Unmet Reproductive and Child-health Needs and Use of Essential Services Package in Urban NGO Clinics of Bangladesh

Jahanara Khatun
Nikhil Chandra Roy
Tariq Azim

Acknowledgement

Acronyms

ANC	Antenatal Care
ARI	Acute Respiratory Infection
BCC	Behaviour Change Communication
EPI	Expanded Programme on Immunization
ESP	Essential Services Package
FP	Family Planning
HPSP	Health and Population Sector Programme
ICPD	International Conference on Population and Development
MWRA	Married Women of Reproductive Age
NIPHP	National Integrated Population and Health Programme
NSDP	NGO Service Delivery Program
PNC	Postnatal Care
RTI	Reproductive Tract Infection
SAS	Statistical Software Package
TT	Tetanus Toxoid
UFHP	Urban Family Health Partnership
USAID	United States Agency for International Development

Contents

iii

Figures

Executive Summary

The International Conference on Population and Development (ICPD), held in Cairo in 1994, emphasized the delivery of a broader range of reproductive and basic healthcare to meet the comprehensive health needs of the family. In response to the mandate of ICPD, like other developing countries, the Health and Population Sector Programme (HPSP) 1998-2003 of the Government of Bangladesh (GoB) and the National Integrated Population and Health Programme (NIPHP) 1997-2002, supported by the United States Agency for International Development (USAID), have made a provision for delivering a broader range of integrated health and family-planning services through their respective service-delivery points located in urban and rural areas.

The Urban Family Health Partnership (UFHP), one of the NIPHP partners, provides the essential services package (ESP) to city dwellers of Bangladesh through 27 local non-government organizations (NGOs). For improved delivery of ESP, it is important to assess how do the clients use clinic-based services and what is the extent of their unmet health needs for specific ESP at these NGO clinics. The Operations Research Project (currently known as Family Health Research Project) of ICDDR,B: Centre for Health and Population Research, in collaboration with UFHP, designed a study to know the extent of unmet health needs of clients and of use of ESP in the clinics to improve the delivery of ESP.

During July-August 2000, a cross-sectional survey was conducted in 6 UFHP static clinics and in 92 satellite clinics linked to the UFHP static clinics. In total, 1,478 clients were consecutively selected from both static and satellite clinics for exit interviews and to observe client-provider interactions. Data from the monthly performance reports on the use of ESP were also analyzed to see the trend in the use of ESP. A semi-structured questionnaire was used for collecting information on sociodemographic characteristics of clients and reasons for visiting the clinics, along with other information. Bivariate analysis was carried out to determine the factors affecting the unmet needs of clients for selected reproductive heath services.

Results of the study showed that more than 80% of the respondents (clients and attendees of children aged less than 5 years) were aged 20-29 years. Clients of the satellite clinics had more living children than clients who visited the static clinics. Forty-six percent of women who came for services at the satellite clinics were uneducated compared to 25% of the static clinic clients. More than 95% of the satellite clinic clients were living within a distance of one km from the clinic, while about half of the static clinics clients came across a distance of over one km from the clinic. A higher proportion of poor clients visited the satellite clinics compared to well-off clients who visited the static clinics.

About 85% of the UFHP static clinic clients requested for a single service and 15% for multiple services. One-third of the clients interviewed visited the clinics for the first time, and the rest had visited the clinics before. Sixty percent of new clients visited for pregnancy-related care. Nineteen percent of the clients who switched from other sources switched for reproductive tract infection (RTI) services, which was higher than any other ESP delivery.

Findings showed that there were substantial unmet health needs (clients who received their desired services and were in need of additional services but did not avail of those services) among the clients. Almost one quarter of the children aged less than 2 years had unmet health needs for immunization and almost two-fifths of children aged less than 5 years had unmet needs for diarrhoea and ARI separately. Twenty-six of married women of reproductive age (MWRA) had unmet health needs for family planning, 11% for antenatal care, 54% for tetanus toxoid, and 15% for RTI services.

The clients who visited the clinics for desired services, in some cases, had need for additional services beyond their desired services. Almost two-thirds of them did not perceive the importance, and because of this they did not receive those services. The two other important reasons for unmet needs were that the clients were not aware of availability of ESP and some clients had financial constraints.

Clients-related factors, such as age, marital status, occupation of women, occupation of husbands, number of children, education of women, duration of stay at the same place, proximity, and last visit to clinic were significantly associated with unmet health needs of clients.

Most (90%) clients preferred the UFHP satellite clinics due to proximity of the clinic, availability of skilled providers (32%), and less-expensive services (45%). Availability of various health services also influenced the clients to use the UFHP NGO clinics.

Interpersonal communication was a primary influencing factor in motivation of clients for using clinics. Printed and electronic media (signboard 15%, TV 27%) also motivated them. The neighbours who had visited the satellite clinics before played a key role (60%) as a source of information.

The clients of UFHP clinics were asked whether they received the specific ESP or not. Regarding reproductive health services, the mothers were asked whether they received antenatal care (ANC) during their current pregnancies or for last livebirth in the year prior to the survey. Eighty-one percent of the UFHP clinic clients received ANC. No differences of ANC visits were found by type of urban areas. Eleven percent of the women of reproductive age did not receive any TT immunization. Of those who received TT immunization, 35% received TT1 and TT2, 32% received TT3 andTT4, and 33% received TT5. Overall, 58% of MWRA were using contraceptive methods.

2

Variations in proportions among them by type of urban categories were quite large. The current use of contraception among MWRA was higher (61%) in city corporation than in district (57%) and thana (55%) municipalities. Eighty-seven percent of children aged less than 2 years received immunization. Thirty-three percent of children aged less than 5 years had ARI symptoms. Significant variations in the use of ESP in different clinics were observed.

To assess the monthly client flow in the clinics, the monthly performance reports of two years from July 1998 to June 2000 prior to the survey were analyzed. The overall use of ESP was higher during 1999-2000 than during 1998-1999. Variations were also observed in the use of ESP by types of urban categories. The overall use of selected essential services was comparatively low in thana municipalities compared to the city corporations and district municipalities. The use of all ESP was more pronounced in the static clinics than in the satellite clinics. The use of family-planning services was higher in the satellite clinics than in the static clinics.

The findings indicate that, providing a broader range of services from the clinics alone is not enough to ensure maximum use of ESP by clients. Therefore, in addition to offering a broader range of services, additional strategies may be considered for reducing the unmet health needs of urban NGO clinic clients.

The findings of the study have several implications for the overall improvement of the coverage of ESP in urban clinics and suggest the following:

- Substantial unmet reproductive and child-health needs exist among clients, suggesting:
  - Introduction of a systematic screening checklist to identify and address unmet health needs. A checklist would help reduce unmet health needs of clients and improve the use of ESP in clinics by those who have already taken initiatives to visit the clinics.

- About 85% of clients tend to seek one service at a time, and providers, in turn, concentrate on it. This indicates to see whether there is a need for additional services, suggesting:
  - Use of screening checklist will identify and address missed opportunities.

- Lack of awareness of clients about the availability of specific services of ESP and specific health needs beyond their desired services is the contributing factor for unmet health needs, suggesting:
  - Introduction of behaviour change communication (BCC) at clinics and in the community to provide more information to clients about the availability of a broader range of services and their own health needs. Peers/neighbours can work as motivators.

- Meeting additional family-health needs by addressing missed opportunities will be helpful to:
  - Make the programme cost-effective both for providers and clients. By providing multiple services in a single visit, providers would benefit, and clients would be benefited by spending less time (and money) for travelling and waiting for services.
  - Reduce existing drop-outs in immunization and contraception and improve the use of ESP and coverage.
- Further research is needed to:
  - Test a strategy (a screening checklist) to identify and address unmet health needs of clients which will result in meeting the unmet family-health needs, thereby leading to improving the use of clinic services.

