6). Another rural study also documented similar findings (7).

However, studies conducted in urban areas, of which there is a lack of documentation of ANC services in general, only focused on slum women (5,8). One of these studies was conducted in an urban slum of Dhaka city and demonstrated that 68 percent of women utilized some form of ANC during their pregnancies (8). Although this study explored some in-depth information on maternal morbidity, information on ANC was very limited. The other study was conducted in a representative sample of slums in five selected thana of Dhaka city (5). The study documented that 55 percent of pregnant women received Western-style of ANC during their pregnancies. Despite some information on the utilization of ANC services, this study mainly focused on maternal morbidity. Again, there is no information about the overall nature, content and the process of delivery of these services. Although the later study focused on user's perspective on the utilization of delivery facilities, it did not include user's perspectives on the utilization of ANC services.

Therefore, limitations of the previous studies to document a detailed picture of ANC services in Bangladesh reflects the need for comprehensive documentation of these services. The changing demography as a result of rapid urbanization indicates that it is imperative to obtain a more comprehensive picture of ANC services in urban areas of Bangladesh. Further, lack of a government health service delivery structure in urban areas as it is present in rural areas makes the situation worse in urban areas. Although, there is a network comprising of government, non-government and the private sector providing health services in urban areas, under-coverage and duplication of services have been reported due to lack of adequate coordination among service providers.

Thus, to address the gaps in the current knowledge on ANC services and to provide a detailed picture of ANC services, a descriptive study has been designed to describe the types and patterns of ANC services available in urban areas of Dhaka. This will be obtained by interviewing a group of pregnant women as well as observing directly the services provided as ANC. The study will also describe utilization of these services and will identify factors such as age, parity, education, occupation and household income which may affect utilization. The perceptions and experiences of women in utilizing ANC services will also be explored by the study.

3.0 AIMS

3.1 General aim

To describe the types, patterns and utilization of ANC services in urban areas of Dhaka, Bangladesh.

3.2 Specific aims

1. To examine the types of ANC services provided by various categories of service providers;
2. To identify factors associated with the utilization of ANC services;
3. To examine women's perceptions and experiences on ANC; and
4. To examine the perception of health care providers about clients' use of ANC services and their experiences of providing these services.

4.0 POTENTIAL SIGNIFICANCE

The present study aims to develop an inventory of the range, location and nature of ANC services in the study area. The summary of the study results will be disseminated among organizations involved in ANC activities to assist the development of a more co-ordinated approach to the provision of ANC in urban Dhaka. This inventory will also assist in providing important baseline data, previously unavailable, about traditional forms of ANC.

The examination of the process of delivery of Western-style ANC will provide an understanding about the quality of ANC services currently provided. These will then be compared with the Government's set standards in relation to ANC services so as to identify any existing gaps. Recommendations regarding any identified gaps will then be made. This comparison will also give organizations the opportunity to reflect on the standards and range of their services.

Analyses of clients' reported experiences about ANC services and the health care provider's perceptions of the women's use of ANC services will be presented to health care providers to give them an opportunity to review and reflect upon their clinical practices. Recommendations regarding clinical practice will also be made.

In focusing upon clients' perceptions about ANC different views about ANC will be explored. This will give an opportunity to understand the client's issues relating to the utilization of ANC. This data will give ANC providers and government and non-government organizations an opportunity to incorporate client's views in further development and implementation of ANC services in Dhaka.

5.0 ETHICAL CONSIDERATIONS

The researcher will be respectful of study informants by informing them about the indented research process, acquiring consent, maintaining confidentiality, and ensuring safeguards are in place to monitor and minimize harm to them.

Participation in the study will be on a voluntary basis and informed verbal consent will be obtained from all informants. A brief overview of the research objectives and the process of data collection will be read out in Bangla for their consideration. A brief information sheet will be presented to ANC providers describing the research objectives, process of data collection and implications of the study. Special permission will be obtained to use tape recorders in in-depth interviews.

It will be explained to all informants that they are free to leave the study or refuse to take part in the study at any time. Women clients will be assured that refusal to participate or leaving the study will not affect their access to the existing health care services. In case of ANC providers, every effort will be made to inform them about all aspects of the study to diminish any sense of threat that they may feel about the study.

