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CE SHEET)

ETHICAL REVIEW COMMITTEE, ICDDR,B.

Date Feb. 2, 1992
March 4, 1992

ncipal Investigator Dr. Kirk Dearden

Trainee Investigator (if any) NA

lication No. 92-006

Supporting Agency (if Non-ICDDR,B)

le of Study Empowering Women for Health:
essing the Impact of Training & Service
ivery in Dhaka Slums

Project status:
( ) New Study
( ) Continuation with change
( ) No change (do not fill out rest of form)

cle 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 NA
(d) Sensitive questions — Yes No NA
(e) Benefits to be derived — Yes No NA
(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 NA
6. Will precautions be taken to protect anonymity of subjects — (Yes) No
7. Check documents being submitted herewith to Committee:

___ 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.

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

Kirk Dearden — Principal Investigator
A-032067
NA — Trainee

Empowering Women for Health:
Assessing the Impact of Training and Service Delivery in Dhaka Slums

Principal Investigators:	Kirk Dearden, Ford Foundation Counterpart (to be identified), Jahanara Khatun
Consultants:	R. Bradley Sack, Stan Becker, Abdullah Baqui, Sushila Zeitlyn, Kanta Alvi
Start Date:	As soon as possible
Date of Completion:	15 months after start date
Total Budget Requested:	$18,905
Funding Source:	ICDDR,B
Head of Program:	Dr. Bradley Sack, Associate Director, Community Health Division

Abstract Summary

This protocol examines the relationship between empowerment and health for four groups of slum-dwelling women in Dhaka, Bangladesh: women who participate in the Women's Empowerment Pilot Project (WEPP), women who participate as volunteers in the Urban Volunteer Program (both current and former volunteers), and controls. The major objective of this study is to examine the relationship between program participation (i.e., as a volunteer or in WEPP), empowerment, and health. Changes in women's function within the family as well as changes in their social boundaries, self-perceptions, and world views will be assessed through focus group discussions and questionnaires. Questionnaires will also be used to measure modifications in such proximate determinants of health as domestic hygiene, access to health services, family planning, and nutrition. Qualitative and quantitative techniques will be used to evaluate the extent to which volunteers and WEPP mothers are truly empowered (based on an index). Further, the degree to which empowerement (regardless of program affiliation) leads to better health will be examined.

9. Aims of Project

a) General Aim

In recent years, women have increasingly become the focus of development efforts. While the expected outcomes of such broad endeavors are multitudinous, many seek to "empower" women through education, training, and access to credit while simultaneously improving health. Nevertheless, there have been relatively few attempts to determine if women who participate in such activities enjoy better health. Furthermore, the relationship between program involvement, empowerment, and health is tenuous at best, in part, because an adequate definition of empowerment has not yet been devised.

The overall objective of this research is to evaluate how participation in two development efforts, the Urban Volunteer Program (UVP) and the Women's Extension Pilot Project (WEPP) of the International Center for Diarrheal Disease Research, Bangladesh, impacts upon health. A second objective is to better understand how some of the social changes which are often labeled as empowering mediate the relationship between development efforts and health.

b) Specific Aims

The specific aims of this study are:

1) To determine whether participation in the Urban Volunteer Program or the Women's Empowerment Pilot Project improves the health of participants and their offspring. Specifically, current nutritional status will be compared for four groups of women: those who participate in the Women's Empowerment Pilot Project, women who worked as volunteers in earlier

stages of the Urban Volunteer Program[1] (but who were subsequently deactivated), active volunteers, and controls. In addition, morbidity rates for offspring will be compared. Histories of diarrhea, measles, scabies, and malnutrition will be taken for children under five years of age.

2) To better understand how hygiene, nutrition, and the use of health care services, including family planning, contribute to the health of volunteers, WEPP mothers, controls, and their offspring.

3) To develop a quantifiable index of empowerment.

4) To ascertain the degree to which participation in the Women's Empowerment Pilot Project or the Urban Volunteer Program precipitates social changes normally linked with "empowerment".

5) To evaluate the extent to which empowered women (regardless of affiliation with the Urban Health Extension Project) and their offspring enjoy improved health.

c) Significance

There have been relatively few efforts to examine the health of poor urban women and children. This research should provide meaningful insights into the social determinants of disease and health in slum communities. As such, it is considered particularly useful for planners, policymakers, and program administrators who work in Third World cities. This research should also help in deciphering the relationship between participation in

[1] The Urban Volunteer Program refers to that phase of the project which began in 1986 and concluded in 1991. The new name for the project, the Urban Health Extension Project, is used interchangeably with the Urban Volunteer Program in this protocol.

development programs, empowerment, and health.

10. Ethical Implications

This study in no way endangers the health or well-being of subjects. Only interviews, focus groups, and existing data collection systems will be used to gather information from respondents. All data will be treated anonymously.

11. Research Plan

a) Background

The purpose of this study is to answer two fundamental questions. First, does work as a volunteer or participation in WEPP precipitate changes in the way women examine and overcome barriers in their lives? Second, do such changes lead to improvements in health? To answer these questions, one must better understand the context of disease in an urban setting and appreciate why it is that women are especially susceptible to high rates of morbidity and mortality. Further, at least a basic understanding of empowerment must be reached. The following sections detail the health of the urban poor, describe the lot of women, and provide basic information on the Urban Volunteer Program and the Women's Empowerment Pilot Project. In a concluding section, a definition and index of empowerment are given.

i) Health and the Urban Poor

Many urban poor suffer from the diseases of underdevelopment and rapid industrialization simultaneously. High rates of growth in urban areas often exacerbate poor living conditions. It is estimated that by the year 2000, nearly half of Third World residents will live in cities (Harpham,

Lusty, & Vaughan, 1990). In fact, 45 of the 60 cities expected to exceed 5 million inhabitants by the turn of the century will be located in the developing world (Harpham et al., 1990). Historically, Bangladesh's population has resided in rural regions. However, recent migration and high fertility have contributed to phenomenal growth in urban areas. In fact, by 1990 almost 23 million Bangladeshis lived in cities. This number is projected to exceed 55 million by the year 2010 (Center for Urban Studies, 1988, 1990).

Many urban poor live in poverty (Clemens & Stanton, 1987a, 1987b; Harpham et al., 1990; Islam & Zeitlyn, 1987; Tekce & Shorter, 1984). Harpham et al. (1990) estimate that thirty percent or more of the inhabitants of most large Asian, African, and Latin American cities inhabit squatter settlements and slums. About half of all metropolitan Bangladeshis live in such communities and an equal percentage subsist below the poverty line (Center for Urban Studies, 1988, 1990). For these individuals, the afflictions of underdevelopment are all too real. The high rates of diarrheal disease, acute respiratory infections, night blindness, scabies, measles, and tetanus which mark the lives of children living in remote regions of Bangladesh are also highly evident among those living in urban slums (Urban Volunteer Program, 1991). Malnutrition, one of the most important determinants of morbidity and an underlying cause of much of the mortality in the developing world, is manifest in a majority of slum children. According to estimates from the Urban Volunteer Program (1991), sixty to seventy percent of children living in the squatter settlements of Dhaka are moderately to severely malnourished.

Young and old alike suffer the consequences of unsafe drinking water (Clemens & Stanton, 1987a, 1987b). Only about 21% of Bangladesh's urban population have access to adequate and safe water supplies and most slum dwellers (approximately 90%) lack private latrine facilities and regular

services for garbage disposal (Center for Urban Studies, 1988, 1990).

In addition to suffering the diseases of poverty and underdevelopment, urban residents are faced with the additional burden of industrialization. Overcrowding, pollution, traffic, noise, crime, high cost of living, and poor housing are common to many cities of the Third World; those residing in slum areas may be especially susceptible to such difficulties (Harpham et al., 1990). According to a recent report of the Population Crisis Committee (1991), Dhaka residents, when compared to most inhabitants of cities of the developing world, live under particularly austere conditions. While murder rates in Bangladesh's capital are much lower than in other metropolises, those living in Dhaka are much more likely than most to spend a majority of their income on food (PCC estimates that 63% of Dhaka residents' earnings are spent on foodstuffs), less likely to enjoy adequate access to electricity and clean water, less likely to attend secondary school, and more likely to experience high rates of infant mortality. In fact, Dhaka's infant mortality rate is exceeded only by Recife, Brazil. Of the 100 cities assigned an urban standard of living score, Dhaka ranked 96th (Population Crisis Committee, 1991).

ii) Women's Lot

Not all urban residents share the burden of disease equally. Women are especially susceptible to the double affliction of underdevelopment and industrialization (Harpham et al., 1990). They are seldom afforded the legal protection their husbands, brothers, and sons enjoy and only infrequently have access to the productive resources necessary for healthy living (Dyson & Moore, 1983; Lloyd & Brandon, 1991; Pronk, 1991).

In addition to assuming the primary role for child rearing, women in urban areas are often heavily involved in low-wage labor; when formal employment

is not available, women frequently resort to jobs in the informal sector: selling on the streets or from their homes, taking in children, bartering, and performing piecemeal work (Guyer, 1981; Harrison, 1990; Islam & Zeitlyn, 1987).

Women are also less likely than men to receive the benefits of formal schooling (Caldwell, 1981, 1986; Cleland & van Ginneken, 1988; Lindenbaum, Chakraborty, & Elias, 1985). In many societies of the developing world, boys, especially firstborn males, are considerably more likely to obtain the educational training necessary to obtain good jobs at good wages (Cleland & van Ginneken, 1988; Lindenbaum et al., 1985). Women, on the other hand, are rarely encouraged to pursue activities beyond the confines of their own home.

Considerable evidence suggests that in Bangladesh males consume more protein and calories than females (Blanchet, 1987; Chen, Huq, & D'Souza, 1981). This may be due, in part, to widespread feeding practices which ensure that women eat only after husbands and children have eaten (Harrison, 1990). During such physiologically critical periods as pregnancy, lactation, and menstruation, cultural taboos restrict women from receiving those foods which are nutritionally of greatest importance, including meat and other sources of protein (Blanchet, 1987; Harrison, 1990). Combined with repeat pregnancies in close succession, abstinence from essential nutrients may quickly lead to maternal depletion.