Background

Introduction

In Bangladesh, like other developing countries, the rapid urban growth is a challenge for agencies providing health services to city-dwellers. In 1996, an estimated 24 million people lived in urban areas of Bangladesh, which is one-fifth of the country's population. By 2020, the urban population may reach nearly 80 million, not much less than half of the total population in the country. The urban growth rate in Bangladesh projected at 5.4% in 1990-2010 is significantly higher than that of India (3.1), Sri Lanka (3.0), and Pakistan (4.4) [1]. According to the population census 2001, the number of total population in Bangladesh is 123.1 million, of which 23% live in urban and 77% in rural areas. A comparison of urban-rural population census 2001 with census 1991 shows that 38% of population increased in urban area, whereas in rural areas it was only 10% [2]. About one-third of the population of Dhaka city lives in slums and squatter settlements. The urban slum population has a lower immunization coverage and lower use of antenatal care, higher infant mortality and morbidity rates, and low contraceptive coverage compared to non-slum people [3]. The health needs of this poor population are high, and it is likely that many of their needs are unmet. The urban population growth is much higher among the poor. The health situation in the slum areas will worsen if appropriate programmes are not implemented. Improvements of health and population sectors are urgent priorities of the Government of Bangladesh (GoB). For this reason, the healthcare-delivery system of Bangladesh has adopted a series of vertical strategies, for example, Expanded Programme on Immunization (EPI), Control of Diarrhoeal Diseases (CDD), and programme on Acute Respiratory Infection (ARI). But little coordination ever existed between these programmes. Although the vertical primary healthcare (PHC) programme achieved some progress in terms of immediate control, overlaps and redundancies resulted in the long run, and none of the vertical programmes were deliverable from the basic health infrastructure, thereby failing to tap missed opportunities and address concerns relating to sustainability [4].

The 1994 International Conference on Population and Development (ICPD), held in Cairo, emphasized the need for delivering a broader range of integrated health and family-planning services. This need was echoed by the Health and Population Sector Programme (HPSP) 1998-2003 of the GoB and the National Integrated Population and Health Programme (NIPHP) (1997-2002), supported by the United States Agency for International Development (USAID), to address the issues of missed opportunities and sustainability [5]. Under the NIPHP, the Urban Family Health Partnerships (UFHP) supported NGO clinics providing ESP to the urban population of Bangladesh. The Family Health Research Project former Operations Research Project (ORP) of ICDDRB: Centre for Health and Population Research is responsible to provide research and technical assistance to all the NIPHP partners.

The UFHP, one of the partners of the NIPHP, provides essential health services to city dwellers in urban areas through 27 local NGOs since 1997. These NGOs operates 124 static clinics and 280 satellite teams to run the outreach satellite clinics. One doctor and a paramedic were responsible for providing services in each static clinic; there was also a counsellor and a senior service promoter. The satellite clinics were managed by a two-member team, comprising a paramedic, who provided health services, and a service promoter, who was mainly responsible for behaviour change communication (BCC) and mobilization of clients. On average, 325,000 clients receive ESP from these facilities in each month *(UFHP unpublished documents).* In July 2002, the NIPHP was renamed as NGO Service Delivery Programme (NSDP). The NSDP supports 41 local NGOs to deliver ESP through urban and rural static and satellite clinics.

To improve the coverage of ESP, UFHP felt the need to assess the use of clinic-based services and the extent of unmet health needs of clients for specific ESP at the UFHP-supported NGO clinics. For this purpose, it was needed to know the socioeconomic status of customers, whether the clinic users come from a pool of non-users with unmet needs, or have most recently switched to UFHP-supported NGO clinics from other service facilities. To investigate the above issues, the Family Health Research Project (former ORP) of ICDDR,B, in collaboration with UFHP, designed and conducted this study at the UFHP-supported clinics located in different urban areas.

Rationale

Results of several clinic-based studies in different countries, such as Latin America, Guatemala, Peru, and Mexico, indicated that the temporal and physical integration is not enough to ensure provision of more services to women for meeting their health needs and also ensure that the delivery of reproductive health services will become more efficient and less costly [6].

Findings of a study conducted in a government Model ESP clinic in Dhaka city showed that 8-13% of clients had unmet needs for additional services [7]. Of these, over half had unmet needs for family planning and one-fifth for RTI, and one in 10 children aged less than 5 years visited the clinics, with the problem of acute respiratory infection.

An assessment of the service-delivery system in a maternal child health and family planning (MCH-FP) clinic in Zone 3 of Dhaka city revealed that the rate of missed opportunities for providing immunizations were 44% among children coming to the MCH-FP clinics [8]. For maternal TT immunization the rate of the missed opportunities were 87%.

Studies conducted in hospitals and clinics of Latin America and Guatemala found that clients, who visited a clinic for a particular service at a point of time, had additional needs for other services. But the existence of other services is little known by clients, resulting in the under-use of existing services [6]. Similar findings were also observed in needs-assessment study conducted in Zone 3 of Dhaka city [9]. It was found that 25% and 20% of clients who visited the clinic for non-family-planning and non-EPI services were unaware of the availability of family-planning and EPI services in that facility. The above evidence from home and abroad has an obvious programmatic implication.

Results of the World Bank study showed that there were high burdens of reproductive morbidity among women of developing countries [10]. About one-third of disease burden among women aged 15-44 years is linked to health problems relating to pregnancy, childbirth, abortion, and RTI. Available data for South Asia show that women have a huge unmet need for services relating to these conditions [10].

A recent review of the nine community-based studies of gynaecological morbidity in India showed a considerable burden of RTI/sexually transmitted infections (STIs). Results of studies in Bangladesh also show a significant burden of reproductive morbidity [10]. A survey on nature of morbidity due to RTI among users and non-users of family planning showed that 22% of the 2,929 rural women of Bangladesh reported symptoms of infection. Of 472 symptomatic women examined, 68% had clinical or laboratory evidence of infection. This represents an important unmet need, because RTIs are frequently asymptomatic in women, are not recognized and treated, and may cause long-term problems, including infertility or neonatal sequelae, such as congenital syphilis and gonococcal eye disease.

Lack of systematic screening of total healthcare needs is an important weakness in most integrated programmes. This fact has been observed in different studies in different parts of the world [6]. An appropriate strategy for assessing the unmet health and family-planning needs of clients and adequately addressing these missed opportunities should result in meeting the unmet health and family-planning needs, thereby leading to enhanced use of clinic-based services. Therefore, this study was undertaken to assess the extent of unmet health needs of clients and also to identify the factors that affect the use of ESP in UFHP-supported NGO clinics, aiming at making suggestions/development of strategies to address those needs.

Objectives

The objectives of the study were to: (a) identify the extent of unmet health needs of clients for selected ESP in the NGO clinics supported by UFHP; (b) identify the reasons and factors contributing to their unmet health needs; (c) identify the factors affecting the use of ESP in the NGO clinics; (d) assess the use of ESP in the NGO clinics; and (e) make suggestions to address the unmet health needs.

Research Questions and Indicators

Research questions	Indicators

What is the extent of unmet health needs of clients for delivery of specific ESP at the NGO clinic supported by UFHP?	- Proportion of unmet health needs by type of ESP indicators
	   – Child health (immunization, diarrhoea, and respiratory illness)
	   – Reproductive health (antenatal care, postnatal care, tetanus toxoid, family planning, and reproductive tract infection)
	- Proportion of missed opportunities addressed by service providers

Are the new clients of these UFHP clinics coming from a pool of non-users with unmet needs?	- Proportion of new clients by type of services - Proportion of clients received single and multiple services - Proportion of clients made multiple visits
Are clients switching from other service facilities to the UFHP- supported NGO clinics?	- Proportion of clients switched from other facilities
What factors have influenced clients to visit these UFHP clinics?	- Distance from the clinic - Reasons for choosing the UFHP-supported NGO clinics - Source of information regarding the clinics
What is the use rate of ESP at the UFHP-supported NGO clinics?	- Proportion of selected ESP used by clients (antenatal care, postnatal care, tetanus toxoid, family planning, and reproductive tract infection) - Monthly average use of selected ESP in UFHP-supported NGO clinics (antenatal care, family planning, acute respiratory infection and EPI)

Materials and Methods

Study design, site and period

This cross-sectional study used data from exit interviews with clients and service statistics of clinics. The study was conducted in the following static clinics and all the satellite clinics under the static clinic (Table 1) from 22 July to 22 August 2000.

Table 1. List of UFHP- supported NGO clinics

Categories of municipalities	Name of municipality	Name of NGO
Type A: City corporation	Chittagong Low-performing	Nishkriti
	Khulna High-performing	Family Planning Association of Bangladesh (FPAB)
Type B: District municipalities	Sylhet Low-performing	Sylhet Samaj Kallyan Sangstha (SSKS)
	Sirajganj High-performing	Annanay Samaj Kallyan Sangstha (ASKS)
Type C: Thana municipalities	Feni Low-performing	Prosanthi
	Rajbari High-performing	Voluntary Family Welfare Association (VFWA)

Sampling

The assessment of whether or not a customer who visited the UFHP-supported NGO clinic for a specific service has an unmet need for additional services can be treated as a binomial variable. The sample size was determined using the following formula for a specific level of accuracy and precision.