Privacy of the informants will be ensured by using a coding system only known to the researcher. Confidentiality of data will be maintained by storing them in a suitable locked store. Confidentiality of taped data will be ensured by storing them in a locked place and by erasing them at the conclusion of the study. The thesis and other reports based on the study will not use the names of actual persons or places.

Every endeavor will be made to minimize any potential harm to the participants. The researcher is a qualified medical doctor and has extensive experience in conducting field work. She has also undertaken training in particular research methods to be utilized in the research process and considers herself as competent to

undertake this research.

The potential for any emotional distress as a result of in-depth interviews will be closely monitored and a careful sensitive approach by the researcher will minimize this risk. Although there is a potential for a conflict between the role of the researcher and the clinician, this will be minimized by the fact that the researcher has not been involved in clinical practice for several years. If any of the pregnant women demonstrate signs and symptoms of complications associated with pregnancy, the researcher will refer them to the nearest health center.

It is hoped that the study informants will be benefited from the study. The study informants will be assured that the study findings will be disseminated to the proper health authorities to improve the situation for others who would be pregnant in future.

6.0 METHODOLOGY

6.1 Study design

Since little is known about the range, location and nature of ANC services in urban areas of Dhaka, the proposed study will be descriptive in nature, and will apply both quantitative and qualitative techniques.

6.2 Study site

The study will be conducted in Dhaka, the largest metropolitan and the capital of Bangladesh. Dhaka has 10 administrative zones each with a population of about 400,000 to 500,000. The study will be conducted in Zone 3 which is known to be similar to other zones in Dhaka city. The Urban MCH-FP Extension Project of International Center for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) has set up a health and demographic surveillance system known as Urban Panel Survey (UPS) in a representative sample of Zone 3 which will be used to assist in the selection of the study samples. Moreover, the development of a cost-effective urban MCH-FP service delivery is underway by this project in this zone and therefore the results of the study would be useful for the project.

6.3 Study population

There will be two categories of study population:

1. women of child bearing age; and
2. Western-style and traditional-style ANC providers.

6.4 Study sample

1. Pregnant women: the women who are pregnant and in their third trimester (>6 months) during February to April 1996 will be identified by the UPS. From the Crude Birth Rate (CBR) in the study area, it has been estimated that at least 200 women in their third trimester of pregnancy will be available (9).

2. ANC providers: they will be identified by snowball sampling. Each pregnant woman will be asked to name two ANC providers. It is expected that some ANC providers will be named by more than one informant. However, it can be assumed that a list of at least 20-30 ANC providers will be available.

6.5 Data collection

Both quantitative and qualitative information will be collected in the study. These are presented below in tabular form:

SAMPLE	DATA COLLECTION METHODS	INFORMATION TO BE COLLECTED
Pregnant women (200)	Structured interview (200)	age, marital status, education, occupation, and parity of the women; education and occupation of their husband; house and land ownership and monthly income of households; current pregnancy, and utilization of ANC during pregnancy; and perception and experiences in utilizing ANC services.
	Semi-structured in-depth interview (15)	perception and experiences of utilization of ANC services.
ANC providers (20)	Structured interview (20)	age, qualification, training obtained, name and type of organization; views about women's use of ANC services and experiences in providing these services..
	Direct observation (20)	quality of ANC services and client-provider interaction
	Semi-structured in-depth interview (10)	views about women's use of ANC services and experiences in providing these services.

6.5.1 Data collection methods

Before the data collection process begins, the researcher will make informal visits to the communities involved and talk informally with the community people.

6.5.1.1 Structured and semi-structured interviews with pregnant women:

The pregnant women identified by the UPS will be interviewed about the socio-demographic characteristics. Information on the utilization of ANC during their current pregnancies, and perceptions and experiences of utilization of these services will be collected using an interviewer-administered questionnaire. Semi-structured, in-depth interviews will be conducted with a sub-sample (15) of these women to clarify issues raised in structured interviews.

6.5.1.2 Structured and semi-structured interviews with ANC providers and direct observation of the services provided:

The ANC providers identified by the pregnant women in the study will be interviewed to obtain their descriptive profiles (type of organization, type of services, qualification, training) by using an interviewer-administered questionnaire. The provider's perceptions of clients' use of ANC services and the experiences of providing these services will be obtained using open-ended ~~questions in the structured questionnaire.~~ Further, the client-provider interaction will be observed with these providers. To enrich the information obtained by structured interviews, a limited number (10) of semi-structured interviews will be conducted with a variety of ANC providers.

