Making pregnancy safer has been central to population policies especially after the International Conference of Population Development regime, and keystone of second phase of Reproductive and Child Health care (RCH) programme. Pregnancy-related women health included antenatal care during pregnancy, provision of safe delivery and post-natal care after delivery. Promotion of maternal and child health service has been one of the most important components of the family welfare programme of the Government of India and the National Rural Health Mission (NRHM).

The authors are: 1. Sister Tutor, College of Nursing, Dr. RML Hospital, New Delhi and 2. Vice President, Indian Nursing Council, Kotla, New Delhi.

Bloom et al (1999) found that utilisation of antenatal and skilled delivery services improved pregnancy outcome. Various studies (Griffiths & Stephenson, 2001; Ram & Singh, 2006) have found that inspite of the best efforts, women’s utilisation of maternal health services is influenced by perceived socio-cultural, economic, and health system factors operating at the community, household, and individual levels as well as within the larger social and political environments and health care infrastructure. Therefore several strategies have been introduced from time to time to address the MCH-

MCH Services in Delhi in Terms of Beneficiaries’ Awareness, Coverage and Satisfaction

Bhargavi CN¹, Asha Sharma²

Abstract
Maternal and child health (MCH) services have seen many changes, the recent one being introduction of a trained female community health activist under NRHM – ‘ASHA’ (i.e. Accredited Social Health Activist) to act as a link worker in MCH programmes. But any programme, no matter how relevant its components are, is likely to fail unless it succeeds in improving the coverage, knowledge and imparting satisfaction to its clients. Literature and anecdotes reported a mismatch between the people’s need and the services delivered. People have a right to be involved in the decision making. Clients’ (beneficiaries’) perception and satisfaction will help to understand the gaps and adopting a bottom-up approach i.e. the understanding of the ground realities from the mothers so as to throw light on quality, need and sustainability of the MCH-related programmes.

In this descriptive study conducted in Delhi from September to December 2012 to analyse MCH services in Delhi in terms of beneficiaries’ awareness, coverage and satisfaction, a multi stage sampling technique was used and a sample size of 1000 beneficiaries was selected randomly from the list of mothers obtained from the conveniently selected Primary Health Centre. Data were analysed by descriptive and inferential statistics in SPSS. The study findings showed that 92.65 percent mothers received their first ante-natal check-up in the first trimester but 48.3 percent of mothers only received three ante natal check-ups. Home visits were found to be performed by health worker both in ante natal and post natal period during 3rd month of pregnancy and within 6 week after delivery. Among the health workers who visited beneficiaries, ASHA visited mothers the most during ante natal and post-natal period and ANM visited less during ante natal period and somewhat nil (0.1%) within first 6 weeks after delivery (post-natal). Also, 99.6 percent of mothers received IFA tablets and there was 100 percent coverage of TT immunisation. Most deliveries (96%) were indicated to be institutional and 40 mothers (4%) delivered at home. The reason for home delivery was that they did not feel institutional delivery as necessary; 92.2 percent mothers were given breastfeeding within first two hours of delivery; 99.6 percent of mothers were aware about various components of MCH services and the major source of information regarding MCH services was found to be ASHA followed by ANM. Majority of beneficiaries (86%) were found to be fully satisfied with the MCH services and there was no rating below average satisfaction. No significant difference in satisfaction based on their age & educational qualification was observed; however significant difference was observed in the satisfaction based on the number of children as the mothers with more than one child were more satisfied than mothers with one child which may be due to high expectations level of mothers during first child birth than the second.
related issues and recently ASHA (Accredited Social Health Activist-community Health Volunteer) has evolved as the new band of community-based functionality in addition to Anganwadi Workers and Auxiliary Nurse and Midwives (ANMs) to identify beneficiaries and facilitate receipt of adequate antenatal, natal and postnatal care.

Tsui (2003), Pathak & Mohanty (2010) and others studied the factors contributing to poor maternal and child health outcome and access to care. Various determinants of beneficiaries’ perceptions of health services and quality have been highlighted in the literature and successes of the efforts in terms of policies and programmes for deployment of human resources have been assessed quantitatively using household survey but data did not provide enough information on users perspective on services received, their awareness, satisfaction etc.