Calculation $$n = \frac{Z^2 P (1-P)}{d^2}$$

Where,

$n =$ represents the desired sample size of clinic customers needs to be interviewed.

$Z =$ standard normal deviate usually set at 1.96 for a 95% confidence level.

$P =$ is the population mean of interest (the previous study showed that the prevalence of missed opportunity was 13%),

$d =$ is the allowable error (0.05).

Therefore $\quad n = \dfrac{(1.96)^2(0.13 x 0.87)}{(0.05)^2}$ = 173

Thus, the calculated sample size considered for each clinic is 175.

Urban areas in Bangladesh can be classified into three types (A, B, and C), depending on their urbanization characteristics, e.g. size of urban area, population density, etc. UFHP also categories the urban clusters into three groups: A: City corporation, B: District municipality, and C: Thana municipality.

There were variations in implementation of clinic activities and achievements in clinic performance among the clinics situated in different types of urban area. Therefore, to assess the extent of unmet needs in these clinics, this survey estimated the unmet needs, separately for each type of urban area. The sample was independently drawn from each type of urban area, using the following multistage-sampling procedure:

- Initially from each type of urban area (A, B, and C), two municipalities were selected from one high-performing area and one low-performing area. The high- and low-performing areas were selected according to the coverage rates of some specific programme-performance indicators (e.g. contraceptive prevalence rate, coverage of antenatal care, and coverage of tetanus toxoid and child immunization) identified by the national survey in 1999-2000 [11].

- Then from each type of municipality, one static clinic (fixed clinic which provides services 6 days a week) was randomly selected by tossing. And all the satellite clinics under this static clinic were included in the study.

- Clients visiting these clinics were selected consecutively according to the types of services included in ESP considered for the study.

Study population

Data were collected from the customers attending these clinics through exit interviews. In total, 175 clients were selected from each clinic. To identify missed opportunities for specific ESP indicators, the sample was subdivided into specific indicators focusing on the use of those services (family planning, antenatal care, tetanus toxoid, postnatal care, reproductive tract infection, immunization, ARI, and diarrhoea). In total 1,478 clients--860 from static and 618 from satellite clinics--were interviewed.

Questionnaire development and training

The questionnaire used in the survey consisted of the following sections:

a. Background and sociodemographic characteristics of clients to identify client-related factors associated with unmet needs

b. Knowledge of clients and their views on UFHP-supported NGO clinics to know whether clients are aware of the availability of ESP from the clinic

c. Family planning, antenatal care, postnatal care, TT immunization, RTI, child immunization, diarrhoea, and ARI section to know use of these ESP among UFHP clients

d. Identification of missed opportunities for selected ESP indicators, and

e. Client satisfaction of services received.

The questionnaire was pre-tested in two UFHP-supported NGO clinics and finalized after discussions with UFHP personnel. Two-day orientation sessions were organized for the 12 interviewers on the questionnaire followed by a practical training in the two UFHP NGO clinics in Dhaka.

Data processing and analysis

After editing, data were entered into the computer, inconsistencies were checked, and data file was cleaned. Data once entered and cleaned were analyzed using the SAS statistical package. The logistic regression method was carried out to determine the effects of different variables on unmet health needs in the clinics. The unmet health needs of clients for tetanus toxoid, RTI, antenatal care, and family planning were used as dependent variable. The independent variables included age of respondents (MWRA), occupation of women, occupation of husbands, number of children, education of women, duration of stay at the same place, proximity, and last visit to clinic. The unmet health needs of clients were used as dependent variables in the regression (1 if there is unmet health needs, 0 if not).

Results

Background characteristics

The distribution of the respondents' age, family size, educational attainment, monthly income, and residential location in three urban categories and by type of clinic is presented in Table 2.

Table 2. Characteristics of respondents by urban categories

| Variable | Urban categories | | | | | | Total | |
| | City corporation (Type A) | | District municipality (Type B) | | Thana municipality (Type C) | | | |
	Static (n=245) %	Satellite (n=217) %	Static (n=258) %	Satellite (n=241) %	Static (n=357) %	Satellite (n=160) %	Static (n=860) %	Satellite (n=618) %
Age of women (years)								
< 20	14	18	12	16	14	15	13	16
20-29	85	82	85	81	85	83	85	82
>30	01	0	03	03	01	02	02	02
Number of living children								
No child	15	19	16	10	18	14	17	15
1-2	61	51	56	47	55	43	57	47
>3	24	30	28	43	27	43	26	38

Table 2 (*contd.*)

Variable	Urban categories						Total	
	City corporation (Type A)		District municipality (Type B)		Thana municipality (Type C)			
	Static (n=245) %	Satellite (n=217) %	Static (n=258) %	Satellite (n=241) %	Static (n=357) %	Satellite (n=160) %	Static (n=860) %	Satellite (n=618) %
Education of women								
No education	20	42	30	56	25	36	25	46
Primary	26	37	24	24	26	37	26	32
>Secondary	54	21	46	20	49	27	49	22
Length of residency in the same area (years)								
<1	18	16	11	8	12	8	13	11
1-5	31	32	41	35	47	31	41	33
>5	51	52	48	57	41	61	46	56
Distance from home (km)								
<1	70	100	50	94	47	96	54	96
>3	30	0	50	6	53	4	46	4
Means of reaching to clinics								
On foot	40	99	22	95	20	97	26	97
Vehicle used	60	01	78	05	80	03	74	03
Average monthly income of family (TK)								
<1,500	2.	3	1	3	0	0	1	2
1,501-3,000	42	61	22	39	36	64	33	53
3,001-5,000	27	29	28	32	24	19	26	28
>5,000	29	7	49	26	40	17	40	17

Table 2 shows that, irrespective of municipalities and sites of the clinics, more than 80% of the respondents were aged 20-29 years.

Respondents interviewed in the satellite clinics reported having more living children than those using the static clinics. The mean number of children of the respondents who visited the satellite clinics was 2.22 ($\pm$1.69), while for the respondents who visited the static clinics it was 1.81 ($\pm$1.40) Seventeen percent and 15% of the women who visited the static and satellite clinics respectively had no children.

Forty-six percent of the satellite clinic clients reported having no education compared to one-fourth of the static clinic clients. Almost half of the clients of static clinic and over one-fourth of the satellite clinic clients reported having more than secondary education. Over 95% of the satellite clinic clients came from within one km from the clinic, while only about half of the static clinic clients came within one km of the clinic. The number of clients coming from more than a distance of 3 km was higher in the thana municipal static clinics compared to that of the district municipality and city corporation static clinics.

Over 95% of the satellite clinic clients came on foot compared to 26% of the static clinic clients. Over 70% of the static clinic clients used vehicles to visit the clinics, whereas only 3% of the satellite clinic clients used vehicles. In response to a question how long they were living the same area, 56% and 24% of clients, respectively, of the satellite and static clinics stated that they were living in the same area for more than 5 years. As the mobility of families was higher in the city corporation areas, more clients, living in the same location for less than one year, visited the city corporation clinics compared to the district and thana municipality clinics.

It was expected that more clients from well-to-do families visited the static clinics compared to the satellite clinics. Over 50% of the satellite clinic clients had a monthly income ranging from Tk 1,500 to Tk 3,000 compared to one-third for the static clinic clients. Forty percent of the static clinic clients had a monthly income of Tk 5,000 or more compared to 17% of the satellite clinic clients.

Extent of unmet health needs for selected ESP in NGO clinics

To identify the unmet health needs, the clients who visited the clinics for specific ESP were asked whether they currently had any need for any specific services other than their desired services and whether the providers addressed those needs.

Child health services: Table 3 shows the proportion of unmet needs for selected child-health and reproductive health services among clients of the clinics. About one-fourth of children aged less than 2 years had unmet needs for child immunization and two-fifth of children aged less than 5 years had unmet needs for both diarrhoea and ARI separately. However, there were variations in proportion of unmet needs among children of different municipalities. The unmet need of clients for treatment of diarrhoea and ARI in thana municipalities was significantly higher than in district municipality and city corporation clinics. The unmet need for immunization among children from thana municipality was significantly higher compared to children from city corporation clinics.