6.6 Data analysis

6.6.1 Quantitative data analysis

After the completion of data collection, the data will be edited for consistency and completeness and then be coded. The data obtained through open-ended questions will be categorized according to themes and then be coded. The data will be entered and analyzed using EPIINFO software. Frequency distributions and descriptive statistics (mean, standard deviation, confidence interval) of variables such as age, parity, education, occupation and utilization of ANC will be undertaken. Contingency tables will be done to show the distribution of the observations according to the variables. Associations found in the contingency tables will be tested for statistical significance using Chi-square test.



6.6.2 Qualitative data analysis

Unlike quantitative analysis, qualitative analysis will commence at the beginning of the study and will be on-going. The analysis will be based on testing of ideas developed prior to and during the process of data collection. When field activities commence, rigorous qualitative data analysis suggested by Bernard will be used (10). This will involve first by reading through field notes and interviews. After each interview the data will be coded, categorized and then be abstracted to identify propositions to be tested in further interviews. As the interviews progress, the patterns within the data as well as exceptions to the patterns will be more obvious. Evidence supporting the patterns and exceptions to the patterns will be identified in the data. Negative cases will be selected to assist in clarifying the limits and meaning of the prevailing patterns in the data. Triangulation of data will also be used to clarify these patterns.

6.7 Dissemination of results

A thesis incorporating study results will be submitted to the University of Western Australia for Obtaining a Master in Medical Science degree. A further paper summarizing the study results will be disseminated in report form to the government and non-government organizations in Bangladesh who are involved in ANC activities. The study findings will be presented in seminars and conferences. The study results will also be sent to different journals for publications.

7.0 Research timetable

The study will be conducted from January 1, 1996 to April 30, 1996 in the following stages:

1. Study approval and study preparation during which research proposal will be submitted to Research Review Committee (RRC) and Ethical Review Committee (ERC) of ICDDR,B for approval, questionnaires and interview guide-lines will be finalized, and necessary equipment will be purchased.

January 1 - January 31 '96 (4 weeks)

2. Recruitment and training of research assistant, and pre-testing of questionnaires and compilation of secondary data

February 1 - February 15 '96 (2 weeks)

3. Data collection

February 16 - April 30 '96 (10 weeks)



8.0 Budget

Personnel:

Research assistant @ A\$ 200 per month x 3 = A\$ 600

Consumable:

Stationery	A\$ 150
Photocopying	A\$ 200
Tape-cassettes	A\$ 100
Camera films	A\$ 50

Transport:

Daily transport expenses for the research assistant and the researcher A\$ 500

Communication with supervisors in Australia A\$ 150

Excess baggage allowance for taking research papers in Australia A\$ 150

Dissemination of results A\$ 100

Total A\$ 2000

8.1 Budget justification

The research project will be funded from a research allowance of A\$ 2000 provided out of fees paid to the University of Western Australia by AusAID and living expense and air fares to and from Bangladesh will also be borne by AusAID.

1. Personnel: the research assistant will work full time eight hours a day for five days a week, for a total of 12 weeks (2 weeks for training and pre-testing of questionnaire and 10 weeks for data collection). She will be paid @ A\$ 200 per month for three months. The subtotal will be A\$ 600.

2. Consumable:

a. Stationery: this includes pens, papers, notebooks, clip boards etc and will cost about A\$ 150.

b. Photocopying of forms: the structured questionnaire on socio-demographic information and utilization of ANC is expected to be eight pages long. About 200 copies will be required. The observation check-list for the process of delivery of ANC will be

five pages long. About 20 copies of check-list will be needed. Structures questionnaire for ANC providers will be five pages long and 20 copies will be needed. At 10 cents a page, the total cost will be around A\$ 200.

c. Tape-cassettes: these will be needed to record in-depth interviews. Fifty cassettes will cost around A\$ 100.

d. Camera film: the cost of films and developing the prints will be about A\$ 50.

3. Transport: daily transport on rickshaw and scooter will be A\$ 4.00 for both the researcher and the research assistant. For about 65 working days during data collection will cost A\$ 500.

4. Communication with supervisors: telecommunications with supervisors in Australia will cost around A\$ 150, @ A\$ 3.00 per minute.

5. About 15 kilograms of research results are expected to be brought back to the University for analysis, with @ A\$ 10 per kg will cost A\$ 150.

