Advances in Economics and Business Management (AEBM)
p-ISSN: 2394-1545; e-ISSN: 2394-1553; Volume 2, Issue 13; July-September, 2015 pp. 1258-1263

http://www.krishisanskriti.org/Publication.html

Maternal Health Services-Facilitating Access in Low-resource Settings

Ashavaree Das[1] and Kirti Sharma[2]

[1]Prince Sultan University, Riyadh, Saudi Arabia
[2]Management Development Institute, India
E-mail: [1]adas@psu.edu.sa, [2]kirti.sharma@mdi.ac.in

1. INTRODUCTION

Pregnancy is a period of substantial physical and role change for a woman. It is also a time when health related behaviors are more salient because they affect the mother as well as the developing fetus (Crozier et al., 2009; Hotham, Ali, White, & Robinson, 2008).Seeking information during pregnancy can improve the health knowledge of the expectant mothers (Pasinlioglu, 2004). This knowledge can help pregnant women to communicate with health service providers, demonstrate preventive health care behaviors, and improve self-care abilities (Moorman & Matulich, 1993; Nicholson, Gardener, Grason, & Powe, 2005; Warner & Procaccino, 2004). It also provides them with opportunities to learn about their pregnancy, childbirth, and parenting; and to have any potential health problems diagnosed and treated at the earliest possible stage. The primary goal of this study was to examine the pregnancy related care-seeking patterns among pregnant women.

In 2000, India forwarded its National Population Policy, followed by its National Health Policy and the National Rural Health Mission (NRHM) in 2002 and 2005 respectively, while endorsing the Millenium Development Goal-5 of improving maternal health (Aggarwal, 2005). Within this framework, ambitious goals were set, that included the reduction of the maternal mortality rate (MMR) to 100 per 100,000 live births, 80% institutional deliveries, and 100% deliveries by medical professionals (Kalter et al., 2011). Additionally, the Indian government launched a grand rural health program in 2005, the NRHM to provide effective health care to rural populations with a special focus on states that have weak public health indicators and infrastructure (Kumar, 2005). Other initiatives such as the Janani Suraksha Yojana and the Vande Mataram Yojana have also been put in place that encourage women of low socio-economic status to opt for institutional deliveries through cash transfers as well as provide advice and counseling to mothers and communities about pregnancy related issues (Lim et al., 2010; MOHFW, 2004).

India has managed to reduce the MMR from 1990 to 2008 by 59%—from an estimated MMR of 570 to 230 per 100 000 live births which is an average annual decrease of 4.9% (WHO, 2010, A 29). Still, the MMR is unacceptably high and fails to meet the Millennium Development Goals of reducing MMR by 75% (Rai & Tulchinsky, 2012).

The improvement in maternal mortality since 1990 can be attributed to overall development, promotion of education, poverty reduction, stronger government health policies, improved medical technology, and access to primary care (Goldie, Sweet, Carvalho, Natchu, & Hu, 2010). Infant mortality in India has declined from 77 deaths per 1,000 live births in 1991-95

to 57 deaths per 1,000 live births in 2001-05, thus implying an average rate of decline of 2 infant deaths per 1,000 live births per year (International Institute for Population Sciences, 2007). In spite of these impressive declines, one out of every 14 children born during the five years before the National Family Health Services-3 (NFHS-3) survey will die before reaching age five (International Institute for Population Sciences, 2007). India alone contributes a quarter of neonatal deaths in the world, accounting for approximately 1 million neonatal deaths each year. (Lawn, Kerber, Enweronu-Laryea, & Cousens, 2010). Additionally, Bhat and Adhisivam (2013) noted that eight million low birth weight infants are born each year in India which accounts for nearly 40 % of the global burden—the highest for any country.

Thus, although there have been improvements in maternal and child health (MCH), India still has a long way to go in order to achieve satisfactory levels in the area of MCH. There is no singular reason for this but studies point to insufficient coverage for priority interventions, suboptimum content and quality of existing programs, poverty and poor nutrition as factors affecting sluggish improvements in MCH (Rai & Tulchinsky, 2012).