Reproductive health service: Overall, the unmet need for TT among MWRA was higher (54%) than for any other reproductive health services: family planning 26%, antenatal care 11%, postnatal care 16%, and RTI 15%. The unmet need of clients for TT was higher in the city corporation areas than in the district and thana-level municipalities. Variations in the unmet health needs for other reproductive health services were also observed in the clinics of different types of municipalities. The unmet need of clients for reproductive health component was significantly lower in the thana municipal clinics compared to the district municipal and city corporation clinics, except antennal and postnatal care services.

13

Table 3. Percentage of clients having unmet needs for selected ESP, by type of urban categories

Variable	Urban categories			No. of unmet needs among UFHP clinic clients
	City corporation (Type A)	District municipality (Type B)	Thana municipality (Type C)	
Child health				
Immunization	16	20	27*	22
Diarrhoea	21	39**	49***	38
ARI	21	38**	57**	42
Reproductive health				
Antenatal care	5	14	14	11
TT	66	49**	41**	54
Family planning	31	28	20*	26
RTI	18	21	5**	15
Postnatal care	18	8	16	16

*$p<0.05$, ** $p<0.01$, *** $p<0.001$

Note:

Measurement of Unmet need for ESP:

For example, unmet health need for antenatal care measurement

No. of additional antenatal care needs missed/total antenatal care service needs (requested antenatal care service provided + additional antenatal care needs missed x 100).

(e.g. no. of additional ANC needs missed (10)/total ANC service needs (requested antenatal care 30 + additional antenatal care needs missed 10=40x100=25%).

Reasons for unmet health and family-planning needs of clients

The clients who had unmet health needs for specific health services (e.g. tetanus toxoid, RTI, antenatal care and postnatal care) were asked about the reasons for not seeking treatment during the exit. It was found that, although clients of reproductive age had specific health needs, almost two-thirds did not perceive the importance. The other important reasons mentioned by the clients included: they did not know where they could go for specific services; very few indicated that they did not seek services because of financial constraints.

Factors affecting unmet health needs of clients

The logistic regression method was carried out to determine the effects of different variables on unmet health needs of clients in clinics. Table 4 shows selected factors affecting unmet health needs of clients for TT.

Table 4. Factors associated with unmet heath needs of clients for TT

Variables in the equation	Odds ratio	Confidence interval
Age of women (years)		
<20	0.76	0.51-1.14
20-29 (RC)	1.00	-
30+	0.56*	0.32-0.96
Occupation of women		
Others (RC)	1.00	-
Housewife	0.63	0.49-5.69
Occupation of husband		
Others (RC)	1.00	-
Farmer	1.40*	1.02-1.94
Living children		
No children (RC)	1.00	-
Have children	1.11	0.82-1.51
Education of women		
No education (RC)	1.00	-
Has education	1.36	0.97-1.90
Living status		
Stay in same place 1+ year (RC)	1.00	-
Stay in same place <1 year	2.04***	1.35-3.06
Distance of clinic from home (km)		
>1 (RC)	1.00	-
<1	1.39 *	1.00-1.95
Time of last clinic visit in		
>2 months (RC)	1.00	-
<2 months	0.86	0.62-1.20
Intercept		−1.453
-2 log L		=1061.0
df		=10
n		=924

* p<0.05), *** p<0.001, RC= Reference category

The unmet need for TT among the older age group (30+ years) was 44%, which was lower compared to the 20-29-year age group. A significantly higher (p<0.03) unmet need for TT vaccine was observed among women whose husbands were engaged in agricultural work compared to women whose husbands were engaged in other works. Women staying in the same place for less than one year and living nearer to the clinic had a significantly higher chance of (p<0.001 and p<0.05) of having unmet need for TT vaccine (Table 4).

Factors associated with unmet needs of clients for reproductive tract infection

Although, older women (30 years+) had higher unmet need for RTI services, it was not statistically significant. Since other variables did not attain any significant differences for unmet need for RTI among the study population, it is not shown in a table form.

Although not significant, the unmet need for ANC was lower among younger and older age groups of women compared to women in the age group of 20-29 years. Women who had children had a significantly lower (p<0.001) unmet need for antenatal care compared to women without any children. A significantly higher (p<0.05) unmet need for antenatal was observed among educated women compared to uneducated groups. Women who visited the clinics within 2 months had a significantly lower (p<0.03) unmet need for antenatal care compared to women who visited the clinics 2 months before (Table 5).

Table 5. Factors associated with unmet heath needs of clients for antenatal care

Variables in the equation	Odds ratio	Confidence interval
Age of women (years)		
<20	0.32	0.09-1.04
20-29 (RC)	1.00	-
Age 30+	0.47	0.07-3.09
Occupation of husband		
Non-farmer (RC)	1.00	-
Farmer	1.34	0.43-4.12
Living children		
No children (RC)	1.00	-
Have children	0.08***	0.03-0.24
Education of women		
No education (RC)	1.00	-
Education	10.15*	1.19-86.7

Table 5 (*contd*.)

Table 5 (*contd.*)

Variables in the equation	Odds ratio	Confidence interval
Living status		
Stay in same place 1+ year (RC)	1.00	-
Stay in same place <1 year	0.23	0.03-1.96
Distance of clinic from home (km)		
>1 (RC)	1.00	-
<1	1.93	0.57-6.50
Time of last clinic visit in		
>2 months (RC)	1.00	-
<2 months	0.34*	1.12-0.90
Intercept		–2.406
-2 log L		= 131.60
df		=8
n		=567

* p<0.05, **p <0.01, ***p <0.001, RC= Reference category

As expected, the unmet need for family-planning method was significantly lower (p<0.001) among the older-age group (30+ years) of women compared to the middle-age group (20-29 years). Significantly lower (p<0.001) unmet needs were observed among women who had children and were educated compared to women who had no children and no education. Again, a highly significant (p<0.001) unmet need for family-planning method was observed among women who lived within 1 km from the clinic compared to women who lived more than 1 km away from the clinic (Table 6).

Table 6. Factors associated with unmet heath needs of clients for family planning

Variables in the equation	Odds ratio	Confidence interval
Age of women (years)		
<20	0.79	0.48-1.32
19-20 (RC)	1.00	-
30+	0.41 **	0.19-0.85
Occupation of women		
Others (RC)	1.00	-
Housewife	2.02	0.94-4.34

Table 6 (*contd.*)

Variables in the equation	Odds ratio	Confidence interval
Occupation of husband		
Non-farmer (RC)	1.00	-
Farmer	1.30	0.86-1.94
Living children		
No children (RC)	1.00	-
Have children	0.21***	0.14-0.34
Education of women		
No education (RC)	1.00	-
Education	2.51***	1.66-3.79
Living status		
Stay in same place 1+ year (RC)	1.00	-
Stay in same place <1 year	1.44	0.83-2.48
Distance of clinic from home (km)		
>1 (RC)	1.00	-
<1	1.80 **	1.20-2.68
Time of last clinic visit in		
>2 months (RC)	1.00	-
<2 months	1.15	0.76-1.72
Intercept		–0.34
-2 log L		=648.8
df		=9
n		=646

* p<0.05, ** p<0.01, *** p<0.001, RC= Reference category

Additional need of services addressed by providers

To understand the missed opportunities addressed by the providers, the clients who were identified and had needs for additional services were asked whether the provider had referred or provided them with those specific services. Table 7 shows the clients identified additional services. Of them, 35% of RTI, 38% of antenatal care, 25% of family-planning cases were addressed by the providers. The additional need of services for TT, child immunization, and postnatal care addressed by the providers was 17%, 19%, and 12% respectively.

Table 7. Distribution of additional health services addressed by providers

Additional service	No. of clients needed additional services	Providers referred or provided services	
		No.	Percentage
TT	314	52	17
RTI	51	18	35
Antenatal care	55	21	38
Family planning	244	58	24
Child immunization	104	20	19
Postnatal care	9	1	12

Number of visits to clinics

The clients were asked whether they had previously visited the UFHP clinics. Twenty-eight percent reported that they had never visited the clinics. Table 8 shows the distribution of visits to clinics within the last one-year prior to the study. It was found that the proportion of people visiting one time was similar to both static and satellite clinics. However, the static clinics in city corporations and district municipalities attracted more new clients compared to satellite clinics, except district satellite clinics. Over one-third of both static and satellite clinic clients visited the clinics 4 times or more within last one year.