6. For binding of the thesis and dissemination of results among relevant authorities will cost around A\$ 100.

9.0. REFERENCES

1. Benson RC. Current obstetric and gynecological diagnosis and treatment. California: Lange Medical Publications, 1992.

2. Huque A, Zahidul A, Kobinsky A. Levels, trends and consequences of maternal morality and morbidity. Background paper prepared for the workshop on guide-lines for Safe Motherhood Programming. The World Bank/Mother Care, Washington DC, 1991.

3. Fiscella K. Does perinatal care improve birth outcomes? A critical review. Obstet Gynaecol 1995; 85(3): 468-79.

4. Vanneste A. Chakraborty J. Can antenatal care in the Matlab maternity care predict perinatal and maternal mortality? (an unpublished research report). ICDDR,B: Community Health Division, 1994.

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8. Uzma A. Post partum health of mothers in urban slums of Dhaka, Bangladesh (an unpublished MMedSc thesis). Western Australia: University of Western Australia, 1995.

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10. Bernard HR. Research methods in anthropology: qualitative and quantitative approach. 2nd edition. International Educational and Professional Publisher, London: Sage publications, 1995.



PAPERS AND PUBLICATIONS:

Andrew Hall and Quamrun Nahar. "Albendazole as a treatment for infections with *Giardia duodenalis* in children in Bangladesh". Transactions of the Royal Society of Tropical Medicine and Hygiene (1993); 87, 84-86.

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Baqul AH, Paljor N, Nahar Q, Silimperi DR. "Infant and child feeding practices in Dhaka slums". May 1993 (ICDDR,B working paper no 34) (Urban FP/MCH working paper no.6). ISBN: 984-551-008-6.

Salway S, Jamil K, Nahar Q, (editors). "Issue for family planning in the urban slums of Dhaka, Bangladesh: opinions and perceptions of field level workers". May 1993.(ICDDR,B working paper no. 37) (Urban FP/MCH working paper no.9) ISBN: 984-551-012-4.

Fionczak N, Amin S, Nahar Q, "Health Facility Survey in Selected Dhaka Slums". October 1993. (ICDDR,B working paper no.40)(Urban FP/MCH working paper no. 12) ISBN: 984-551-015-7.

Salway S, Jamil K, Nahar Q, Nurani S. Perceptions of Pregnancy Risk and Contraceptive Use in the Postpartum Period among Women in Dhaka Slums. November 1993. (ICDDR,B working paper no. 43)(Urban FP/MCH working paper no. 15). ISBN: 984-551-017-43

ANTENATAL CARE SERVICES IN DHAKA, BANGLADESH

INTERNATIONAL CENTRE FOR DIARRHOEAL DISEASE RESEARCH, BANGLADESH
AND THE UNIVERSITY OF WESTERN AUSTRALIA

INTERVIEW SCHEDULE FOR PREGNANT WOMEN

February to April 1996

Stratum # Cluster# Structure# Household#

Name of head of household

Woman's name

Date of Interview

Eligibility: woman who is more than 6 months pregnant

Consent: yes 1
 no 2 (stop here)

Q no	Questions	Answers	Skip to
SECTION A: INFORMATION ON SOCIO-DEMOGRAPHIC CHARACTERISTICS			
1	How old are you?	<u> </u> <u> </u> <u> </u> years	
2	What is your religion?	Muslim = 1 Hindu = 2 Others = 7 (specify) <u> </u>	
3	How long have you been married?	<u> </u> <u> </u> <u> </u> years	
4	Are you living with your husband at present?	yes = 1----- no = 2-----	Q 6
5	Why not?	<u> </u>	
6	Have you ever given birth?	yes = 1 no = 2-----	Q 8
7	Could you please tell me the number of pregnancies you have and the details of the children you have given birth to, including children born dead or who have died?	# pregnancy <u> </u> <u> </u> <u> </u> # total birth <u> </u> <u> </u> <u> </u> # children living <u> </u> <u> </u> <u> </u> # children born dead <u> </u> <u> </u> <u> </u> # children died <u> </u> <u> </u> <u> </u>	
8	What is the highest number of schooling you have achieved?	<u> </u> <u> </u> <u> </u> years	