Perhaps the best indicator of women's inferior status in Bangladesh is life expectancy. While in developed countries most women outlive men by 8 to 10 years (Population Reference Bureau, 1987), Bangladeshi men, on average, live slightly longer than women (52.1 years for men versus 51.5 years for women) (United Nations, 1990). D'Souza and Chen (1980) indicate that though females in Bangladesh experience a lower mortality rate than

males during the neo-natal period (as is the case for developed nations), during childhood and adolescence, females' death rates exceed those of males, in some instances by as much as 50%. Differential parental care, feeding patterns, food distribution and illness management are thought to be largely responsible for this excess in female mortality (D'Souza & Chen, 1980).

iii) Program Description

The Urban Volunteers Program began in the early 1980's, primarily as a demonstration study aimed at assessing the feasibility of using largely illiterate slum women to deliver basic primary health care as well as referral for appropriate services. With the help of major funding from USAID, UVP expanded its activities in 1986. By 1990, there were more than 1200 volunteers working in 12 thanas (precincts) of Dhaka. Shortly thereafter, the service delivery component of UVP was reduced. Approximately 650 volunteers were discontinued, leaving UVP with a core of about 550 women working voluntarily in 5 thanas. UVP volunteers receive two weeks of training in diarrhea disease prevention and treatment, immunizations, nutrition, and family planning. They are also provided periodic refresher courses. Volunteers are expected to give at least two hours of service monthly (largely in health education, referral, and the distribution of ORS packets) to the approximately 30 families assigned to them. The effectiveness of this model has been described elsewhere (Baqui, Lerman, Siddiqi, Hadi, 1991).

The Women's Empowerment Pilot Project of the Urban Volunteer Program was begun in June of 1990 with funding from the Ford Foundation. As its name implies, WEPP was designed to test the feasibility of empowerment projects in Dhaka slums. Since June of 1990, WEPP has provided training in literacy and numeracy, health, financial management, and legal advocacy

(women's rights in marriage, divorce procedures, inheritance rights, etc.) to approximately 550 adult and 180 adolescent women. In addition to the two months of training adults received, adolescent women were given an additional month of instruction on reproductive health. WEPP participants are given the opportunity to take part in savings and loan programs and several groups of WEPP women have also been involved in skills development through collaboration with IDEAS, international, an Australian NGO. (Because only a handful of women received skills training, they will be excluded from all analyses; further, adolescents who participated in WEPP will not be included in this investigation). The initial phase of WEPP training concluded in September of 1991.

It should be noted that while the Women's Empowerment Pilot Project was designed specifically to "empower" women, the Urban Volunteer Program was not. However, the Urban Volunteer Program does seek to mobilize women. Consequently, its ability to empower and improve health will be evaluated.

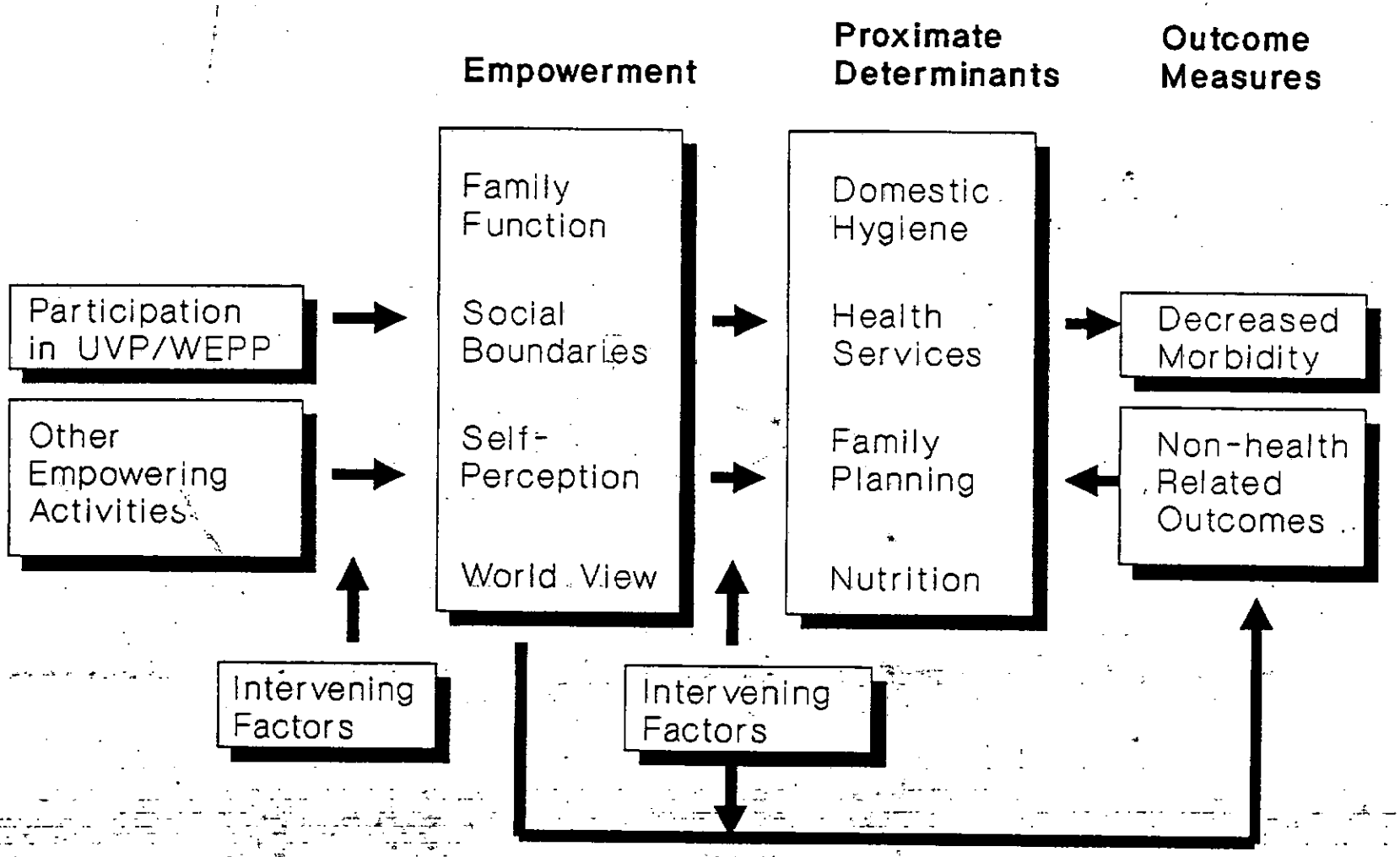
iv) Defining Empowerment and delineating the Relationship between Program Participation, Empowerment, and Health

What is empowerment and how might it impact women's lives? For the purposes of this investigation, empowerment is a process of profound, cognitive, social and behavioral change which enables women to define, challenge, and overcome barriers in their lives. Figure 1 suggests four broad areas that may be affected by empowerment: family function, social boundaries, perception of self, and world views.

Family Function

Women's position and function within the family may change as a result of participation in empowering activities, broader social changes, or both. For example, work as a volunteer or consciousness raising as part of WEPP training could introduce changes in the way women think about their roles within the family (i.e., women may have less time to assume childrearing

Figure 1 Conceptual Framework



responsibilities or they may feel less inclined to do so). As a consequence of such thinking, women's workload could shift towards husbands, mothers-in-law, or offspring.

Empowerment activities might also improve women's status within the household and the community (anecdotal evidence suggests this is the case). In theory, improved status could promote women's ability to control or manipulate decision-making. How might shifts in decision-making (away from husbands and mothers-in-law and towards wives) impact maternal and child health? In Bangladesh, where many women feel obliged to consult husbands before taking sick children to the clinic, the ability to make independent decisions could dramatically improve access to routine and emergency care.

Focus group discussions, questionnaires, and case studies will be used to gauge decision-making within the household, parents' interactions with offspring, and aspirations for children (as an indicator of roles parents consider appropriate for sons and daughters).

Social Boundaries

Widespread ascription to "purdah" confines a majority of Bangladeshi women to the boundaries of their own home. Those who venture outside rarely travel far; relationships with non-kin are circumscribed. Volunteers, on the other hand, are expected to leave their homes to interact regularly with non-kin (including superviors) and to assume increased responsibility for the health of neighbors and friends. WEPP participants regularly leave the household to attend group meetings. Theoretically, greater mobility could facilitate the adoption of new role models. It might also encourage an increased awareness of financial, legal, and health resources available in the community to slum women and children.

Increased contact with the "outside" world may also precipitate changes in

values. For instance, women who frequently travel outside of the home may be more willing to spend money on themselves or their offspring, especially daughters. The implications for health-related behavior are obvious: changes in how money and time are spent could lead to a fundamental shift in resources towards women and children, especially daughters.

Through focus groups and interviews, data will be collected on interactions with non-kin (specifically, market vendors and health care practitioners), leisure activities, and personal purchases.

Self-Perception

Empowerment should alter women's feelings of esteem, competence, and control. Volunteers who successfully fulfill their obligations outside (and within) the household should feel better able to assume increasing responsibility. WEPP mothers who faithfully attend group meetings and contribute regularly to group savings plans, may also experience greater control, competence, and esteem.

Such changes may modify how women think about disease, the environment, and the provision of health care. The literature on maternal education suggests that level of schooling may impact women's confidence in handling officials, ability and willingness to travel outside the home in search of services, timing of health-seeking behavior, quality of care, and the propensity to adhere to advice with greater persistence (Cleland, 1988). However, it is not clear that such changes characterize the lives of women who participate in development projects.

During interviews and focus group discussions women will be asked to describe themselves and their husbands. Focus groups will also be used to explore how women might react if husbands take additional wives. Results from focus groups and questionnaires should also shed light on decision-

making regarding distribution of food and income.

World View

Women's world view is likely to affect their behavior. For those who ascribe to fatalism, planning may seem a futile exercise. However, for those women who believe that life events are subject to control, the future may hold considerable promise.

Role models play an important in shaping individuals' perceptions of the world. Are empowered women more likely to adopt models who reflect upon and challenge existing norms? Are "disempowered" women more likely to pattern their lives after women who assume more traditional roles? What constitutes "power"? Local definitions of empowerment, control over life events (as measured by promptness of health seeking behavior), and aspirations for children, will be explored using focus groups and interviews.

v) Developing an Index of Empowerment

The following questions will be used to develop an index of empowerment:

Family Function

1. May I ask you what your last "major" expense was? [Group according to intended beneficiary: father?, mother?, son?, daughter?, all?]
2. I would now like to know about your last major purchase. Could you tell me what that was?
3. Who took the decision to make this purchase (father, husband, mother, son, mother-in-law, both father and mother)?
4. Choice of family planning method (husband or wife?).

Social Boundaries

1. What do you feel is an appropriate age for your daughter (or a daughter) to marry?
2. Why?

3. When is it appropriate age for your son (or a son) to marry?

4. Why?

5. Could I ask you to list belongings which are personally yours (if any)? (e.g., mementos, hand mirrors, lipstick, books, ornaments).

[Limit list to four or five items; exclude clothing; also exclude items such as cookware which are shared by the family].