Table 8. Proportion of new clients and clients who made multiple visits to clinics, by urban categories

Variable	Urban category							
	City corporation (Type A)		District municipality (Type B)		Thana municipality (Type C)		Total	
	Static (n = 245)	Satellite (n= 217)	Static (n= 258)	Satellite (n=241)	Static (n=357)	Satellite (N=160)	Static (n=860)	Satellite (n=618)
Visiting 1st time	33	19	31	41	24	21	29	28
Visited once	-	1	9	11	3	-	4	5
Visited 2-3 times	30	30	34	24	35	20	33	25
Visited >4 times	37	50	26	24	38	59	34	42

Clients: revisited, switched from other sources, and new clients by type of services of ESP

To identify new clients, clients switched from other sources, and revisited clients (who visited the clinics before and now again came to receive services) of the UFHP-supported NGO clinics, all clients were asked from where they had received the specific services most recently. Of the antenatal care clients, 60% were new, 13% switched from other sources, and 28% revisited the clinics. Of the clients who visited for postnatal care and RTI services, 72% and 52% respectively were new. Of the TT clients, more clients were visited the clinics previously. Table 9 shows the distribution of clients switched from other sources, revisited clients, and new users by type of ESP.

Table 9. Distribution of clients, who previously visited clinics, switched from other clinics, and first time visited, by type of ESP

Service	All municipalities			Total no. of clients
	Previously visited (%)	Switched from other clinics (%)	1st time visited (%)	
Family planning	40	24	36	216
Antenatal care	27	13	60	265
Postnatal care	28	-	72	58
TT	59	14	27	227
RTI	29	19	52	190
Immunization	60	13	27	304

Factors for choosing UFHP-supported NGO clinics

Table 10 presents the clients' views to choose UFHP-supported NGO clinics for getting services by category of municipalities and by types of clinics. The clients were asked the reasons for choosing UFHP-supported NGO clinics. A significantly higher proportion of clients of both static and satellite clinics in city corporation and thana municipality mentioned proximity of clinics as the reason for choosing UFHP-supported NGO clinics compared to the district municipal clinics. Another significant reason was "less-expensive services" provided by the UFHP-supported NGO clinics. The respondents also mentioned some other reasons, but no significant differences were observed between clinics of city corporation, district municipalities or thana municipalities, except for the reason "variety of health services provided" mentioned by the thana-level municipal clinic clients.

20

Table 10. Percentage distribution of respondents, by reasons for choosing clinics

Variable	City corporation (Type A)		District municipality (Type B)		Thana municipality (Type C)		Total	
	Static (n=245)	Satellite (n=217)	Static (n=258)	Satellite (n=241)	Static (n=357)	Satellite (n=160)	Static (n=860)	Satellite (n=618)
Proximity of clinic	56***	90***	37	78	48***	96***	47	87
Skilled provider	34	36	41	27	38	31	37	32
Variety of health services provided	19	15	18	13	28**	16	22	12
Friendly behaviour of providers	32	34	40	36	30	25	29	28
Short-waiting time	6	6	9	3	6	4	7	4
Less expensive	49***	49***	19	13	36***	47***	36	45

*p<0.05; **p< 0.01; ***p< 0.001,Multiple responses were allowed

Source of information

Table 11 shows the client's source of information by type of urban areas and clinics. Thirty-six percent of the satellite clinic clients mentioned NGO worker as a source of information, whereas 28% of the static clinic clients mentioned NGO worker. Relatives and family members of the static clinic clients also played a key role as a source of information. Television was predominantly a source of information for static clinic clients.

21

Table 11. Percentage distribution of respondents, by source of information regarding clinics

Variable	City corporation (Type A)		District municipality (Type B)		Thana municipality (Type C)		Total	
	Static (n=245)	Satellite (n=217)	Static (n=258)	Satellite (n=241)	Static (n=357)	Satellite (n=160)	Static (n=860)	Satellite (n=618)
Interpersonal								
Neighbour	69	69	39	53	53	58	53	60
Relative	23	7	33	12	41	21	33	13
Family member	4	7	10	7	17	4	15	6
NGO worker	44	72	5	2	34	39	28	36
Print media								
Poster	6	3	8	0	2	8	0	3
Signboard	15	16	18	5	13	11	15	11
Electronic media								
Milking	1	10	2	4	3	1	2	5
TV	24	9	2	51	30	6	27	7
Radio	1	1	25	1	8	3	5	1

Multiple responses were allowed

Use of ESP

To know the coverage/use of ESP among the clients of UFHP-supported NGO clinics, clients were asked whether they received the specific ESP or whether they had any problems relating to specific ESP (e.g. antenatal care, RTI, TT, family planning, EPI, and ARI).

Use of antenatal care: Pregnant women and women who gave birth within last one year were asked whether they received antenatal care during their pregnancy. Fig. 1 shows the proportion of antenatal care received by the currently-pregnant women and the women who gave birth within last one year. Of the pregnant women who visited the clinics, over 80% received at least one antenatal care service. Very small variations were observed in proportion of receiving antenatal care service in different types of municipalities. Over two-thirds of the clients, who did not receive antenatal care, did not
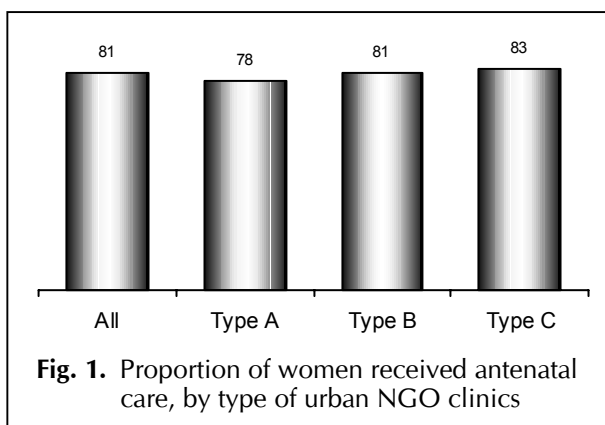

Fig. 1. Proportion of women received antenatal care, by type of urban NGO clinics

22

think that it was needed.

Use of reproductive tract infection services: Women of reproductive age were asked whether they had any problem relating to RTI (symptoms of white discharge and lower abdomen pain) within last 6 months (Fig. 2). One-fourth of them had RTI symptoms. A higher proportion of the clients with RTI symptoms were observed in the district and thana-level municipality clinics (28%) compared to the city corporation clinics (20%). Of the 316 clients with RTI symptoms, only 44% sought treatment. The clients perceived that RTI was a common problem and, as such, they did not give importance to it and did not seek treatment.

Fig. 2. Proportion of women of reproductive age with RTI symptoms who visited clinics
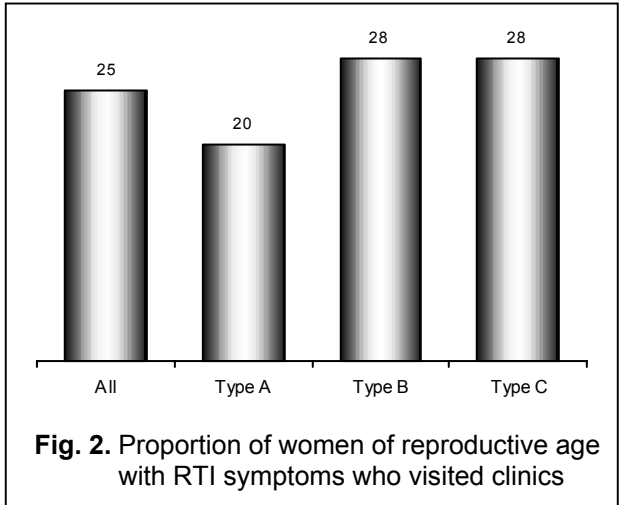
Use of TT services: All women of reproductive age were asked whether they received TT immunization. Eleven percent reported that they did not receive any TT immunization. Thirty-five of those who received only TT1 and TT2, 32% received TT3 and TT4, and 33% received TT5. There were some variations in TT coverage among the clients by type of urban areas (Fig. 3).