Q no	Questions	Answers	Skip to
9	Are you doing any work for money at present?	yes = 1 no = 2 -----	Q 11
10	Describe what work you are doing.	_____	
11	What is the highest number of schooling your husband has achieved?	_ _ years	
12	Is your husband doing any work for money at present?	yes = 1 no = 2 -----	Q 14
13	Describe what work he is doing.	_____	
14	Is he the only person earning for the household?	yes = 1 ----- no = 2	Q 16
15	Who is (are) other member(s) in the household who earn(s) money ?	_____ _____	
16	What is your household's total monthly income?	_ _ _ taka	

SECTION B: CURRENT PREGNANCY AND UTILIZATION OF ANTENATAL CARE

19	Could you tell me when was your last menstrual period?	yes = 1 no = 2 -----	Q 21
20	When was it?	_ _ -----	
21	How long have you been pregnant?	_ _ months	
22	Have you visited any health centre/hospital/doctor/health professional/healer because you are pregnant?	yes = 1 no = 2 -----	Q 41
23	Why did you visit there?	_____ _____ _____	
24	At what month of pregnancy did you go for your first visit?	_ _ months	



Q no	Questions	Answers	Skip to
25	Where did you go?	Hospital = 1 Health Centre = 2 Private doctor = 3 Nurse / Paramedic/ Pharmacist = 4 Traditional healer = 5 (specify) _____ TBA = 6 Others (specify) = 7 _____	
26	Why did you chose to go there?	_____ _____ _____	
27	Who made decision to go there?	Wómen herself 1 0 Husband 1 0 Mother-in-law 1 0 Father-in-law 1 0 Mother 1 0 Father 1 0 Others (specify) 1 0 _____	
28	How did you go there?	By walk = 1 ----- By rickshaw = 2 ----- By scooter = 3 ----- By car = 4 ----- Others (specify) = 7 ----- _____	Q 30 Q 30 Q 30
29	How much was the fare?	! _ ! _ ! taka	
30	How long did it take to receive services?	! _ ! _ ! minutes	
31	Did you consider it long?	yes = 1 no = 2	
32	What services did you receive from the first visit?	a. measuring blood pressure 1 0 b. taking weight and height 1 0 c. blood test 1 0 d. urine test 1 0 e. TT vaccination 1 0 f. advice on diet 1 0 g. advice on danger signs 1 0 h. any medication 1 0 i. advice on contraception 1 0 j. advice on breast feeding 1 0 k. abdominal examination 1 0 l. vaginal examination 1 0 m. advice on safe delivery 1 0 n. advice on postpartum care 1 0 o. others (specify) 1 0 _____	



Q no	Questions	Answers		Skip to
33	Did you spend any money to receive these services at your first visit (excluding transport fare)?	yes = 1 no = 2 -----		Q 35
34	How much did you spend?	_ _ _ taka		
35	Since your first visit did you visit the same provider again for your pregnancy?	yes = 1 no = 2 -----		Q 38
36	How many times did you visit this provider?	_ _		
37	What type of service(s) did you receive from this (these) visit(s)?	40a. Type of services a. Measuring B.P 1 0 b. Taking weight and height 1 0 c. Blood test 1 0 d. Urine test 1 0 e. TT vaccination 1 0 f. Advice on diet 1 0 g. Advice on danger signs 1 0 h. Advice on breast feeding 1 0 i. Advice on contraception 1 0 j. Advice on safe delivery 1 0 k. Medication 1 0 l. Abdominal exam 1 0 m. vaginal exam. 1 0 n. Others 1 0 (specify) _____	40b. When? (months) 1 2 3 4 5 6 7 8 9	
38	Did you visit any other provider for your pregnancy?	yes = 1 no = 2 -----		Q 41
39	a. If yes, where did you go?	Hospital 1 0 Health Centre 1 0 Private doctor 1 0 Nurse / Paramedic/ Pharmacist 1 0 Traditional healer 1 0 (specify) _____ TBA 1 0 Others (specify) 1 0 _____		
	b. If yes, when did you go?	_____		
	c. How many times?	_ _		