The 6th Central Review Mission (CRM) report 2011 of Delhi State (NRHM) showed a reduction in the Infant Mortality Rate of Delhi from 35 in 2005 to 28 in 2011. As reported, a significant number of home deliveries took place after women were turned back from public hospitals, presumably because they were overcrowded. UNDP – Human Development Joint Report (2006) indicated that in Delhi about 45 percent population are living in impoverished settlements with little access to basic facilities. About 8 percent of the Delhi population are under the below poverty line. About 50 percent children and vulnerable women lack basic facilities.

Several innovative strategies have been formulated for improving maternal and child health services, recent one being Janani Suraksha Yojana (JSY), launched on 12 April 2005, which is a safe motherhood intervention under NRHM, with the objective of reducing maternal and neo-natal mortality by promoting institutional delivery among the poor pregnant women. JSY has identified ASHA as an effective link between the Government and the poor pregnant women to identify beneficiaries and facilitate receipt of adequate antenatal, natal and postnatal care (NRHM, 2005). The current rate of ANC uptake is found to be encouraging largely because the packages vary so much from place to place in terms of components, timing and frequency of visits. This study is an attempt to find the MCH services rendered in Delhi and satisfaction on the services as expressed by beneficiaries.

**Objectives**

1. To assess extent of ante natal, natal and post natal service coverage in Delhi, and awareness of beneficiaries regarding MCH services.
2. To assess the satisfaction of beneficiaries regarding MCH services.
3. To find the difference in satisfaction of beneficiaries’ regarding MCH services with selected demographic variables.

**Review of literature**

National Family Health Survey-3 indicated the current utilisation of antenatal care services on an average as 77 percent (72% in rural, 91% in urban areas). Singh et al (2008) observed that only 9.7 percent of the recently delivered women received adequate antenatal care and 21.14 percent only had at least one postnatal check-up. The study attributed such findings to the ignorance of majority of the women and their families regarding importance of post-natal care and also partly due to lack of effort on the part of ASHA. According to UNICEF report-2011, the maternal mortality rate strongly indicate the overall effectiveness of the health care delivery system. Available evidence suggests that many countries cannot keep the commitments to “ensure appropriate pre-natal and post-natal health care for mothers” and to “develop preventive health care, guidance for parents and family planning education and services”.

Pandey et al studied the individual and community factors and perceptions that influence women’s behaviours and utilisation of maternal and child health care provided by Government. The findings indicated that support of household members, previous health care experiences and social networks in the village and interaction with health workers affect women’s decision to seek care.

In a case study on maternal health in India and its national safe motherhood programmes, Mavalankar & Vora indicated that the maternal healthcare indicators have slowly improved, institutional deliveries have risen from 26 to 39 percent, and nearly half of the women now have their births attended by health personnel. Post-natal care remains the most neglected area with only 42 percent of women receiving such care within two months of delivery, and a negligible number of women are visited in the vulnerable first week after delivery. The illiterate mothers and mothers from the lowest wealth quintile used basic maternal healthcare much less than their literate or wealthier counterparts and about half of the pregnant mothers did not complete three antenatal visits, and a quarter did not receive tetanus prophylaxis. Only 65 percent of pregnant women stated that they received IFA tablets. The caesarean-section rate (9% nationwide) has also increased. Anecdotal evidence
from states suggested that there has been a major increase in institutional deliveries owing to financial incentives from Janani Suraksha Yojana and ASHA programmes. Iyengar et al found that some states have also implemented innovative schemes for maternal health in the past few years with good results.

**Material & Methodology**

A descriptive survey approach was selected and data was collected from 5 conveniently selected Primary Health Centres of Delhi. The setting was selected considering feasibility, congenial atmosphere and better cooperation to collect the data for the study. A pre-tested interview schedule based on the District level Health Survey questionnaire (with permission) was used to collect data (r= 0.74.) and the study used multi stage sampling method. Approval was obtained from the competent authority and five PHCs were selected. The CDMO of each district was contacted for local permission. The list of beneficiaries was collected from Health Centre record and beneficiaries with under five children were selected randomly from each selected PHC. The subjects were contacted personally and interviewed at their convenience. Data analysis was done by using SPSS software package.