There is no single solution to bring down maternal and infant mortality rates as targeted by the various national level programs dedicated to MCH. However at the very least,

proper prenatal and postnatal care could avert up to 72% of neonatal deaths (Darmstadt et al., 2005). Alvarez, Gil, Hernandez, and Gil (2009) found an inverse relation between maternal mortality ratio and prenatal care coverage. Other studies have also documented the link between pregnancy-related care and maternal mortality (Goldie et al., 2010; Hill et al., 2007). Thus, women can better manage their pregnancies by preventing complications – ensuring good quality care through routine pre and post natal care, family and community education (Disease Control Priorities Project, 2007). Information and advice provided to pregnant women is critical as it enables women to recognize problems when they occur; and demonstrate preventive health behaviors such as increasing protein and iron intake (Nicholson et al., 2005; Matthews, Mahendra, Kilaru, & Ganapathy, 2001; Thassri et al. 2000). Furthermore, evidence suggests that appropriate health information during pregnancy has significant effects on the birth weight, term, and the survivability of the babies (Bhutta et al., 2008; Darmstadt et al., 2005; Hong & Ruiz-Beltran, 2007). Hong and Ruiz-Beltran (2007) note that even in developed countries where the level of infant mortality rate is low, prenatal care which includes health information provided to the mother is associated with lower mortality in infancy, especially among low birth weight and preterm births.

As noted earlier, the Government of India has launched various initiatives and programmes toward the advancement of maternal and infant mortality related goals. However, any programme, however relevant its core components is likely to fail unless it achieves satisfaction of its target audience. The goal of this paper is to outline low-income women's perceptions of health care seeking in the maternal health context.

2. METHODOLOGY

2.1 Design, Setting, and Participants

Interviews were employed to understand the information-seeking behaviors of pregnant women. Women were recruited from a public hospital in West Delhi during designated antenatal clinic days. Health staff employed by the hospital assisted in recruitment by reading out flyers to the women. A convenience sampling method was used. Women were asked several question to screen them for study eligibility, including the purpose of the clinic visit (should be for antenatal care only) and age (atleast 18 years of age). After informed consent was obtained, the women were interviewed either before or after their consultation.

In addition to the women, some mothers and mothers-in-law as well as spouses were invited to participate in interviews. Interested subjects were interviewed after informed consent was obtained. The final sample included 60 pregnant women, 5 mothers, 3 mothers-in-law, and 5 husbands.

Semi structured interviews were used to conduct the communication session with the respondents. Socio-demographic and obstetric data were collected from the women. Additionally, women were asked questions regarding their perceptions of care-seeking during pregnancy, including beliefs, and barriers.

The consenting hospital at New Delhi reviewed the study protocol. Women were not paid for participating. Interviews were carried out in Hindi.

3. ANALYSIS

Data were analyzed in the tradition of qualitative research. This included transcribing the notes from the interview sessions, and coding the data using key words as a means of identifying common and discordant themes (Pope, Ziebland, & Mays, 2000). Apart from coding and categorizing transcribed interviews, socio-demographic data were also collected. Demographic and obstetric data included age, education level, occupation, parity, gestational age at interview, number of antenatal visits, and reason for seeking antenatal care. In addition to socio-obsetric data, several other variables were measured to provide a general description of the population being studied. Respondents' sources of pregnancy related information, and trust placed in each source were also measured.

4. FINDINGS

Table 1 summarizes the socio-demographic characteristics of the 60 pregnant women who participated in the present study. The median age of the sample was 24 years. Sample respondents ages ranged from 19-35 years. The majority of the respondents were housewives (88%, n = 53), while only 12 % worked for pay (n=7). Almost 29% (n = 17) of the respondents were experiencing their first pregnancy, and approximately 25% (n = 15) were multi-parous i.e. had given birth two or more times.