6. Have you ever been to the cinema?

7. How recently did you go to the cinema?

8. When you experience a financial crisis, do you turn to:

(1) husband's kin
(2) own kin
(3) husband's friends
(4) own friends
(5) other, specify

Self Perception

1. If you were to describe yourself in one word, what would that be (mother, wife, volunteer, woman, worker--what type)?

2. What other word might you use to describe yourself?

3. Could you please list the foods and drinks which you consumed yesterday?

4. Could you list the foods and drinks your husband consumed yesterday?

World View

1. I would now like you to think about the person in this community you look up to most. Could you describe him or her in a few words (i.e., what is it about this individual that earns your respect)? [Kin members are legitimate answers. If respondent cannot think of anyone, simply write "none"].

2. Is this individual a (0) man? or a (1) woman?

3. I would now like you to think about the most "powerful" individual in this community. Could you describe him or her in a few words (i.e., what is it about this individual that that makes him or her powerful)? [Kin members are legitimate answers. If respondent cannot think of any "powerful" individuals, simply write "none"].

4. Is this individual a (0) man? or a (1) woman?

5. Questions on treatment/timing of health-seeking (for children < 5)--from "Access/Use of Health Services" grid:

What was done first about this illness? (treatment vs. non-treatment)

Did (name of individual) go to any body else for treatment? (treatment vs. non-treatment)

How soon after (name) became sick did he/she seek for help?

Answers to open-ended questions will need to be grouped and coded. While coding such questions could be quite time-consuming, the very nature of open-ended questions encourages a range of responses.

vi) The Role of Intervening Factors

A number of intervening factors could modify the relationship between program participation and empowerment. Such variables might include community structure, prevailing norms, limited resources (including money and time), age, family size, birth order (first born women are usually better treated than females of higher birth order), social class, and, for volunteers, length of service (WEPP mothers received training only recently). Other factors, may mediate the relationship between empowerment and the proximate determinants of health. Such variables could include those already mentioned plus such pre-existing conditions as chronic malnutrition and overall levels of environmental contamination. Finally, limited time between program participation, empowerment, and health, may be a real deterrent to change. While not all potentially confounding variables can be controlled, a number of factors (including family size of respondent, respondent's birth order and age, length of service for volunteers, and social class) will be controlled in data analysis.

b) Hypotheses

The following hypotheses will guide research on empowerment and health:

1) Women who work as volunteers or who participate in the Women's Empowerment Pilot Project are more likely than peers to have high scores on the empowerment index.

2) Volunteers, WEPP participants, and offspring are more likely than peers to enjoy better health. Specifically, mothers are less likely

to be moderately or severely malnourished (as measured by mid-upper arm circumference). Children will be less likely to suffer from diarrhea, measles, scabies, and moderate or severe malnutrition (as measured by mid-upper arm circumference). WEPP mothers and volunteers will also be more likely to engage in good hygiene practices (homes free from feces and rubbish; hands and clothes clean; low fecal coliforms counts) and will be more apt to seek full immunization against tetanus toxoid, DPT, polio, measles, and TB.

3) Empowered women (as defined by high scores on the empowerment index) will be more likely to enjoy better health and engage in those behaviors which promote health, including improved domestic hygiene, access to appropriate health services, adequate nutrition, and the practice of family planning.

It is important to point out that while various aspects of the relationship between project participation and health can be examined, this research will not be able to establish a causal connection between program involvement, empowerment, and health. However, associations between each of these components can be evaluated.

c) Research Plan

1) Data

This research will draw upon several sources of data to test the hypotheses specified above. Data to be used include the Research Cluster Surveillance System (RCSS), the Urban Surveillance System (USS), new questionnaires and focus group discussions developed specifically for this study and case studies.

The Research Cluster Surveillance System collected information on demographic events, child morbidity, immunization status, anthropometry,

social class, and health knowledge of mothers in Dhaka between 1985 and 1991. This surveillance system contains 70 clusters of about 38 households each (total number of households, approximately 2,660) covering slum and non-slum areas of Dhaka. Because the RCSS included areas outside of Dhaka's slums, it cannot be considered representative of slum populations. Further, slums which were included in the RCSS were arbitrarily defined, based on volunteers' service delivery areas.

The Urban Surveillance System (USS) began in 1990 and is an on-going system of data collection in five thanas of Dhaka city: Mohammadpur, Lalbagh, Demra, Kotwali, and Sutrapur. Unlike the RCSS, the USS was a probabilistic sample designed specifically to represent Dhaka slums. Presently, the USS is expanding from 4500 households to approximately 8000 households. A baseline survey, administered to the 4500 households in 1990 and 1991 has been modified and will be administered to all 8000 households in October of 1991. In addition to the baseline evaluation, households are tracked for demographic events (births, deaths, migration, and nuptiality) and are queried about nutrition, family planning, immunization status, diarrhea morbidity, and cause of death. This information is updated in 90-day cycles.

Three new sources of data, questionnaires, focus group discussions, and case studies will also be used to analyze the relationship between women's empowerment and health. Through questionnaires, interviewers will collect quantitative information on empowerment, maternal and child health, access to health services, family planning, and nutrition. Information about domestic hygiene practices will be collected through questionnaires and spot observations. Further, hand pathogen testing of mothers for fecal coliforms will be conducted. Hand pathogen testing provides objective information on maternal sanitation, though some variation in coliforms count is expected, depending upon the time of the day the sample is taken.

Field testing of questionnaires (which appear in Appendix C) will be

carried out among a sample of respondents (approximately 10 for each group; total n=40). In designing this research, every effort has been made to utilize existing data. In fact, many of the questions and forms which the USS presently uses will also be employed in this study. For example, the registration form for this investigation is patterned after that used in the USS. Immunization tables, anthropometric measures, morbidity indicators, and information on domestic hygiene and social class for the USS and for the study on empowerment differ only with respect to the quantity of variables collected. Because not all information gathered as part of the Urban Surveillance System is needed for this study, only information on a limited number of variables will be collected. Likewise, because the USS does not solicit sufficient information on access to and use of health care resources, family planning, and the distribution of food and other household resources, additional information will need to be gathered. Collection of all quantitative data is expected to occur along with the July 1992 wave of data collection for the USS.

Focus group discussions (Appendix A) will be conducted first. While the number of focus groups to be held as part of this research is now set at 24 (see Appendix B), the actual number required may be somewhat larger since investigators would like to feel comfortable with both the content of discussions and the process whereby they are conducted.

Focus group discussions form an integral part of data gathering, precisely because they can provide information that is not obtainable through the more formal questionnaire. Because focus groups create a forum for more active participation and input, they can furnish important insights into why women and men behave they way they do with respect to health. Specifically, they can help to evaluate how changes in family function, social boundaries, perceptions, and world views impact health.

Because we feel that men can play a part in facilitating empowerment, we have opted to include their input in focus group discussions. Eight of

the 24 focus group discussions which will take place during the course of this research will include husbands of current and former volunteers, WEPP participants, and controls. Husbands' input should provide meaningful insights into the process of empowerment for volunteers, WEPP mothers, and controls.

The major purpose of focus group discussions is to collect information on those social changes which precede the proximate determinants of maternal and child health. It is expected that each of the 24 focus groups will be limited to 5-7 participants each.

While much of this study focusses on social and health outcomes, case studies will be used to provide important insights into the process of empowerment. For this study, twenty women who take part in interviews and focus group discussions will also be asked to respond to open-ended questionnaires. Ten women will come from the ranks of volunteers (both current and deactivated) and the Women's Empowerment Pilot Project. Because these women can easily be identified, open-ended interviews with them will occur shortly after the protocol begins. An additional ten women will be selected as case studies once interviews (with accompanying measures of empowerment) are complete. Five of the women selected will have scored relatively low on the quantifiable index of empowerment (i.e., in the lowest quartile) while five will be selected from among those with scores in the highest quartile.

Areas to be discussed during open-ended interviews include:

1) Women's family background. What impact might birth order, number of male and female sibs, and socioeconomic position have on empowerment. Are "empowered" women those who come from homes who already enjoy considerable prestige?

2) Power and status. According to respondents, what is power? What is

status? Which individuals in the community are considered to be particularly powerful or important? How did they acquire their position in the community? Is it possible to transfer power from one individual or group to another? How? How might women become "disempowered"?

3) Barriers to empowerment. What prevents women from becoming empowered? (Do reasons listed differ by group)? How might environmental constraints, social sanctions, and other macro forces at work in the community limit the "benefits" of empowerment? what a woman is able to do after becoming empowered?

4) Life changes. Has the individual's life changed in the past several years? How? Why? When? For better or for worse? What brought about those changes? Could the individual describe in step-by-step fashion how changes in their life progressed? How did friends, family, and neighbors react?

The first ten open-ended interviews can be used to help refine the definition of empowerment used in this protocol. Because case studies by their very nature accomodate a wider range of responses, women can be queried about their own definitions of empowerment and why various aspects of their lives may be considered empowering or disempowering.

In addition to providing important insights into the process of empowerment, the ten case studies on "empowered"/"less empowered" women at the conclusion of this study can be used to help understand why a woman believes or behaves the way she does. For example, if women mention during the course of focus group discussions and questionnaires that they feel husbands should make decisions about family planning, open-ended interviews can be used to explore why they feel this is so.

a) Mechanisms for Gathering Data

Because the USS is only a sample of all residents of slums in five thanas, many volunteers and WEPP mothers are not regularly included in data collection. In fact, only about 100 of the 450 volunteers and about 110 of the 550 WEPP mothers take part in the USS (Dr. Abdullah Baqui, personal communication, September, 1991). The additional data required of volunteers and WEPP participants presently included in the USS will be gathered along with all other information collected as part of the Urban Surveillance System. However, for those volunteers and WEPP mothers who are not part of the USS sample, a separate data collection mechanism will need to be initiated. Because most current volunteers and WEPP participants are in regular contact with the UVP's Community Health Coordinators and Community Organizers, respectively, data collection should be relatively easy. Gathering information for active volunteers from previous phases of UVP could be more problematic. However, because many of the volunteers were only recently deactivated (some as recently as June of 1990), locating volunteers should present few challenges. Further, many of the field staff from UVP were involved in earlier stages of the volunteer program and can play an important part in identifying volunteers' whereabouts. Controls will be randomly selected from among the USS sample. All controls are expected to come from those thanas where volunteers are not currently working (i.e., non-intervention areas).