Ethical clearance was obtained by submitting an undertaking to protect the rights of beneficiaries.

**Results and Discussion**

The minimum age of the beneficiaries was found to be as 18 and majority of mothers were below 30 years (92.9%); 29.7 percent were found to be illiterate, and nearly half (44.5%) of mothers had completed schooling up to standard 10. Regarding number of children majority had maintained two children norm (92%) but 18 percent were having more than 2 children.

**Pregnancy / Ante Natal Care:** 2.2 percent mothers expressed that their first ante natal visit was done during the first month of pregnancy. 41.8 percent received first AN check-up during second month of pregnancy and 50.8 percent received it during the third month; and 5.2 percent visited after third month of pregnancy. However the data regarding the number of ante natal check-ups during pregnancy revealed that 48.3 percent mothers received 3 ante natal check-ups, 29.5 percent mothers received more than three times whereas 15 percent received two times, and 7.2 percent received only once. Majority (99.6%) of mothers received IFA tablets and all the mothers (100%) expressed that they received TT immunisation. Majority of mothers experienced minor ailments during ante natal period as swelling of feet (64.7%), vomiting (67.8%), back pain (31.8%) and very few experienced paleness (1.6%), blurring of vision (1.3%), convulsions (0.4%).

The data regarding health workers who visited mothers at home showed (Fig 1) that 99.4 percent mothers received home visit by a health worker especially by ASHA during ante natal as well as post-natal period, and home visit by ANM was found to be less and some what nil (0.1%) particularly in post-natal period.

The first antenatal visit by mothers at ante natal clinic and health workers at home has been correlated (Fig 2); majority of mothers (51.3%) visited ante natal clinic during third week of pregnancy and majority of first home visits by health worker was also found to be in third month of pregnancy (50.3%) indicating positive correlation.

Analysis regarding delivery showed that 96 percent deliveries were institutional and 40 mothers (4%) delivered at home. After the reason for home delivery was probed (Table 1), it was found that 80 percent of these mothers did not feel institutional delivery as necessary; 92.2 percent mothers were given breast feeding within first two hours of delivery whereas 7 percent expressed initiation of breast feeding after two hours but within 24 hours.

Regarding awareness and source of information, 99.6 percent of mothers were aware about ante natal check-up, TT immunisation during pregnancy, and immunisation of children & family planning. The major source (Fig 3) of information regarding MCH services was found to be ASHA and secondly as ANM.

The data regarding satisfaction of beneficiaries regarding MCH services showed that 86.7 percent of beneficiaries were fully satisfied with the MCH services. However 12.1 percent were partially satisfied and 1.2 percent expressed average satisfaction. There was no rating below average satisfaction. Further, no significant difference was observed in satisfaction of beneficiary based on their age and educational qualification; however significant difference was observed in satisfaction between mothers with one child and more than one child as the mothers with more than one child were more satisfied than the mothers with one child (Table 2) suggesting that with increasing education one’s expectation increases and that explains the less satisfaction among the single child or primi mothers.

The Government focuses on 100 percent achievement in awareness and utilisation of services by mothers on all segments of MCH strategy. In the present study, it was observed that more than two
third of the mothers were fully satisfied with the MCH services and few were only partially satisfied. Similarly high rate of ante natal check-up and more than half of mothers have received three ANC. Similar findings were reported by Banergee et al (2003) as nearly two-third of the women in their study conducted at West Bengal categorised MCH services as good or excellent in terms of knowledge, convenience, utilisation and satisfaction. Sunder lal et al also observed excellent ANC registration in a study conducted at Rohtak (Haryana) and percentage of mothers received three ante natal check-up as low (27.8%). Similarly, Das et al observed in Aligarh (UP) the ANC coverage use rate as very low.