Q no	Questions	Answers	Skip to
	d. Why did you change your provider?	_____	
40	What type of service(s) did you receive from this (these) visit(s)?	a. Measuring B.P 1 0 b. Taking weight and height 1 0 c. Blood test 1 0 d. Urine test 1 0 e. TT vaccination 1 0 f. Advice on diet 1 0 g. Advice on danger signs 1 0 h. Advice on contraception 1 0 i. Advice on breast feeding 1 0 j. Advice on delivery 1 0 k. Medication 1 0 l. Abdominal exam. 1 0 m. Vaginal exam. 1 0 n. Advice on postpartum care 1 0 o. Others (specify) 1 0 _____	
41	Have you been visited by any health worker at your home for your pregnancy?	yes = 1 no = 2 -----	Q 46
42	Where was she from?	_____	
43	When did she visit?	_____	
44	How many times?	1 _ 1 _ 1 _	
45	What services did you receive from this(these) visit (s)?	a. Measuring B.P 1 0 b. Taking weight and height 1 0 c. Blood test 1 0 d. Urine test 1 0 e. TT vaccination 1 0 f. Advice on diet 1 0 g. Advice on danger signs 1 0 h. Advice on contraception 1 0 i. Advice on breast feeding 1 0 j. Advice on delivery 1 0 k. Medication 1 0 l. Abdominal exam. 1 0 m. Vaginal exam. 1 0 n. Advice on postpartum care 1 0 o. Others (specify) 1 0 _____	
CHECK QUESTION 22; IF ANSWER IS 'NO' ASK Q 46, OTHERWISE SKIP TO Q 49			
46	Why did you not visit any provider during your pregnancy?	_____ _____ _____ _____	

Q no	Questions	Answers	Skip to
47	Did you consider visiting a provider?	yes = 1 no = 2 -----	Q 49
48	If yes, what stopped you from going there?	_____ _____ _____	
SECTION: C: PERCEPTIONS ABOUT ANTENATAL CARE			
49	Do you think a pregnant woman needs to get special medical care just for her pregnancy?	yes = 1 no = 2 -----	Q 51
50	If yes, why?	_____ _____ _____	Q 52
51	If no, why not?	_____ _____ _____	
52	Name five important health services that should be provided to pregnant women?	a. _____ b. _____ c. _____ d. _____ e. _____	
53	Name some health providers who can provide all of these services.	Hospital 1 0 Health Centre 1 0 Private doctor 1 0 Nurse/Paramedic/Pharmacist 1 0 Traditional healers 1 0 (specify) _____ TBA 1 0 Others (specify) 1 0 _____	
54	Who is the best person to provide these services?	Hospital 1 0 Health Centre 1 0 Private doctor 1 0 Nurse/Paramedic/Pharmacist 1 0 Traditional healers 1 0 (specify) _____ TBA 1 0 Others (specify) 1 0 _____	

Q no	Questions	Answers	Skip to
55	Why?		
CHECK Q 22; IF ANSWER IS 'YES', ASK Q 56, OTHERWISE STOP HERE.			
SECTION D: EXPERIENCES IN UTILIZING ANTENATAL CARE			
56	Were you satisfied with the services you obtained during your pregnancy?	Satisfied = 1 Not fully satisfied = 2 Not satisfied = 3 Do not know = 9	Q 58 Q 58 Q 59
57	What made you to feel satisfied with the services?		Q 59
58	Why are you not satisfied?		
59	Did the provider(s) spend time to listen to you?	yes = 1 no = 2	
60	Did the provider(s) counsel you about your pregnancy?	yes = 1 no = 2	
61	What did you like about your visits during pregnancy?		
62	What did you dislike about your visits during pregnancy?		
63	How could any of the services you received have been better?		

Interviewer's name _____
 Signature _____



ANTENATAL CARE SERVICES IN DHAKA, BANGLADESH
INTERNATIONAL CENTRE FOR DIARRHOEAL DISEASE RESEARCH, BANGLADESH
AND THE UNIVERSITY OF WESTERN AUSTRALIA

GUIDE-LINES FOR SEMI-STRUCTURED IN-DEPTH INTERVIEWS
WITH PREGNANT WOMEN

February to April 1996

1. Experiences in utilizing antenatal care services:

- waiting time to receive services
- clients-health care provider interaction
- satisfaction about the services
- good aspects of the services received
- difficulties faced in receiving the services

2. Perceptions about antenatal care services:

- utility of these services
- providers, contents and timing of these services
- difficulties in utilising these services



ANTENATAL CARE SERVICES IN DHAKA, BANGLADESH

INTERNATIONAL CENTRE FOR DIARRHOEAL DISEASE RESEARCH, BANGLADESH
AND THE UNIVERSITY OF WESTERN AUSTRALIA

INTERVIEW SCHEDULE FOR ANTENATAL CARE PROVIDERS

February to April 1996

Date of interview |_|_|_|_|

ID no |_|_|_|_|

Consent, yes = 1
 no = 2 (stop here)