2) Method

To assess the health impact of participation in the Urban Volunteer Program and the Women's Empowerment Pilot Project, four groups of mothers will be compared: current volunteers, volunteers who worked in an earlier phase of the program, were disbanded, but continue to provide services on their own, women who are affiliated with WEPP, and a group of controls. Women who participated in both programs will not be included in this investigation because their numbers are few.

a) Criteria for Inclusion

To be included in this study as a case, women must be currently active in UVP or in WEPP at the time of data collection (projected for July of 1992). Further, they must have participated in one of these programs for at least six months. Finally, information will be collected only for those volunteers and WEPP participants who have children less than five years of age. WEPP participants who did not complete the initial two months of training will be excluded. However, there will be an attempt to collect basic sociodemographic information on women who aborted their training to assess comparability to active members. Reasons for terminating involvement in WEPP will also be explored. Controls will come from non-intervention areas (i.e., those slums not targeted by volunteers) and must have children less than five years old.

There are several reasons for including former volunteers in this analysis. First, the number of current volunteers who meet all the criteria for inclusion in this study is rather small (approximately 150). By including former volunteers in the analysis, findings for former and current volunteers can be compared. (All statistical analyses will distinguish between the two groups). Second, many of the volunteers who worked in earlier stages of the Urban Volunteer Program have a long history of involvement with UVP. By extending analysis to volunteers from previous stages of UVP, the amount of time between "exposure" (in this case, to work as a volunteer) and outcome (potential empowerment and improved health) is effectively increased. Finally, incorporating disbanded volunteers in both quantitative and qualitative analyses may provide important insights into the sustainability of the volunteer model. What sociodemographic features characterize volunteers who continue to work in spite of little or no programmatic support? While it is not the purpose of this study to determine disbanded volunteers' efficacy in delivering health care services, this investigation can shed light on the on-going activities of voluntary community health workers.

Controls will come from the current Urban Surveillance System of UVP. Thus, all controls will originate from one of the five thanas currently under USS surveillance (Mohammedpur, Lalbagh, Sutrapur, Kotwali, and Demra). Controls, like cases, will be included only if they have children less than five years of age. However, controls will not be matched to cases for socioeconomic status, age, or education. While matching on each of these factors could provide important insights into how cases and controls similar in background differ (if at all), matching also limits the scope of reference. We feel that findings will be considerably more generalizeable if controls are not matched to cases.

b) Sample Size

Determination of sample size is based on a limited number of outcome variables. For mothers, these include percent moderately to severely malnourished (mid-upper arm circumference of 257 mm or less), percent fully immunized against tetanus toxoid, and contraceptive prevalence rate (CPR). For children, percent fully immunized against DPT, point prevalence of diarrhea (three or more loose stools within 24 hours of being interviewed), and percent moderately or severely malnourished (mid-upper arm circumference of less than 110 mm) will be used to establish sample size for hypothesis testing. All sample size calculations are one tailed and are based on an alpha level of .05 and a beta level of .80.

General formula:

$$\frac{(2 \times \bar{p}\,\bar{q})}{d^2} \times (Z_\alpha + Z_\beta)^2$$

For mothers:

Dr. Mizan Siddiqi (personal communication, September, 1991) estimates that 40% of slum mothers are moderately to severely malnourished. We expect that only 25% of volunteers and WEPP participants will be moderately to severely malnourished.

$$MUAC \quad \frac{(2 \times .325 \times .675)}{.15^2} \times 6.18$$

N = 121 in each group

Unpublished UVP data (Urban Volunteer Program, 1991) indicate that 55% of slum mothers have received the required two shots of tetanus toxoid. We anticipate that 70% of volunteers and WEPP participants will have received both tetanus toxoid shots.

$$TT \quad \frac{(2 \times .625 \times .375)}{.15^2} \times 6.18$$

N = 129 in each group

Dr. Charles Lerman (personal communication, September 1991) estimates that the contraceptive prevalence rate in the slums in 1985 was 25% (in 1989 31% of slum mothers used some form of modern contraception and in 1991 37% were using modern birth control). As a result of empowerment activities, we expect 50% of mothers to be practicing contraception.

$$CPR \quad \frac{(2 \times .375 \times .625)}{.25^2} \times 6.18$$

N = 47 in each group

For children:

Unpublished UVP data (Urban Volunteer Program, 1991) indicate that 40% of slum children less than 5 years of age have received all three DPT shots. We anticipate that 56% of offspring of volunteers and WEPP mothers will be fully immunized against DPT.

$$DPT \quad \frac{(2 \times .48 \times .52)}{.16^2} \times 6.18$$

N = 121 in each group

Clemens and Stanton (1987a, 1987b) indicate that in the rainy season (when data for the present investigation will be collected), 20% of children less than five years old have experienced diarrhea within the past 24 hours. We expect that only 7% of children of volunteers and WEPP participants will have experienced diarrhea in the past 24 hours during the rainy season.

$$PP\ of\ Diarrhea \quad \frac{(2 \times .135 \times .865)}{.13^2} \times 6.18$$

N = 86 in each group

Unpublished UVP data (Urban Volunteer Program, 1991) indicate that 58% of slum children less than 5 years of age are moderately to severely malnourished. We expect that as a result of volunteer activities or participation in WEPP, 40% of mothers' offspring will suffer from moderate or severe malnutrition.

$$MUAC \quad \frac{(2 \times .49 \times .51)}{.18^2} \times 6.18$$

N = 96 in each group

Given that a sample size of at least 129 is needed for each group, and assuming that 15% of those contacted will not participate, the overall sample size is 596 (4 groups x 149 individuals per group).

c) Developing a Baseline for UVP and WEPP

Studies using prospectively collected data allow epidemiologists and other researchers the opportunity to examine change over time in a cohort of individuals. Because individuals are identified on the basis of exposure to a risk factor, and not according to the development of disease, epidemiologists' ability to ascribe disease to one or more risk factors is enhanced considerably. Further, baseline data can be compared to follow-up to assess changes in incidence over time.

Baseline data for this study, in conjunction with follow-up at several points in time, could provide important information on how maternal and child health, as well as women's position in society have changed as a result of empowering activities. However, because UVP's first systematic surveillance system was begun in the mid-1980's, five years after some volunteers began working in the slums, a true baseline is not attainable. Nevertheless, there are other ways of designing this study. One option is to forego a baseline and conduct a cross-sectional investigation. But because health and its social determinants can only be compared at one point in time, variations across time cannot be determined. Further, rates of change cannot be assessed. Another approach--and one that we propose to employ for this research--is to develop a baseline with existing data. While it is entirely possible that the assumptions used to produce a baseline are faulty (for example, individuals who provide data for baseline may be dissimilar to those who form a part of follow-up), adjustments can be made (these modifications are described below). For this investigation, volunteers, WEPP mothers, and controls will be compared to women who provided information at baseline (i.e., those who participated in the RCSS in 1985).

The overall purpose of assuming a baseline is to evaluate how health for volunteers and WEPP participants and their children has changed beyond the change experienced by controls. Thus, if the point prevalence of diarrhea

for the offspring of volunteers and WEPP mothers was .2 during the rainy season of 1980, was the ensuing decline in point prevalence for children of cases any greater than that experienced by the offspring of controls?

Baseline for this study comes from the Research Cluster Surveillance System. As has already been mentioned, the RCSS was not fully operational until 1985, four to five years after the first volunteers began their work in the slums. UVP data indicate that approximately 38% of all current volunteers started work in the slums prior to initial data collection in 1985. However, about 61% began in 1985 or more recently. While very few volunteers actually took part in the RCSS (approximately 70 volunteers were included in data collection), health indicators for the general population are available.

Using the RCSS to establish a baseline is not without problems. First, data from the RCSS cannot be linked with the current surveillance system (the USS), since there is an overlap of only 4 clusters. Second, the use of aggregate indicators of health (rather than individual measures) can mask important differences in morbidity for different groups. For example, Caldwell (1981, 1986) and others (Cleland & van Ginneken, 1988; Lindenbaum et al., 1985) have pointed out that offspring of women with less formal schooling are more likely to suffer from poor health than progeny of those who received some educational training. Further, social class is known to be an important determinant of health (Hale, 1990). Data from UVP indicate that volunteers' educational levels are substantially higher than those of other slum women. For instance, 64% of volunteers have completed at least one year of formal schooling, but only 15% of non-volunteers have similar educational qualifications (Urban Volunteer Program, 1991).

To account for potentially differing levels of health for women from various socioeconomic backgrounds, educational level and social class will be controlled. Thus, volunteers, WEPP mothers, and controls who have

received 1 to 5 years of education will be compared to women at baseline who had similar academic training. Baseline data will come from all residents of Kotwali, Demra, Sutrapur, Lalbagh, and Mohammedpur who participated in the RCSS.

d) Statistical Tests

Thorough univariate analysis is an important first step to identifying a parsimonious multivariate model which best distinguishes between the four groups of mothers included in this investigation as well as differing levels of "empowered" women, using the empowerment index. The first objective in statistical testing is to determine if outcome measures for mothers (mid upper arm circumference, tetanus toxoid immunization status, contraceptive prevalence rate, and fecal coliforms count) and children (DPT immunization status, point prevalence of diarrhea, and mid-upper arm circumference) are different. If, in fact, outcomes for each group are dissimilar, univariate analysis can help establish which predictors best account for this difference. Because most of the data for this study are categorical, chi-squares will be used in univariate analysis. However, for variables that are continuous (e.g., fecal coliforms count and mid-upper arm circumference), t-tests will be employed.

Relative risks can be used to compare former and current volunteers, WEPP mothers, and controls as well as "empowered" and less empowered women. Relative risks contrast estimates of the cumulative effects of incidence rates over time for two groups at a time. Because relative risks (and 95% confidence intervals) can be used to contrast immunization coverage, disease rates, contraceptive use, access to safe drinking water, and other measures of health for two groups simultaneously, they are deemed especially suitable for this study. Further, because groups are compared on the same time interval, the effects of time on each of these measures can be adequately controlled.