Fig. 3. Proportion of TT immunization given to clients of UFHP-supported NGO clinics, by type of urban areas
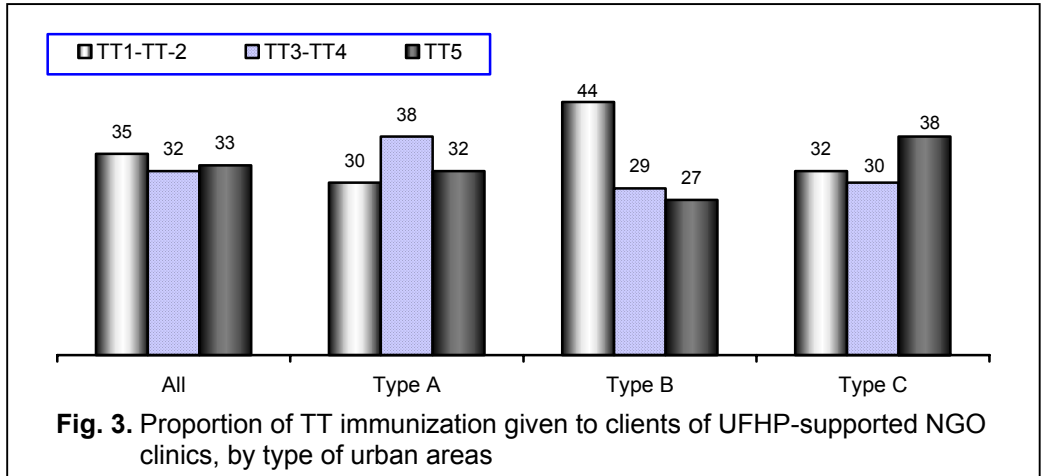
Use of family-planning services: Of the MWRA who visited the clinics, 58% were using family- planning methods (both modern and traditional methods). Variations were observed in the level of current use of contraceptives in different types of municipalities (Fig. 4). Current use of contraceptive methods was 61% among the women in city corporation clinics followed by district (57%) and thana municipality (55%) clinics. No significant differences in contraceptive use by the respondents from the city corporation clinics or district municipality and thana municipality clinics were observed. However, a significantly higher proportion of respondents from the city corporation clinics were using contraceptives compared to the respondents who visited the thana-level municipality clinics.
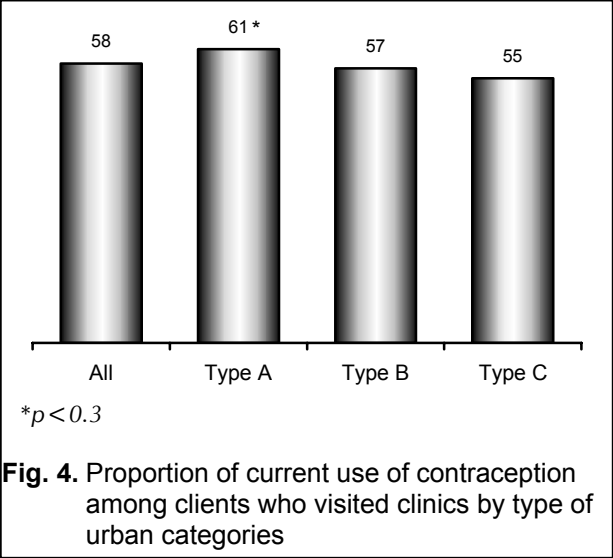

*p<0.3

Fig. 4. Proportion of current use of contraception among clients who visited clinics by type of urban categories

Use of EPI services among children aged less than two years: Fig. 5 shows the proportion of children aged less than 2 years received EPI services. Of the children, 87% received EPI services, and 13% did not receive any immunization services. Ninety-two percent of the clients of C type municipalities, 86% clients of B type municipality, and 83% clients of A type municipalities received EPI services. A significantly higher proportion of children aged less than 2 years sought immunization services from the thana municipality clinics compared to the city corporation clinics. No significant differences were observed between the city corporation clinics and the district municipality and thana municipality clinics.
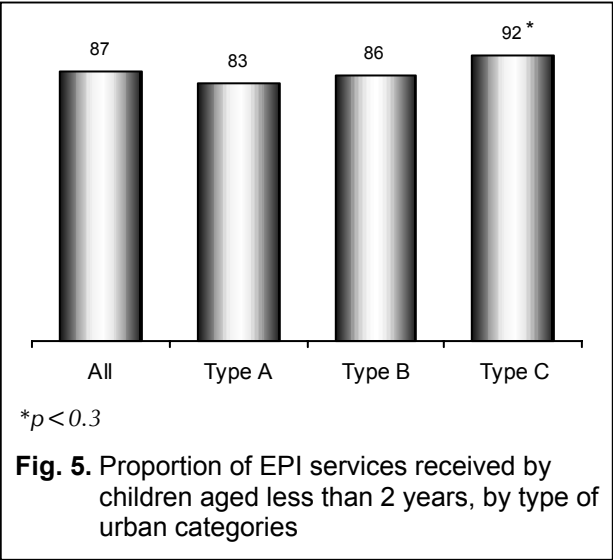

*p<0.3

Fig. 5. Proportion of EPI services received by children aged less than 2 years, by type of urban categories

Use of *ARI services among children aged less than five years: M*others who visited the clinics along with their children aged less than 5 years were asked whether their children had been ill with rapid breathing and/or difficult breathing or chest indrawing, along with or without cough prior to the two-week period. Thirty-three percent of the children had ARI symptoms during last two weeks. Clients of the district and thana-level clinics reported that a higher proportion of children had ARI symptoms (39% and 35% respectively) compared to the city corporation clinics (18%) (Fig. 6).
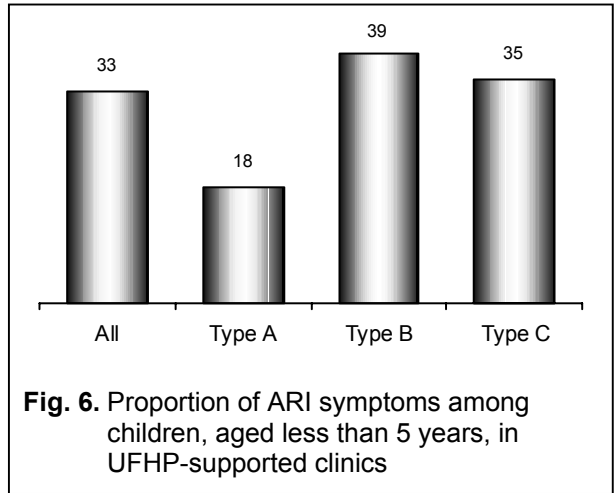
Fig. 6. Proportion of ARI symptoms among children, aged less than 5 years, in UFHP-supported clinics

Monthly average use of selected ESP in UFHP-supported clinics: To assess the trend in monthly visits by clients to the UFHP-supported NGO clinics, monthly performance reports of 2 years from July 1998 to June 1999 and July 1999 to June 2000 were collected from the clinics and analyzed. Monthly trends in the use of selected ESP are shown in Fig. 7-9.

Fig. 7. Monthly average use of selected ESP in UFHP-supported clinics located in city corporations (Type A)

25

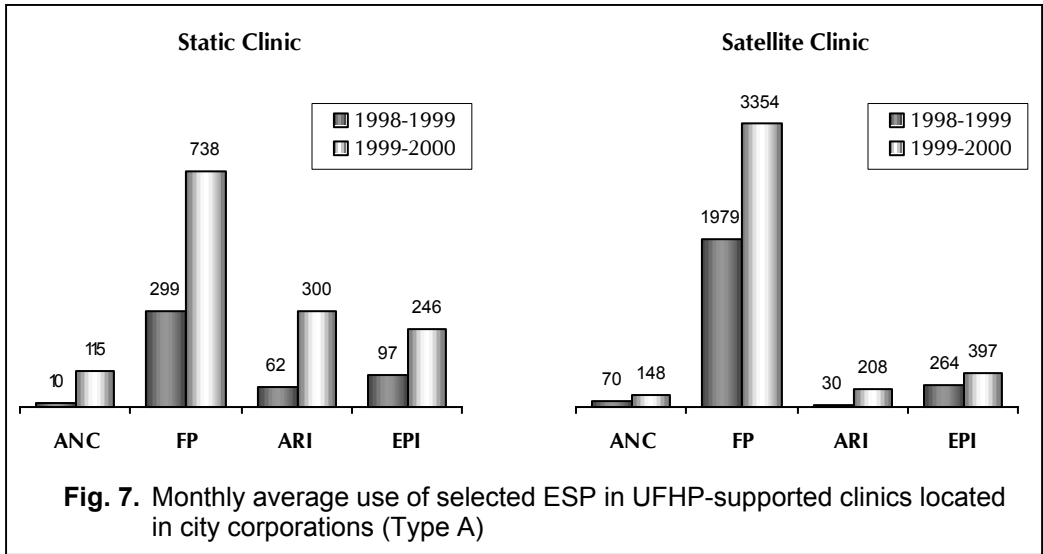Figure 7 shows the overall use of ESP in the city corporation clinics (Type A). It was observed that the level of use of all ESP increased in both types of clinic during 1999-2000 compared to the 1998-1999 period. The use was more pronounced in the satellite clinics compared to the static clinics of all ESP, except ARI. In the satellite clinics, family-planning services were remarkable in 1998-1999; the number of clients of family planning in the static clinics was 299, while in the satellite clinics it was 738; in 1999-2000, the number of clients of family planning in the static clinics was 1,979, while in the satellite clinics it was 3,354.