Q No	Questions	Answers	Skip to
1	What is your name?	_____	
2	How old are you?	_ _ _ years	
3	What is the name of the organization do you work for?	_____ _____ _____	
4	What type of organization is it?	Government = 1 Non-government = 2 Private = 3 Personal = 4 Others (specify) = 7 _____	
5	How long have you been working in this job (work)?	_ _ _ years	
6	What types of service do you provide in this program/organization?	MCH services Pregnancy care 1 0 Delivery care 1 0 Post-natal care 1 0 Immunization 1 0 Care of women's illness 1 0 Care of child illness 1 0 Family Planning 1 0 Other (specify) 1 0 _____	
	Have you received any training for the job (work) you do?	yes = 1 no = 2 -----	Q 10

Q No	Questions	Answers	Skip to .
8	Where did you get your training	_____	
9	How long was it?	! _ ! _ ! days	
10	In your opinion should a pregnant woman avail of antenatal care?	yes = 1 no = 2	Q 13
11	If yes, for what reason should a pregnant woman seek antenatal care?	As a part of routine check-up 1 0 To identify risk factors 1 0 To ensure safe delivery 1 0 To ensure appropriate referral 1 0 Counselling for future contraception 1 0 Other (specify) 1 0 _____ 1 0 Do not know 1 0	
12	At what interval should she come for antenatal check-up?	At monthly interval 1 0 Initially at monthly interval and then more frequently in the last trimester 1 0 There is no schedule; when required 1 0 Other (specify) 1 0 _____ 1 0 Do not know 1 0	



Q No	Questions	Answers	Skip to
13	What do you do when a pregnant woman comes to you/ your program/ organization?	a. Check whether she has TT immunization 1 0 b. Talk about special needs of a pregnant woman 1 0 c. Talk about post-partum contraception 1 0 d. Tell about safe delivery 1 0 e. Ask about previous delivery history 1 0 f. Ask about previous medical history 1 0 g. Ask about foetal movement 1 0 h. Ask about abdominal pain 1 0 i. Ask about vaginal bleeding 1 0 j. Check for leg oedema 1 0 k. Check for clinical anaemia 1 0 l. Check height of uterus 1 0 m. Check blood pressure 1 0 n. Test/advise urine test 1 0 o. Check foetal presentation 1 0 p. Check foetal heart sound 1 0 q. Measure weight 1 0 r. Measure height 1 0 s. Others (specify) 1 0	
14	Do you/your organization charge any money for antenatal care services?	yes = 1 no = 2 -----	Q 16
15	If yes, how much?	_ _ _ taka	
16	How long does it take to provide antenatal care services to a woman in general?	_ _ _ minutes	
17	How many pregnant women do you/your organization see in a day (on average)?	_ _	
18	How many days per week do you/your organization provide antenatal care?	_ days	
19	Do you face any difficulty in providing health services to pregnant women?	yes = 1 no = 2 -----	Q 22



Q No	Questions	Answers	Skip to
20	What type of difficulties do you face?	_____	
21	How can you overcome these difficulties?	_____	
22	Do you think your clients are satisfied with your/ your organizations' services?	yes = 1 ----- no = 2 -----	Q 24
23	If no, why not?	_____	
24	From your experiences in providing health services to pregnant women do you feel that these services have good effect on the health of the mother and the child?	yes = 1 no = 2 -----	Q 26
25	If yes, why?	_____	Q 27
26	If no, why not?	_____	
27	Do you think your service needs improvement?	yes = 1 no = 2 -----	Q 29
28	If yes, why?	_____	Q 30
29	If no, why not?	_____	stop here
30	How can you improve your services?	_____	

Interviewer's name _____
Signature _____



ANTENATAL CARE SERVICES IN DHAKA, BANGLADESH

INTERNATIONAL CENTRE FOR DIARRHOEAL DISEASE RESEARCH, BANGLADESH
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OBSERVATION GUIDE FOR INTERACTION BETWEEN CLIENTS AND SERVICE PROVIDERS
IN PROVIDING ANTENATAL CARE SERVICES