Those variables identified as significant using chi-squares and relative risks (with confidence intervals) will be entered into logistic regression models. Three sets of multivariate analysis are anticipated for this research: 1) comparing health outcomes for groups based on program participation, 2) using empowerment as an dependent variable and group affiliation as a predictor of empowerment, and 3) comparing health outcomes for varying levels of empowered women. Because logistic regression requires a dichotomous dependent variable, groups will be compared two at a time: former volunteers to current volunteers, current volunteers to controls, WEPP mothers to controls, former volunteers to WEPP mothers, "highly empowered" women to "moderately empowered" women, and so on. Potentially confounding factors (formal education, age, parity and birth order of mother, social class, presence of NGO's, and volunteers' length of service, etc.) will be controlled.

e) Qualitative Data Analysis

Focus groups discussions and open-ended interviews will be conducted by Bangladeshi social scientists, recruited from the ranks of interviewers now active in the Urban Surveillance System (minimum educational qualification: Master's degree in a social science discipline). Sessions will be tape recorded, transcribed, and translated. Notes will also be taken during discussions. Transcriptions will be compared with notes and both will be analyzed by the principal investigator, co-investigators, and consultants for content and meaning. Case studies and quotes will be used to present results from qualitative research. Analysis of focus group discussions will begin as soon as transcripts are available and will continue on a regular basis. "Tally", or another text analysis program will be used to determine the frequencies of various terms used by women during interviews and focus group discussions. Further, the context within which these terms are embedded will be explored.

f) Limitations

This study suffers from several limitations. One of the most important--establishing an appropriate baseline--has already been discussed extensively. A second limitation concerns the appropriateness of several of the indicators of domestic hygiene. In a recent study on Guatemala using Demographic and Health Survey data, Bateman and Smith (1991) concluded that community level of sanitation was at least as important to reducing the risk of stunting in children as individual access to sanitary services. Thus, even though some Dhaka slum women engage in "appropriate" domestic hygiene, exposure to community-wide contamination may be a more important determinant of morbidity.

Limitations to Defining Empowerment

The definition of empowerment used in this study suffers from a number of limitations. First and foremost, it is highly ethnocentric. As defined here, empowerment is seen as a process of change from one set of values and behaviors to another. Greater autonomy, increased control over resources, improved mobility, changes in thinking, and equitable distribution of household resources, all seen as positive steps in the West, may, in fact, be quite disempowering for women living in Dhaka slums. While Western countries encourage the practice of family planning and birth spacing, women who use birth control in Bangladesh may be viewed with disdain, precisely because they are working against the prevailing norm that for Bengali women, prestige is acquired through childbearing. Women who bear a family of sons are even more highly revered.

Bengali women may not see changes in hygiene behavior as empowering. In a seminal article published more than three decades ago, Wellin (1955) detailed the problems facing an auxiliary health worker who, over the course of two years, tried to convince mothers in a Peruvian town to use latrines, burn garbage daily, control house flies, and boil water. After

numerous visits to all households and more intensive visits to a handful of homes, the health worker was able to convince only 11 of 200 housewives to boil water. Several of the women--considered sickly by the community--began drinking boiled water because "cooked" water is something one consumes during episodes of illness. Others boiled water because they rejected local cleanliness standards or because their departure from community norms were publicly sanctioned by a local physician who was involved in the campaign. Thus, it may be that women who adopt new beliefs and behaviors related to hygiene are not empowered, as we have hypothesized, but are marginalized socially and are responding to the reaction of neighbors by adopting norms and behaviors inconsistent with the community.

A second limitation to our definition of empowerment is that it ignores constraints within which slum women must operate. Slum women may, in fact, want to use water from tubewells for drinking and cooking. They may be anxious to use sanitary latrines. They may want to improve their health through the consumption of more protein-rich foods. Slum women might want to limit exclusive breastfeeding after six months or receive immunizations for themselves and for their children. Nevertheless, time constraints and limited financial resources may preclude women from adopting "healthier" lifestyles. Furthermore, it is not necessarily true that "disempowered" women do not want such necessities as safe drinking water, sanitary latrines, nutritious foods, and appropriate health care services, including immunizations.

It is entirely possible that empowerment can result not only from inputs and programs directed towards women from the development community, but also from initiatives which are indigenous to the community. Such efforts, including self-start women's clubs, cooperatives, and childcare and labor-sharing arrangements are ignored in this investigation. Furthermore, macro-level social forces, including changing perceptions of women's roles, will not be captured by this research.

Finally, the lag between program participation, "empowerment", and health may be quite long, in fact, perhaps much longer than the time span covered by this protocol. Caldwell (1986) hypothesizes that the impact of one potentially empowering activity, formal education, may not be evidenced for at least a generation. Nevertheless, because a number of individuals (especially volunteers) have a long history of participation in potentially empowering activities (some have worked for as much as 10 years), changes in health resulting from program involvement may be evident.

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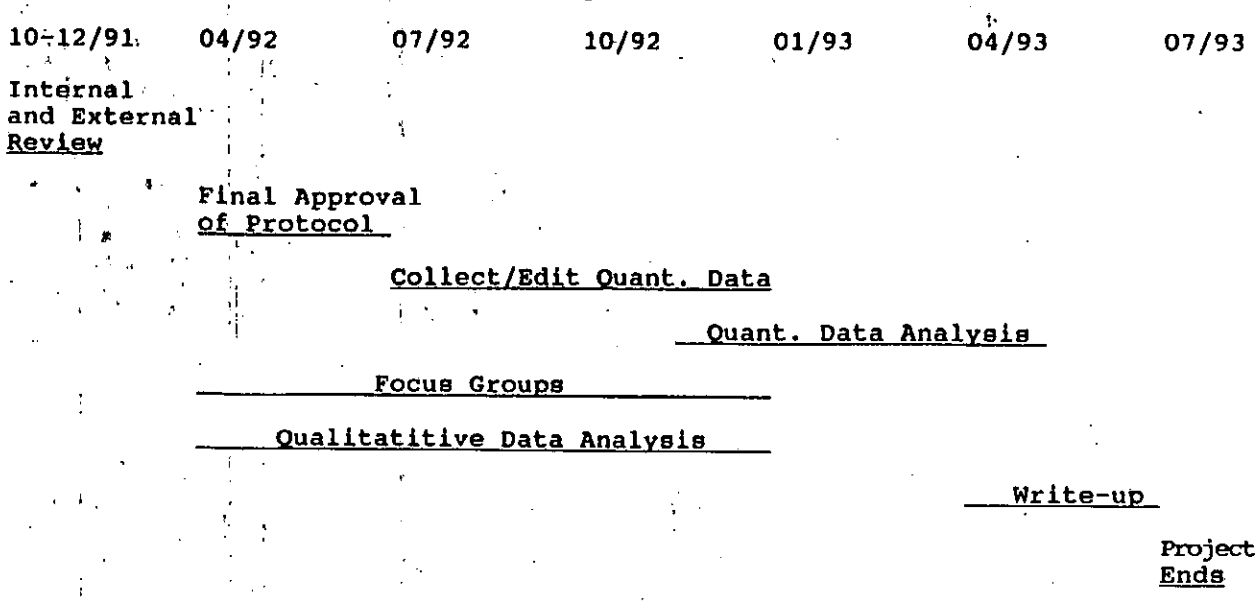
13. Flow Chart

The following diagram depicts the proposed time frame for completion of various components of the study:



14. Itemized Specific Tasks for Investigators

Investigator:	Task:
Dearden	1. Manage overall project
Dearden, Ford Foundation Counterpart, Khatun	2. Attend occasional meetings on protocol
Dearden (with assistance from co-principal investigators and consultants)	3. Refine protocol develop questionnaires and focus group outlines
Dearden, Ford Foundation Counterpart, Khatun	4. Oversee execution of data collection, management, and clean-up field test questionnaires revise questionnaires train interviewers identify cases and controls manage overall data collection work with data management to ensure efficient entry and clean-up of data
Becker	5. Consult on data analysis/overall project management
Dearden, Ford Foundation Counterpart	6. Conduct quantitative data analysis
Dearden, Ford Foundation Counterpart	7. Interpret results, based on findings and current literature review
Ford Foundation Counterpart, Khatun, Dearden	8. Oversee collection/management of qualitative data field test focus group outlines revise focus group outlines train focus group leaders identify focus group participants conduct/oversee focus group discussions oversee transcription/translation process
Ford Foundation Counterpart, Khatun, Dearden	9. Use ethnographic methods to interpret/analyze results from focus group discussions tie into literature
Dearden, Ford Foundation Counterpart, Khatun	10. Report write-up

3100 LOCAL SALARIES:

Designation	Level	Position	Person/ Month	Rate/ Month	Amount (US $)
Co-investigator (Ford Foundation Counterpart) *1		1	11	NA	NA
WEPP Coordinator	GS-6	1	4	595	2,380
Programmer	GS-6	1	2	595	1,190
Translator/Transcriber	GS-6	1	2	616	1,232
Data Management Assistant	GS-4	1	3	461	1,383
Secretarial Assistant	GS-4	1	2	372	744
Interviewer and Focus Group Leader	GS-3	12	6	291	1,743
					$8,672

3200	INTERNATIONAL SALARY	
	Principal Investigator *2	0
	Statistician *3	0
3300	CONSULTANTS' COSTS:	0
3500	LOCAL TRAVEL:	458
3600	INTERNATIONAL TRAVEL:	0
3700	SUPPLIES AND MATERIALS:	
	3704 Stationery and Office Supplies:	200
	3715 Non-stock: Other (Tapes)	50
		250
4300	OTHER CONTRACTUAL COSTS:	75
4806	INTER-DEPARTMENTAL COSTS:	5200
0300	CAPITAL EXPENDITURE:	0
	Sub-total:	14,655
	Overhead Costs: (29%)	4,250
	TOTAL:	$18,905

Note: *1 Co-investigator is funded by a grant from Ford Foundation, Bangladesh

*2 Principal Investigator is funded through the Health and Child Survival Fellows Program of Johns Hopkins University, Institute for International Programs.

*3 Statistician is funded by the health and Child Survival Fellows Program of Johns Hopkins University, Institute for International Programs and by the Department of Population Dynamics, Johns Hopkins University School of Hygiene and Public Health.

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16. Budget Justification

Personnel costs are for local salaries only. The principal investigator, statistician, and Ford Foundation counterpart are all funded through outside grants. Costs for focus group transcriptions and translations reflect current charges to UVP for such services. It is expected that investigators and interviewers/focus group leaders will need to make a large number of trips to the field owing to the broad scope of the study and the focus on qualitative research techniques.

Appendix A

Focus Group Discussion Outlines

Family Function Focus Group

We are interested in learning more about families in urban areas of Dhaka. During this session, we will pose questions to you and ask you to think about decisions you may have had to make or may make in the future.

Last Major Decision

First, I would like to ask each of you to think back to the last time a major decision was made in your household.

What was that decision?

[major purchase, decision to move to the city, decision to seek health care, marriage, job, etc.].

Who took the decision?

Was there discussion between you, your husband, your husband's family, or others before the decision was made?

[Probe to determine the extent to which wives manipulate the decision-making process; it may be that husbands make final decisions while wives manipulate them].

If (decision maker) was not at home, could somebody else have made the decision?

Who (if anyone)?

Why or why not?

Interaction with Children

I would now like you to think about your husbands. How do they interact with children?