Figure 8 shows the monthly average use of selected ESP offered from the district-level municipality clinics (Type B). Like in city corporation clinics, the trends for each ESP indicator increased in the district municipality clinics in 1999-2000 compared to the period 1998-1999.

Fig. 8. Monthly average use of selected ESP in UFHP-supported clinics in district municipality (Type B)
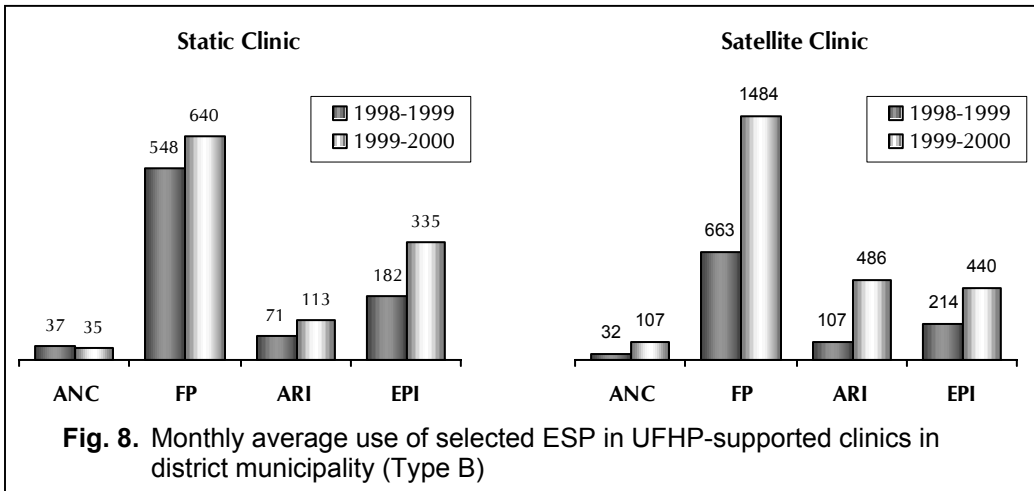
Figure 9 shows the monthly average use of selected ESP offered from the UFHP-supported clinics located in thana municipality (Type C). Although a less number of clients visited the thana municipality clinics for selected ESP, an increased use trend was observed between 1998-1999 and 1999-2000. The use increased for all ESP indicators in the static clinics, while the use of family-planning services only increased in the satellite clinics during 1999-2000.

Fig. 9. Monthly average use of selected ESP in UFHP-supported clinics located in thana municipality (Type C)
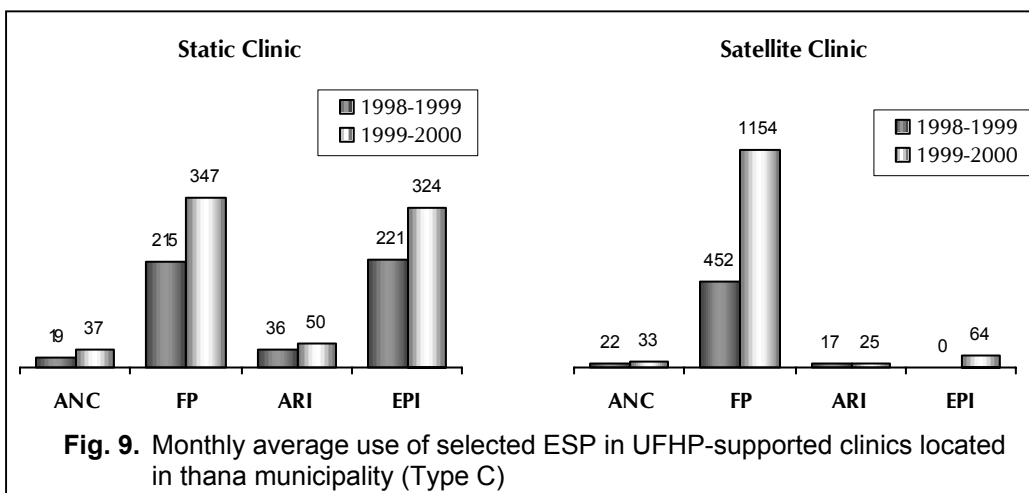
Discussion

The main objective of the present study was to assess the unmet reproductive and child-health needs of clients visiting NGO clinics supported by UFHP. The demographic profiles of urban clinic clients were analyzed by type of visits made by the clients, such as, revisited clients, clients switched from other sources, and new clients. The study also estimated the extent of unmet reproductive and child-health needs among the clients; reasons and factors relating to unmet health needs; programmatic factors that attracted the clients to visit the UFHP NGO clinics; and use of ESP. Comparisons were also made among the clinics of city corporation, district municipalities, thana municipalities, and also between the static clinics and the satellite clinics.

The average number of children among the clients of satellite clinics was higher than among the clients of static clinics. The clients of satellite clinics were much poorer than the clients of static clinic. Similar findings were observed in the study of health-seeking behaviour and ability to pay for selected health services by the UFHP clients [12]. The satellite clinic clients were less educated and living nearer to the clinics compared to the static clinic clients. The district and thana-level clinics provided services to more stable clients (stayed in same place more than one year) compared to the city corporation clinics.

The findings of the study revealed the existence of substantial unmet reproductive and child-health needs among the clients. Almost one-fourth of the children aged less than 2 years had unmet needs for immunization, and two-fifths of the

children aged less than 5 years had unmet needs for diarrhoea and ARI separately. Twenty-six of the MWRA had unmet need for family-planning and 11% for antenatal care, 54% for TT, 16% for postnatal care, and 15% for RTI. It seemed that clients tended to seek one service at a time, and providers concentrated more in addressing that particular need(s) and did not inform clients about, or screened for, needed preventive services. Therefore, other health and family-planning needs are likely to remain unmet. Similar findings were observed in the study conducted in Mexican health centres [6]. It is obvious that integration of services alone would not ensure the identification of unmet needs and addressing of missed opportunities. Introduction of systematic screening of clients will be an effective approach to identify and address missed opportunities resulting in decreased unmet health needs. To ensure the provision of a broader range of services and to address the missed opportunities in the UFHP, a screening tool also needs to be introduced.

The key reason of unmet health needs for specific ESP was that the clients did not think that these specific services were needed for them. This indicates that the clients were in need of specific ESP, but due to unawareness of their own health needs they did not ask providers for further help.

It was found that factors, such as, age, marital status, occupation of women, occupation of husbands, education of women, number of living children, and duration of living in the same area and proximity were significantly associated with unmet health needs of clients for ESP.

The findings showed that about 30% of the clients were new, and others were the UFHP revisiting clients. Over half of the antenatal and postnatal care, and RTI/STD clients were new. The clients who switched from other sources ranged from 10% to 19%. The findings indicated that the UFHP-supported NGO clinics were able to attract a large number of new clients (who first received specific services from UFHP) and also attracted those clients who visited other clinics. Nevertheless, the number of revisiting UFHP clinic clients was also encouraging.

The findings revealed that interpersonal communication played a key role as a source of information. Neighbours and relatives could play a key role in disseminating the information about clinics and their services, which might help make the community people aware of their own health needs, thereby reducing the unmet health needs.