February to April 1996

1. Name and ID of the facility _____

2. Date of observation ____/____/____

Time begin _____ Time completed _____

3. Designation of staff member observed:

Doctor	01
Nurse	02
Paramedic	03
Family Welfare Visitor	04
Medical Assistant	05
Health Assistant	06
Health Worker	07
Family Welfare Assistant	08
Pharmacist	09
TBA	10
Healer (specify)	11
Others (specify)	77

4. At what time did the client arrive? And what time was she seen?

a. Arrival time ____/____/____ hours
b. Time seen ____/____/____ hours

5. Did the provider give the client a respectful and/or friendly greeting?

yes 1
no 2

6. What was the main purpose of the visit as initially indicated by the client?

Antenatal care 1
Sickness of the child 2
Others(specify) 7



7. Did the provider enquire whether the woman was pregnant?

yes	1
no	2

8. What did the provider do?

Obtained detailed obstetric history	1	0
Obtained detailed current pregnancy history	1	0
Obtained detailed delivery history	1	0
Asked about haemorrhage	1	0
Asked about foetal movement	1	0
Measured blood pressure	1	0
Checked for oedema	1	0
Measuring uterine height	1	0
Measuring haemoglobin level	1	0
Advised measurement of haemoglobin level	1	0
Measured albumin level	1	0
Advised measurement of albumin level	1	0
Asked about IT immunization	1	0
Advised about diet	1	0
Advised about safe delivery care	1	0
Advised about post-partum contraception	1	0
Advised about breast feeding	1	0
Advised about danger signs of pregnancy	1	0
Advised for next check-up	1	0
Refer to another facility	1	0
Others (specify)	1	0

9. Did the provider tell the client when to come for next visit?

yes	1
no	2

10. Overall, did the provider respond adequately to the woman's questions?

yes	1
no	2

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Observer's name and signature _____



ANTENATAL CARE SERVICES IN DHAKA, BANGLADESH
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GUIDE-LINES FOR SEMI-STRUCTURED IN-DEPTH INTERVIEWS
WITH ANTENATAL CARE PROVIDERS

February to April 1996

1. Womens' use of antenatal care services:

- expectation of women in utilizing these services
- satisfaction of women in utilizing these services
- reasons for using a particular facility
- reasons for not using antenatal care services

2. Experiences in providing antenatal care services:

- difficulties faced
- ways to overcome difficulties
- satisfaction with the services provided
- ways to improve services



ANTENATAL CARE SERVICES IN DHAKA, BANGLADESH

FORM OF DISCLOSURE AND INFORMED CONSENT FOR PREGNANT WOMEN (To be translated into Bangla)

I am a student at the Community Health Research and Training Unit of the University of Western Australia and interested in maternal health.. I am a medical doctor of this country and have been working with the International Centre for Diarrhoeal Disease Research, Bangladesh (Cholera Hospital).

As a part of my study I have designed a research project titled 'Antenatal care services in Dhaka, Bangladesh' to describe the types, patterns and utilization of health care services available to pregnant women. This study will help me to formulate recommendations to improve health care services during pregnancy.

I would like to spend about an hour talking to you about your pregnancy, and your opinions and experiences of utilizing health services available to you during your pregnancy. There is no obligation for you to participate and there is no distress for you if you take part in the study. If you do not want to take part in the study please tell me, I would not disturb you again.

If you agree to participate and have no time today, I can come back when it is convenient to you. You can stop taking part in the study at any time if you want. Your information will remain confidential. Your name and address will not be given to anyone else. If you have any problem or question regarding this project do not hesitate to contact me in the following address.

I would be grateful if you can spend some time answering my questions.

Thanks.

Dr. Quamrun Nahar
International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B)
and
Community Health Research and Training Unit (CHRTU)
University of Western Australia



ANTENATAL CARE SERVICES IN DHAKA, BANGLADESH

FORM OF DISCLOSURE AND INFORMED CONSENT
FOR ANTENATAL CARE PROVIDERS
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I would like to spend about 10 minutes talking to you about your work. I will also spend another 15 minutes asking about your opinions about a woman's use of services during their pregnancies and your experiences of providing these services. There is no obligation for you to participate and there is no distress if you take part in the study. If you do not want to take part in the study please tell me, I would not disturb you again.

If you agree to participate and have no time today, I can come back when it is convenient to you. You can stop taking part in the study at any time if you want. Your information will remain confidential. Your name and address will not be given to anyone else. If you have any problem or question regarding this project do not hesitate to contact me in the following address.

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