[Probe here to ascertain the extent of husbands' interaction with children; while it is often assumed that husbands have minimal involvement with their offspring, in fact, they may be actively involved: do they stimulate children? hold them? speak to them? play with them? Try to determine both the quantity and quality of interactions husbands have with their children. Also try to determine children's ages. It may be that husbands will only have minimal interaction with newborns but more contact with older offspring].

Husbands: I would now like you to think about your wives. How do they interact with their children?

[Probe here to determine the quantity and quality of maternal-child interaction. Do mothers relate to children in their capacity as providers? nurturers? in some other fashion? Have there been changes recently in how mothers associate with children? Are mothers more likely to view children as friends? dote over them?, etc.].

Professions

If you were to choose an "ideal" profession for your son, what would it be?

Why would you choose this profession?

If you were to choose an "ideal" profession for your daughter, what would it be?

Why would you choose this profession?

Is there a difference? Why or why not?

What might the perfect job for husbands/wives be? Why?

Women's Health Scenario

Frequently we are faced with important decisions about our own health or the health of a loved one. I would like to describe to you a situation involving a man named Anwar and his wife, Khaleda. Then I would like you to tell me what Anwar and Khaleda might do to resolve this problem.

Khaleda has just been informed by a doctor that she must have a hysterectomy. If she does not have this operation soon, she will be putting her own health in jeopardy. While her husband, Anwar, is concerned about his wife's health, he would also like to have more children. He is opposed to the operation.
What should Khaleda do?

What might happen if she doesn't have the operation?

What should Anwar do?

We are interested in learning more about families in urban areas of Dhaka. During this session, we would like to ask you several questions about yourselves and about your own families.

Shopping

As you know, an important part of every day life is shopping for food. Do wives shop?

Why or why not?

Under what circumstances (if any) is it okay for women to shop?

[Probe to see if women who shop are accompanied by husbands, mothers-in-law, other kin or friends (what kinds of friends?). Is shopping performed in an area of town away from the eyes of regulating kin? How far must one travel to carry out shopping? Is shopping a daily activity for men? women?].

Consulting Health Practitioners

If you were to take your children to a doctor, kabiraj, or some other healer, and that person kept you waiting a long time, prescribed the wrong medication (or an expensive medication), insulted you, or failed to heal your children, what might you do?

[Demand prompt attention, discuss problems with doctor in greater detail, seek other medical advice, etc.].

[Determine whether response would differ for different practitioners. If so, why?].

If you were to go to that same practitioner and encounter similar difficulties, what would you do?

[If women are likely to adopt different strategies for themselves and for children, probe to determine why].

Leisure Activities

Have you ever gone to the cinema?

If yes, what did you think of the movie?

Who went with you, if anyone?

Did you inform your husband? Seek his permission? Why or why not?

If no, why haven't you gone?

Marriage Age for Children

What do you consider an appropriate age for sons to marry?

Daughters?

Why these ages?

If there is a difference, why the difference?

Purchases

I would now like to ask you about your last purchase. Was it for yourself?

If not, for whom?

What was the last thing that you bought for yourself?

Self-Perception Focus Group

We are interested in learning more about families in urban areas of Dhaka. During this session, we would like to ask you several questions about how you think about yourselves and about family members.

[Before having participants introduce themselves...]

Self-defining Terms

If you were to describe yourself in one or two words, which words would you use?

[housewife, mother, volunteer, own name, personal characteristics, or qualities].

Why this label or name?

What other words might you use to describe yourself?

[Have each woman introduce herself].

What words might you use for your spouse? mother-in-law? (does she live with or near you?)

Why these words?

Family Law

I would like to tell you a story about Iqbal and Laila. Iqbal and Laila have been married for 10 years. They have 5 children and both work hard. Even so, Iqbal is not happy with his wife.

Should Iqbal take a second wife?

If so, under what circumstances? [first wife's approval, on his own, consent of the law, etc.]

If not, why not?

Has something like this ever happened here? What was the outcome? Were you personally involved?

Family Income

Lastly, I would like to discuss family income.

Do you bring money into the household (from work of any sort)?

If so, what do you do with the money?

[Give it to husband, keep some/all for self/children/others (what is money used for?), save or invest, make purchases (what kind?)].

If women earn income, does the relationship between husband and wife or wife and mother-in-law change?

How?

[wife wields more/less power over household expenditures; wife is esteemed/disdained; neighbors gossip about husband/wife; mother-in-law feels threatened, etc.]

World View Focus Group

We are interested in learning more about families in urban areas of Dhaka. During this session, we would like to ask you several questions about how you think about yourselves, your family members, and the world around you.

First, I would like you to think about one person that you look up to most in the community.

What is it about this individual that earns your respect?

Is this individual male?, female?, young?, older?, kin?, non-kin (whom?), an individual with a large family?

Why did you choose one sex and not the other?

Why a younger/older person?

Should women look up to men? men look up to women?

Why or why not?

Now I would like you to think about the person in this community who is the most powerful.

What is it that makes them powerful?

What about mothers-in-law, are they powerful people?

Why or why not?

What other types of words are used here for respect, prestige, power, position, status?

Aspirations

When you were a young girl, what were your aspirations? What was it that you most wanted to become?

[Goals other than being a wife?]

How have those goals changed (if at all) since marriage?

Let's suppose that you are choosing a husband for your daughter. What kinds of qualities or characteristics would you look for?

What type of a woman would you like your son to marry?

Why?

Appendix B

Number of Focus Group Discussions by Topic and Group

Topic	Former Vol's	Current Vol's	WEPP Participants	Controls	Husbands of Vol's, WEPP Participants, and Controls
Family Function	1	1	1	1	2
Social Boundaries	1	1	1	1	2
Self-Perception	1	1	1	1	2
World View	1	1	1	1	2
Subtotal:	4	4	4	4	8
Total number of focus group discussions:					24

Note: For each topic, one male focus group will include controls and one male focus group will include only one of the three "case" groups: spouses of former volunteers, current volunteers, or WEPP participants.

Appendix C

Questionnaires

1. Registration Form for all household members

Date: Interviewer:

Head of Household: Religion:

Name/Individual Number	DOB (dd mm yy)	Age	SEX	MS	REL HH	MO NUM	FA NUM	HUS NUM	EDU	LIT	M OCC	S OCC	WAGE TYPE*

Note: Codes for all variables except WAGE TYPE are attached as Appendix D. * WAGE TYPE codes are 1=permanent wage, 2=short-term wage, 3=casual wage, 4=self-employed (owners of their own means of production), 5=dependent worker (non-wage workers dependent upon others for credit, raw materials, and rental of tools/space), 6=other. Wage type is not included on the current registration form for the USS.

1a. May I ask, does your mother-in-law share your same cooking pot? (0) No (1) Yes

[If yes, then skip to question 2].

1b. Does she live in this slum? (0) No (1) Yes

Background of Mother

I would now like to find out a little about your own family.

2. Could you tell me how many siblings you have? _____ (exclude respondent)

   [If "0", then skip to question 6].

3. What is your birth order among all siblings? _____ (first, second, etc.)

4. How many of your siblings are female? _____

   If respondent does not have female siblings, skip to question 6].

5. What is your birth order among your sisters? _____

6. May I ask you how old you were when you first got married? ____ (in years)

7. According to the information you gave me when we began this interview, you have _____ children (interviewer, obtain this number from the registration form). Is that correct?

8. May I ask how many total pregnancies you have had? ____ (include pregnancies resulting in abortion/menstrual regulation and stillbirth; also include child deaths--these will not be captured by the registration form).

9. Health Status of Mother (15 - 45 years old)

ID #	WT (kg)	MUAC (mm)	TT1*			TT2*		
			IMN	CRD	DATE	IMN	CRD	DATE

* Women must have had a live/still birth in last 12 months to be eligible for questions on tetanus toxoid. Codes for tetanus toxoid immunization status are the same as those for immunization status of children, presented below.

10. Could you please list the foods and drinks which you consumed yesterday?

_____

_____

11. Could you list the foods and drinks your husband consumed yesterday?

_____

_____

12. Immunization Status of Children (0 - 59 months old)

If I may, I would like to ask you about your children's health.

ID #	DPT				OPV				Measles				BCG			
	S #	IMN	CRD	DATE	S #	IMN	CRD	DATE	S #	IMN	CRD	DATE	IMN	CRD	SCR	DATE
	1 2 3	_ _	_ _	___ ___	1 2 3	_ _	_ _	___ ___	1 2	_ _	_ _	___ ___	_ _	_ _	_ _	___ ___
	1 2 3	_ _	_ _	___ ___	1 2 3	_ _	_ _	___ ___	1 2	_ _	_ _	___ ___	_ _	_ _	_ _	___ ___
	1 2 3	_ _	_ _	___ ___	1 2 3	_ _	_ _	___ ___	1 2	_ _	_ _	___ ___	_ _	_ _	_ _	___ ___
	1 2 3	_ _	_ _	___ ___	1 2 3	_ _	_ _	___ ___	1 2	_ _	_ _	___ ___	_ _	_ _	_ _	___ ___

Codes:

IMMUNIZE (IMN)	CARD (CRD)	SCAR (SCR)
0 No 1 Yes (Card or mother's/ respondent's history) 2 Mother/respondent absent 9 Unknown	0 No 1 Yes-marked 2 Yes-not marked	0 No 1 Yes 2 Child not present 9 Not sure

13. Health Status of Children < 5

ID #	MUAC (mm)	Point Prevalence of Diarrhea	Scabies

Point Prevalence of Diarrhea is defined as three or more loose stools within the 24 hours preceding interview.

Coding for Scabies:

0 No
1 Yes
2 Child not present
9 Not sure

14. Social Class Indicators

Occupancy				Other Land Ownership			Construction		
House		Land			City	Village	Type	Roof	Wall
Owned	1	Self	1	No	0	0	Jhupri	1	1
Rented	2	Railway	2	Yes	1	1	Bamboo	2	2
Other	7	Gov't	3				Wood	3	3
_____									
		Private	4				Tin	4	4
		Other _____	7				Pucca	5	5
							Other	7	7
							_____		

15. May I ask you what your last "major" expense was?

_____

[Open-ended question; probe to determine whether this expense was related to health care, education, transportation, or some other category and for whom this money was spent; e.g., son's education, daughter's medical emergency; exclude such routine costs as rent and food].

16. I would now like to know about your last major purchase. Could you tell me what that was?

_____

17. Who took the decision to make this purchase (father, husband, mother, son, mother-in-law, both father and mother)? _____

18. When you experience a financial crisis, do you turn to:

(1) husband's kin
(2) own kin
(3) husband's friends
(4) own friends
(5) other, specify _____

19. Access/Use of Health Care Services

We are interested in finding out more about health problems you or your family may have experienced recently and what you did for treatment. Could you describe in general terms the most recent illness experienced, beginning with husband first, then yourself, then children less than 5 years of age, in order of age?