It is interesting to note that some of the coverage of ESP was higher among the clients of UFHP clinics in this survey, while some were lower compared to the UFHP baseline survey [13]. For example, in the baseline survey, it was found that the coverage of antenatal care was 60%, while in this clinic-based survey, it was 80%, but

28

the coverage of family-planning was stable. It is encouraging that the coverage of ESP for UFHP clinic clients was comparatively higher than the national coverage. The national family-planning coverage for 1999-2000 was 54%, while it was 58% for the UFHP clinic clients [11]. The coverage of family planning could be higher if the providers would have screen all the clients for specific ESP, provided information on family-planning services and offered or referred the clients for family-planning services.

The findings of the study suggest a trend towards increased use of selected ESP in the UFHP-supported NGO clinics. It appeared that, over time, the quality of services of clinics improved resulting in increased use of ESP. But at the same time, it was also found that there were substantial unmet reproductive and child-health needs among the clients of UFHP-supported NGO clinics. So, there is still a scope to increase the use of ESP more through addressing missed opportunities. BCC also needs to be ensured at the community to address the unmet needs of clients who do not visit the clinics and to address the problems of drop-outs of immunization and family-planning methods as well.

Lessons Learned and Recommendations

The findings of the study have several implications for the overall improvement of the coverage of ESP in urban clinics and suggest that:

- Substantial unmet reproductive and child-health needs exist among clients, suggesting:
  - Introduction of a systematic screening checklist to identify and address unmet health needs. A checklist would help reduce unmet health needs of clients and improve the use of ESP in clinics by those who have already taken initiatives to visit clinics.

- About 85% of clients tend to seek one service at a time, and providers, in turn, concentrate on it. Therefore, there is a need to see if there are unmet health needs for other services, suggesting:
  - Use of screening checklist will identify and address missed opportunities.

- Lack of awareness of clients about the availability of specific ESP and specific health needs beyond their desired services is the contributing factor for unmet health needs suggesting:
  - Introduction of behaviour change communication at clinics and in the community to provide more information to clients about the availability of a broader range of services and their own health needs. Peers/neighbours can assist as motivators.

- Meeting additional family-health needs by addressing missed opportunities will be helpful to:

- Make the programme cost-effective for both providers and clients. By providing multiple services in a single visit, providers would benefit, and clients would be benefited by spending less time (and money) travelling and waiting for services

- Reduce existing drop-outs in immunization and contraception and improve the use and coverage of ESP.

▪ Further research is needed to:

- Test a strategy (a screening checklist) to identify and address unmet health needs of clients which will result in meeting the unmet family-health needs, thereby leading to improving the use of clinic services.

References

1.   Bangladesh development series, The World Bank, Bangladesh 2020: a long–run perspective study. Dhaka: University Press Limited for World Bank, 1998.

2.   Population census 2001: preliminary report. Dhaka: Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning, Government of Bangladesh, 2001:4,6.

3.   Laston SL, Baqui AH, Paljor N, Silimperi DR. Immunization beliefs and coverage in Dhaka urban slums. Dhaka: International Centre for Diarrhoeal Disease Research, Bangladesh, 1993: 1-36 (Urban MCH-FP working paper no. 5).

4.   Hasan Y, Alamgir SU, Reza M, Ashraf A, Barket-e-Khuda. Developing a cost-effective tired system for delivering essential services package review. Dhaka: International Centre for Diarrhoeal Disease Research, Bangladesh, 1999:1 (ICDDR,B special publication no. 93).

5.   Bangladesh. Ministry of Health and Family Welfare. Health and Population Sector Programme (HPSP) 1998-2003: programme implementation plan. Dhaka: Ministry of Health and Family Welfare, Government of Bangladesh, 1998:1,9.

6.   Vernon R, Foreit J. Improved client screening can help achieve ICPD integration goals, July 1997.

7.   Khanam R, Alamgir SU, Routh S. Tapping missed opportunities: an innovative approach based on screening algorithms (abstract). *In*: Programme and abstracts of 9th Scientific Conference, 11-13 February 2000. Dhaka: International Centre for Diarrhoeal Disease Research, Bangladesh, 2000:63.

8.   Perry HB, Arifeen SE, Hossain I, Weierbach R. The quality of urban EPI services in Bangladesh: findings from the urban initiatives needs assessment study in Zone 3 of Dhaka city. Dhaka: International Centre for Diarrhoeal Disease Research, Bangladesh, 1996:23 (ICDDR,B working paper no. 24).

9.   Arifeen SE, Mookherjee S. The urban MCH-FP initiative: an assessment of programme needs in Zone 3 of Dhaka city. Dhaka: Urban MCH-FP Extension Project (Urban), International Centre for Diarrhoeal Disease Research, Bangladesh, 1995:25.

10. Saroj P. Unmet reproductive and sexual health needs in South Asia. Health Pop Dev Countr 1998;1(2):29-39.

11.   Mitra SN, Sabir AA, Saha T, Kumar S. Bangladesh demographic and health survey 1999-2000. Dhaka: National Institute of Population Research and Training, 2001:51.

12.   Health seeking behavior, willingness and ability to pay for selected health services in Urban Family Health Partnership (UFHP) areas of Bangladesh Dhaka. Dhaka: Health Economics Programme, International Centre for Diarrhoeal Disease Research, Bangladesh, 1999:13p (Draft).

13.   UFHP baseline survey. Dhaka: Mitra and Associates, 1999.

Definition of Key ESP Indicators Used in the Study

ESP indicator	Unmet needs	Switched from other sources	New user
Family planning	Family-planning non-user of MWRA visits clinic for particular ESP other than family-planning services and does not want any more children or wants to wait two or more years to get another child	Currently using or used family-planning method within the last two months, and took services from other than the UFHP-supported clinics and has now come to UFHP- supported clinics for family-planning services	Currently not using any method or did not use any method for the last two months and visited this clinic for family-planning services for the first time
Antenatal care	Currently pregnant or who gave birth within the previous 1 year but did not seek antenatal care services from any providers	Antenatal care customer who previously visited other providers for antenatal care during this pregnancy and has now come to the UFHP-supported clinic for antenatal care	Visited the UFHP-supported clinic for antenatal care services for the first time and never visited any other facilities for antenatal care services during this pregnancy
Postnatal care	Currently in postpartum period but did not seek postnatal care from any providers	Postnatal care customer previously visited other providers for postnatal care during this postpartum period and has now come to the UFHP clinic for postnatal care	Visited the UFHP-supported clinic for postnatal care for the first time and never went to any other providers for postnatal care during the postpartum period
Reproductive tract infection	Customers who have symptoms of reproductive tract infection or had reproductive tract infection symptoms but did not visit any providers during the last 6 months	Reproductive tract infection customer previously visited other providers for reproductive tract infection services during the last 6 months and has now come to the UFHP clinic for reproductive tract infection services	Visited the UFHP clinic for reproductive tract infection services for the first time and previously did not visit other providers for reproductive tract infection services during the last 6 months

Appendix (contd*.)*

ESP indicator	Unmet needs	Switched from other sources	New user
TT immunization	Did not visit any providers for TT vaccine or received TT vaccine more than one year ago and did not complete proper dose(s)	TT customer previously visited other providers for TT immunization and has now come to the UFHP clinic for TT immunization	Visited the UFHP clinic for 1st dose of TT and never visited other providers for TT immunization
Child immunization	A child aged less than 2 years visited the clinic but did not receive any dose of immunization or received immunization more than 6 months ago and did not complete proper doses	EPI customer previously visited other providers for immunization and has now come to the UFHP clinic for EPI services	Visited for routine immunization for the first time and never visited any facilities for routine immunization
Acute respiratory infection	A child with acute respiratory infection symptoms but did not visit any facilities during last 2 weeks	ARI customer previously visited other facilities for acute respiratory infection services during last 2 weeks and has now come to the UFHP clinic for acute respiratory infection services	Visited the UFHP clinic for acute respiratory infection services for the first time and previously did not visit any other facilities for ARI services during the last 2 weeks
Diarrhoea	Children aged less than 5 years who had diarrhoea but did not visit any facilities during the last 2 weeks for treatment of diarrhoea	Visited the UFHP-supported clinic to seek treatment of diarrhoea and previously visited other facilities for diarrhoea services during last 2 weeks and has now come to the UFHP clinic for diarrhoea services	Visited the UFHP-supported clinic for diarrhoea services for the first time and previously did not visit other facilities for diarrhoea services during the last 2 weeks

34