The present study showed that the literacy rate has improved as only 27.9 percent mothers were illiterate and 99.6 percent mothers were aware about the MCH services i.e. ANC, TT immunisation, IFA tablets, immunisation in children and FP and improved acceptance, utilisation and satisfaction. Kar (2001) however observed in another study in Delhi that the mothers obtained sub-optimal score (47.5%) on an average and less than a quarter of the mothers had the desirable level of awareness of 80 percent or more. Thus low awareness among the clients is one of the major reasons of low utilisation of services. Bajaj et al (1999) reported similar findings of low utilisation of services in Delhi slums owing to lack of knowledge about the services offered which is attributed to the high level of illiteracy and lower accessibility to these institutions. The study reported the awareness of mothers ranged from 52 to 82 percent and the mothers who had not reported to ante natal clinic said that they either “did not know” about the services or “did not feel the need” to use them on women who had availed the services.

The present study found that the mothers with one child were less satisfied than the mothers with more than one child and there was no significant difference in the satisfaction based on age and education. However Banergy (2003) observed that older, multiparas, illiterates mothers expressed better than the younger, nulli or primiparas, literates mothers.

**Table 1: Reasons of home delivery (n=40)**

<table>
<thead>
<tr>
<th>Reason</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did Not Feel Necessary</td>
<td>32</td>
<td>80</td>
</tr>
<tr>
<td>Cost Too Much</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Too Far From Home</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>No Transport</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Poor Quality Service</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>No Time To Go</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Family Did Not Allow</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Better care at home</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Table 2: Comparison of satisfaction on beneficiaries on MCH services**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>$t$ value</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 25 years</td>
<td>439</td>
<td>32.65</td>
<td>1.23</td>
<td>0.07</td>
<td>0.92</td>
</tr>
<tr>
<td>Above 25 years</td>
<td>561</td>
<td>32.65</td>
<td>1.15</td>
<td>0.58</td>
<td>0.537</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 10th class</td>
<td>680</td>
<td>32.64</td>
<td>1.18</td>
<td>0.383</td>
<td>0.537</td>
</tr>
<tr>
<td>Above 10th class</td>
<td>180</td>
<td>35.46</td>
<td>1.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of children</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One child</td>
<td>450</td>
<td>32.56</td>
<td>1.36</td>
<td>1.845</td>
<td>0.091</td>
</tr>
<tr>
<td>More than one child</td>
<td>550</td>
<td>32.71</td>
<td>1.02</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Nursing Implications**

**Nursing Care services**

The study finding have significant implications in public health and community health nursing practices as these can be used for formulating strategies for improving MCH care and also for preparing and conducting various community outreach programs.

The study may be used for performance evaluation of MCH services and may aid in capacity building; enhancement of knowledge of all health care providers including Nurses, MO, AWW etc.; strengthening the community/public health nursing activities and for conducting health education and campaigns on major issues.
Nursing Administration

The study findings can be used for district health planning including rational placement need-based training, planning for capacity building.

Nursing Education

1. The study finding will help for planning and conducting need-based training reinforcement/refresher programmes for ASHA, ANM to make modification and development of teaching and learning in the nursing programme to put a focus on building capacity for community health care and community health development such as MCH services mapping and field work, community-based health care and services design, and development of healthy public policy.

2. The study can help Nursing Institutions to develop roles and functions for student nurses and use a mechanism of programme management to monitor and evaluate the capacity building in MCH throughout the programme.

3. The study findings can help the nursing institutions to be involved in regular surveys on MCH services and on other components for developing and providing the essential refreshing courses and capacity building programmes for career and professional development.

Recommendations

A district wise comparative analysis may be conducted in Delhi regarding beneficiaries’ perception and satisfaction on MCH services provided. A large scale study may be conducted on beneficiaries’ perception and satisfaction on various aspects of MCH services. A meta analysis may be conducted regarding MCH services, facilities and selected demographic features for developing a theoretical framework. A need assessment study may be conducted in MCH services with a view to revise the guidelines regarding MCH service.

Conclusion

The present study indicated an improved literacy rate among mothers and so an enhanced awareness about MCH services. The involvement of local community health volunteers (ASHA) has been found to be useful and successful for an overall improvement in terms of increase in awareness, percentage of utilisation, acceptance, and satisfaction in MCH services rendered in Delhi state. Certain deficiencies that still remain may be overcome by more awareness campaigns, holding mothers’ meetings and inviting opinions and suggestions from the clients and encouraging enhanced community participation.

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