ID #	Could you describe in general terms this individual's most recent illness? [Open-ended; use respondent's term for illness]	What was done first about this illness? (See Codes Below)	Did (name of individual) go to any body else for treatment? (See Codes Below)	How soon after (name) became sick did he/she seek for help? [in days or hours]

Codes: Consulted 1. health care professional (qualified allopathic doctor, nurse) 2. unqualified allopathic practitioner 3. pharmacist 4. healer (kabiraj, peer, fakir) 5. dai (TBA) 6. husband's relatives 7. own relatives 8. neighbor 9. other (please specify) 10. didn't consult anyone (exclude home treatment) 11. treated at home with herbs or other home remedies.

20. Domestic Hygiene Practices

Water		
Source	Drinking	Cooking
Tap	1	1
Tubewell/pump	2	2
Pond/river	3	3
Well	4	4
Other _____	7	7
Water Source:		
Not shared	0	0
Shared by community	1	1
Outside community	2	2

Latrine		
Type	Respondent Only	Children <5
Sanitary	1	1
Hanging	2	2
Pit	3	3
No fixed site	4	4
Other _____	7	7
Latrine:		
Not shared	0	0
Shared by community	1	1

21. Family Planning/Birth Spacing

Now I would like to ask several questions about family planning. Have you or your husband ever used a family planning method? (Ask respondent to indicate which ones have been used before reading list).

Birth Control Method	Self or Husband Used Method	May I ask who decided to use this method?
Oral Pill	Yes No	Self Husband Both
Condom	Yes No	Self Husband Both
Norplant	Yes No	Self Husband Both
Diaphragm/Foam/Jelly	Yes No	Self Husband Both
Injection	Yes No	Self Husband Both
IUD	Yes No	Self Husband Both
Female Sterilization	Yes No	Self Husband Both
Male Sterilization	Yes No	Self Husband Both
Menstrual Regulation	Yes No	Self Husband Both
Safe Period	Yes No	Self Husband Both
Withdrawal	Yes No	Self Husband Both
Abstinence	Yes No	Self Husband Both
Traditional Methods, Specify:	Yes No	Self Husband Both
Other	Yes No	Self Husband Both

22. I would just like to check once again; have you or your husband ever tried in any way to delay or avoid getting pregnant?

(0) No/Don't Know (1) Yes

23. May I ask, are you currently pregnant (carrying a baby)?

(0) No (1) Yes (9) Don't Know

[Skip to question 25 if respondent is currently pregnant].

24. Are you or your husband currently using some family planning method to delay or avoid pregnancy?

(0) No/Don't Know (1) Yes

May I ask which method(s) you currently use?	When did you begin to use this method (month and year)?	Who usually purchases this method?
Oral Pill		Respondent Husband Other, specify:
Condom		Respondent Husband Other, specify:
Diaphragm/Foam/Jelly		Respondent Husband Other, specify:
Injection		Respondent Husband Other, specify:
IUD		Respondent Husband Other, specify:
Female Sterilization		Respondent Husband Other, specify:
Male Sterilization		Respondent Husband Other, specify:
Menstrual Regulation		Respondent Husband Other, specify:
Safe Period		Respondent Husband Other, specify:
Withdrawal		Respondent Husband Other, specify:
Abstinence		Respondent Husband Other, specify:
Traditional Methods, Specify:		Respondent Husband Other, specify:
Other Traditional Methods, Specify:		Respondent Husband Other, specify:
Other		Respondent Husband Other, specify:

Nutrition/Breastfeeding

To be asked of each child < 5 years old.

25. Child's Name _____ 26. Child's ID# _____

27. Did you ever put (name of child listed above) to the breast?

No (0) _____ Yes (1) _____ Not sure/Don't know (9) _____

[If no or not sure, skip to question 33].

28. How old was infant/child when the first water or food in addition to milk was given?

Age in months _____ or Age in years _____

Have never given child anything in addition to breastmilk _____

[Skip to question 33].

29. What foods were given to the child when you <u>first</u> started supplying supplements (include cow's milk, formulas, water, and porridges, if given)?

_____

_____

30. Any other foods or liquids? _____

31. How old was child when you felt your milk was "not enough" for him or her?

Age in months _____ or Age in years _____

Have never felt that own milk was not enough _____

32. How old was the child when you began to persistently encourage him or her to eat other foods?

Age in months _____ or Age in years _____

Have never persistently encouraged child to eat other foods _____

Now I would like to ask you some questions about the way <u>you</u> think and feel.

33. If you were to describe yourself in one word, what would that be (mother, wife, volunteer, woman, worker--what type)? _____

[respondent's name constitutes a legitimate response].

34. What other word might you use to describe yourself? _____

35. What do you feel is an appropriate age for your daughter (or a daughter) to marry? _____

36. Why? _____

_____

37. When is it appropriate age for your son (or a son) to marry? _____

38. Why? _____

_____

39. Could I ask you to list belongings which are personally yours (if any)? (e.g., mementos, hand mirrors, lipstick, books, ornaments).

[Limit list to four or five items; exclude clothing; also exclude items such as cookware which is shared by the family].

1. _____
2. _____
3. _____
4. _____
5. _____

40. Have you ever been to the cinema? (0) No/Not sure (1) Yes

[If no/not sure, skip to question 42].

41. How recently did you go to the cinema? _____ (months) or _____ (years)

[If less than one month, code as 01].

42. I would now like you to think about the person in this community you look up to most. Could you describe him or her in a few words (i.e., what is it about this individual that earns your respect)? [Kin members are legitimate answers. If respondent cannot think of anyone, simply write "none"].

---

43. Is this individual a (0) man? or a (1) woman?

44. I would now like you to think about the most "powerful" individual in this community. Could you describe him or her in a few words (i.e., what is it about this individual that that makes him or her powerful)? [Kin members are legitimate answers. If respondent cannot think of any "powerful" individuals, simply write "none"].

---

45. Is this individual a (0) man? or a (1) woman?

[For volunteers only...]

46. How long have you been serving as a volunteer? _____ (in years)

[For WEPP participants only...]

47. When did your training with WEPP begin? _____ (month) _____ (year)

Thank individual for her time and cooperation.

46. Spot Behavior Check (To be marked once interview is complete.)

Mother's:		Children's:		Feces				Trash (non-organic)	
				Human		Animal			
saree dirty?	0 1 9	face dirty?	0 1 9	in yard?	0 1 9	in yard?	0 1 9	in yard?	0 1 9
hands dirty?	0 1 9	hands dirty?	0 1 9	in house?	0 1 9	in house?	0 1 9	in house?	0 1 9
nails dirty?	0 1 9	nails dirty?	0 1 9						
		pants soiled?	0 1 9						

For all variables coding is: 0 = No; 1 = Yes; 9 = Not sure.

48. Hand Pathogen Test (Respondents Only--marked after interview is complete)

Fecal Coliforms Count		Time of Day:
Left Hand:	Right Hand:	

Appendix D

Codes for Registration Form

E.4.2.3 CODE PLAN/FILE DOCUMENTATION

File name : URF.DAT (batch 11 +)
Record length : 79
Description : Registration Data for Urban Slum Surveillence System
Source : Urban slum households
Owner : USS
Date : 08/03/90

Sl.#	Variable	Value	Value label	Start posit.	Var. length	Var. type	Dec.
1.	Date of visit	(dd/mm/yy)		1	6	N	0
2.	Interviewer #	(see interviewer list)		7	2	N	0
3.	Stratum #	01	Stratum # 1	9	2	N	0
		02	Stratum # 2				
		:					
		08	Stratum # 8				
4.	Cluster #	01	Cluster # 1	11	2	N	0
		02	Cluster # 2				
		:					
5.	Structure #	01	Structure # 1	13	2	N	0
		02	Structure # 2				
6.	Household #	01	Household # 01 (with structure)	15	2	N	0
		02	Household # 02				
		:	:				
7.	Head of household sl.#.	01	HH sl.# 01	17	2	N	0
		02	HH sl.# 02				
		:	:				
8.	Religion	1	Muslim	19	1	N	0
		2	Hindu				
		3	Other				
9.	Individual sl.#	01	Individual #1	20	2	N	0
		02	Individual #2				
		:	:				
10.	Name/ person's #	(in capital letters)		22	20	N	0
11.	Date of birth	(dd/mm/yy)		42	6	N	0

Sl.#	Variable	Value	Value label	Start posit.	Var. length	Var. type	Dec.
12.	Age at date of visit	(in complete years)		48	3	N	0
13.	Sex	1	Male	51	1	N	0
		2	Female				
14.	Marital status	0	Never married	52	1	N	0
		1	Married				
		2	Divorced				
		3	Widowed				
		4	Partially separated				
		5	Functionally separated				
15.	Type of entry	1	Enumeration	53	1	N	0
		2	Inmigration				
		3	Birth				
		4	Internal migration				
16.	Relation to household head	00	No relation	54	2	N	0
		01	Self				
		02	Husband				
		03	Wife				
		04	Son				
		05	Daughter				
		06	Father				
		07	Mother				
		08	Brother				
		09	Sister				
		10	Uncle				
		11	Aunt				
		12	Cousin				
		13	Nephew				
		14	Niece				
		15	Son's wife				
		16	Daughter's husband				
		17	Brother's wife				
		18	Sister's husband				
		19	Grandfather				
		20	Grandmother				
		21	Grandson				
		22	Granddaughter				
		23	Grandson's wife				
		24	Granddaughter's husband				
		25	Son of grandson				
		26	Daughter of grandson				
		27	Son of granddaughter				
		28	Daughter of granddaughter				
		29	Step-father				

Sl.#	Variable	Value	Value label	Start posit.	Var. length	Var. type	Dec.
		30	Step-mother				
		31	Step-son				
		32	Step-daughter				
		33	Step-brother				
		34	Step-sister				
		35	Father-in-law				
		36	Mother-in-law				
16.	Relation to household head (contd.)	37	Brother-in-law				
		38	Sister-in-law				
		39	Brother-in-law's wife				
		40	Sister-in-law's husband				
		41	Adopted son				
		42	Adopted daughter				
17.	Mother's Ind.#	(regn. sl. #)					
		00	Mother is not registered	56	2	N	0
18.	Father's Ind.	(regn. sl. #)					
		00	Father is not registered	58	2	N	0
19.	Husband's Ind. # (for MS = 1 and Sex = 2)	(regn. sl. #)					
		00	Husband is not registered	60	2	N	0
		88	Male or not a married woman				
20.	Pregnancy/Breast feeding status						
	For married woman	0	Not pregnant	62	1	N	0
		1	Pregnant				
		9	Unknown				
	For child <= 5 years	2	Breastmilk only				
		3	Breastmilk+water only				
		4	Breastmilk+food (liquid, semi-solid, or solid)				
		5	Food only and no breastmilk				
		9	Unknown				
		8	Age > 5 years and not a married woman				

Sl.#	Variable	Value	Value label	Start posit.	Var. length	Var. type	Dec.
21.	If pregnant, LMP date	(dd/mm/yy)					
		888888	Not pregnant or Not a married woman or Male	63	6	N	0
		999999	Unknown				
22.	Birth place	1	Within same community as now living	69	1	N	0
		2	Outside current community but in another Dhaka slum				
		3	Outside current community, in Dhaka City, but not in Dhaka slum				
		4	Outside Dhaka City, but in Dhaka District				
		5	Other district outside Dhaka District				
		6	Outside Bangladesh				
		9	Unknown				
23.	Place of residence one year back from date of interview	1	Within same community as now living	70	1	N	0
		2	Outside current community but in another Dhaka slum				
		3	Outside current community, in Dhaka City, but not in Dhaka slum				
		4	Outside Dhaka City, but in Dhaka District				
		5	Other district outside Dhaka District				
		6	Outside Bangladesh				
		8	Child of age < 1 year				
		9	Unknown				
24.	Education in complete years	00	No education	71	2	N	0
		01	Class I				
		02	Class II				
		:	etc.				
		20	Infant or child <= 5 years				

Sl.#	Variable	Value	Value label	Start posit.	Var. length	Var. type	Dec.
25.	Literacy Bangla	0	Can't read and write	73	1	N	0
		1	Can read only				
		2	Can read and write				
		8	Any male or female of age < 15 years or age > 45 years				
26.	Main occupation	01	Household service providers	74	2	N	0
		02	Household-based self-employed service providers				
		03	Service (lower grade) providers				
		04	Service (upper grade) providers				
		05	Small business owners (permanent shops)				
		06	Street vendors (legal)				
		07	Street vendors (illicit/illegal)				
		08	Middlemen				
		09	Transport + vehicle rental agents				
		10	Property rental agents				
		11	Appliance rental agents				
		12	Household informal teachers				
		13	Formal teachers				
		14	Religious/clerics				
		15	Non-formal health providers				
		16	Formal health providers				
		17	Informal (street) performers				
		18	Formal performers				
		19	Skilled laborers				
		20	Unskilled laborers				
		21	Vehicle drivers				
		22	Transport workers				
		23	Rickshaw-pullers, cart-puller				
		24	Student				
		25	Unemployed				
		26	Apprentice				
		27	Disabled				
		28	Beggars				
		29	Informal teachers				
		30	Professional activits (Doctor,Lawyer,Enginer)				
		31	Industrialist/Factory owner				
27.	Secondary occupation	- do -		76	2	N	0
28.	Batch #	01	Batch # 01	78	2	N	0
		02	Batch # 02				

E.4.2.4 OCCUPATIONAL CODES

01 Household Service Providers

- Maid/Bearer/Cook

02. Household-based Self-employed Service Providers

- Makes biri, agarbati or chocolate packets
- Makes prepared spices
- Makes rugs
- Makes cartoon
- Sews punjabi

03 Service (lower grade) Providers

- Darwan
- Peon
- Guard
- Sweeper

04 Service (upper grade) Providers

- Clerical staff
- Office worker

05 Small Business Owners (permanent shops)

06 Street Vendors (legal)

- Collect and sells firewood
- Collects and sells wastepaper
- Sells battery metal
- Sells birds
- Sells books, magazines, etc.
- Sells flower-necklaces, flowers
- Sells utensils, rugs, household items
- Sells cigarettes, bettlenuts, etc.
- Sells cakes and rice

- Sells ice cream
- Sells vegetables
- Sells fowls
- Sells fishes

07 Street Vendors (illicit/illegal)

- Sells black market items (tickets of cinema, transport, match, etc.)
- Sells ganja, heroine, etc.
- Sells Indian saris

08 Middlemen

- Act as middlemen for land and/or cow
- Broker for manpower to foreign lands
- Match-making

09 Transport + Vehicle Rental Agents

- Provides rickshaw,bus, car for rent

10 Property Rental Agents

- Provides houses only for rent (landlords)
- Provides land for rent
- Provides buildings/shops for rent (for business)

11 Appliance Rental Agents

- Provides VCR, microphone, TV, etc. for rent

12 Household Informal Teachers

- Teaches Bangla, English or Arabic
- Teaches songs

13 Formal Teachers

- School/college/madrasha teacher

14 Religious/Clerics

- Exercises civil spirits by uttering charms and incantations

15 Non-formal Health Providers

- Midwifery
- Ayurvedic & Homeopathic Pharmacists
- Ayurvedic Pharmacist
- Prepare Ayurvedic medicines

16 Formal Health Providers

- Registered physicians
- Registered nurses

17 Informal (street) Performers

18 Formal Performers

- Cinema
- Jatra
- Songster
- Theater/drama

19 Skilled Laborers

- Blacksmith
- Blanket-maker
- Builds kutcha houses
- Butcher
- Gardener
- Goldsmith
- General mechanic
- Motor vehicle mechanic
- Rickshaw mechanic
- Potter
- Spice-maker
- Tailor
- Umbrella repairman
- Key-maker
- Washerman
- Weaver
- Wedding decorator
- Wood-cutter

20 Unskilled Laborers

- Polishes boots
- Breaks bricks
- Cowlender
- Performs massage
- Porter
- Pulls rickshaws, push carts
- Supplies water to shops
- Works in station, terminal, market (Kuli)

21 Vehicle Drivers

- Boatman
- Drivers of car, bus, babi taxi, train, etc.

22 Transport Workers

- Conductor
- Helper

23 Rickshaw-pullers, Cart-puller

24 Student

25 Unemployed

26 Apprentice

27 Disabled

28 Beggars

29 Informal teachers

30 Professional activaties
- Doctor
- Lawyer
- Engineer

31 Industrialist/Factory owner

Appendix E

Consent Forms for Questionnaires, Hand Pathogen Tests, and Focus Groups

International Center for Diarrheal Disease Research, Bangladesh

Protocol on Empowering Women for Health: Verbal Consent Form

for Questionnaires/Hand Pathogen Tests

The desire for good health is universal. Mothers play an important part in determining not only their own health, but the health of their family as well. While there are many programs designed to improve health, including two which we will examine as part of this study (the Urban Volunteer Program and the Women's Empowerment Pilot Project), there are many obstacles to better health and overall well-being.

At ICDDR,B, we plan to examine the health of three groups of women: those who work as volunteers for the Urban Volunteer Program or who previously worked for UVP, women who participate in the Women's Empowerment Pilot Project, and women who have not been involved in either program. You have been scientifically selected to help us in the study. Your help in completing the following questionnaire (which will be administered by an interviewer) can help researchers understand your own health as well as the health and well-being of children less than five years of age. We would also like to ask you several questions on the difficulties you may face as a women and what you have done specifically to overcome the challenges of daily living.

In addition to questionnaires, we will be administering a simple test to mothers designed to measure hand pathogens. This test is not painful and poses no risk to you. You do have the option of not participating in this study; however, your assistance can help us understand the social barriers you face in your attempt to improve the well-being of yourself and your family.

Be assured that your responses to this questionnaire will be treated anonymously. Researchers will not be able to identify you individually nor will they disclose personal information to others. If you would like to participate in this study, please give your verbal consent.

Witness: _____ _____

Signature of appropriate staff member

আন্তর্জাতিক উদরাময় গবেষনা কেন্দ্র, বাংলাদেশ

স্বাস্থ্যের জন্য মহিলা উন্নয়ন প্রোটকল: মৌখিক সম্মতি ফর্ম, প্রশ্নমালা / হাতের রোগজীবানু পরীক্ষা

ভালো স্বাস্থ্যের হাঁটা আবর্জনীন. মায়েরা শুধুমাত্র নিজেদের স্বাস্থ্যের ব্যাপার ছাড়াও, পরিবারের সবার স্বাস্থ্য নির্ধারনের ক্ষেত্রে গুরুত্বপূর্ন ভূমিকা পালন করতে থাকেন, যদিও স্বাস্থ্যের উন্নতির কথা চিন্তা করে অনেক প্রোগ্রামই নকশা করা হয়েছে, যেমন আমাদের গবেষনায় এমন ২টি প্রোগ্রাম (আরবান ভলান্টিয়ার প্রোগ্রাম এবং মহিলা উন্নয়ন পাইলট প্রোজেক্ট) তথাপি আবর্জনীন উন্নতি ও ভালো স্বাস্থ্যের ক্ষেত্রে অনেক বাধা রয়েছে.

আন্তর্জাতিক উদরাময় গবেষনা কেন্দ্র, বাংলাদেশ এ আমরা ৩ টি দলের স্বাস্থ্যের অবস্থা পরীক্ষা করে দেখার পরিকল্পনা করেছি. এই ৩ টি দল হচ্ছে: যারা বর্তমানে আরবান ভলান্টিয়ার প্রোগ্রাম এ ভলান্টিয়ার হিসাবে কাজ করছে বা যারা আগে আরবান ভলান্টিয়ার প্রোগ্রাম এ ভলান্টিয়ার হিসেবে ছিলেন, মহিলা উন্নয়ন পাইলট প্রোজেক্টে অংশগ্রহনকারী মহিলারা, এবং কোন প্রোগ্রামের সাথেই জড়িত নয় এমন মহিলারা, এই গবেষনায় সাহায্য করবার জন্য আপনাকে বিজ্ঞানসম্মতভাবে নির্বাচিত করা হয়েছে. নিম্নের প্রশ্নের উত্তর সম্পূর্ন করার ব্যাপারে আপনার সাহায্য (যা একজন ইন্টারভিউয়ার জিজ্ঞেস করবেন) গবেষকদের আপনার নিজের স্বাস্থ্য এবং পাঁচ বছরের নীচের বয়সের শিশুদের স্বাস্থ্য ও তার সর্বাঙ্গীন উন্নতি সম্বন্ধে বুঝতে সাহায্য করবে, মহিলা হিসেবে চলতে গিয়ে আপনাকে যে কতগুলো সমস্যার সম্মুখীন হতে হয় এবং প্রাত্যহিক জীবনে সমস্যা চ্যালেঞ্জ মোকাবিলা করার জন্য যে পদক্ষেপ নিতে হয়, সে সম্বন্ধেও আমরা আপনাকে কিছু প্রশ্ন করতে চাই.