Table 1: Demographic and obstetric data of pregnant women in the study

Variables	n (%)
Age	
18-19	2 (3.3%)
20-24	32 (53.3%)
25+	26 (43.3%)
Education	
No education	11 (18%)
Grade 1-5	16 (27%)
Grade 6-8	17 (28%)
Grade 9-10	10 (17%)
Grade 11-12	2 (3%)
Grade 12	4 (7%)
Occupation	
Housewife	53 (88%)
Work for pay	7 (12%)

Parity	
0	17 (29%)
1	27 (46%)
2	9 (15%)
3	4 (7%)
4 or higher	2 (3%)
Gestational age at interview	
1-3 months	10 (16.7%)
4-6 months	28 (46.7%)
7-9 months	22 (36.7%)
Number of antenatal care visits	
0	
1	1 (1.7%)
2-3	21 (35%)
4+	23 (38.3%)
	15 (25%)
Reason for antenatal visit	
Routine Checkup	45 (75%)
Complication	15 (25%)

Source: Survey

Table 2: Pregnancy knowledge amongst pregnant women in the study.

Pregnancy knowledge	n (%)
Recognizing Danger Signs during pregnancy	
Did not recognize any danger sign	37 (61.7%)
Recognized at least one danger sign	11 (18.3%)
Recognized two danger signs	12 (20%)
Recognized the importance of tetanus toxoid injection	
Yes	15 (25%)
No	45 (75%)
Recognized the importance of Iron/Folic Acid tablets	
Yes	35 (58.3%)
No	25 (41.7%)
Knew where to go in case of complication	
Yes	8 (13.3%)
No	52 (86.7%)

Source: Survey

Most women attended ANC clinics in the middle and later trimesters of their pregnancies, with only 10% of the women making antenatal visits within the first three months of pregnancy. . Almost 15% of the women had more than more four ANC visits. While routine medical check-up was the reason for most antenatal visits, about 25 % (n=15) of women visited their doctors due to complications such as bleeding, convulsions, etc.

Table 2 outlines the participants' awareness of pregnancy related knowledge. More than half of the respondents (61.7 %, n=35) were not able to recognize even one of the danger signs of pregnancy. Eleven women (18.3%) recognized at least 1 danger sign, while 20% women (n= 2) recognized at least two danger signs and symptoms during pregnancy. While 75% of women (n= 45) did not recognize the importance of tetanus toxoid injections during pregnancy, approximately 42% of the women (n= 25) were not able to recognize the importance of iron/folic acid tablets during pregnancy. An overwhelming 87% of women did not know where to go in case of complications during pregnancy.

In India, pregnancy is viewed as a normal phenomenon, that does not require any intervention by health care professionals, unless complications occur. During pregnancy, most women reported seeking advice from their husbands, the elder women of their families, and friends. Doctors and para-medical staff were also consulted, but were visited primarily during complications such as high fever, convulsions, or bleeding. Allied health workers were also consulted depending upon their availability, for instance, when a health worker made herself available for a particular area. Women also reported consulting mass media sources for information. From time to time, women actively consumed special reports on TV or radio pertaining to their health. Table 3 presents the information sources that women consulted for seeking information related to pregnancy, as well as the trust placed in each source.

Table 3: Respondents most highly trusted sources.

Source
Doctor
Mother
Mother-in-law
Other health professionals (nurse, midwife, anganwadi worker)
Husband
Co-sister
TV/Radio

Source: Survey

The participants were also asked to state their reasons for use and non-use of the stated sources of information. Respondents reported that they were most likely to seek information from doctors and allied health staff such as nurses or midwives. Trust in the knowledge of health staff due to their experience, status in society, and nature of work encouraged the respondents to seek information from such sources. Doctors were trusted more than nurses or midwives due to their elevated status in society, and were considered life-savers. Thus their opinions and advice were highly sought after. Nurses and midwives were considered easier to approach, due to lower power distance, and were frequently asked questions that women were otherwise shy to ask doctors. Health workers such as the ASHA/Anganwadi were not used as much because the respondents felt that the information provided was inadequate and sometimes not useful. The elder women of the family were also consulted for their experience in childbirth and related wisdom. Due to dependence of their husbands, mothers-in-law were consulted first for any advice during pregnancy. However, women relied mostly on their mothers as opposed to mothers-in-law or co-sisters. They stated trusting their own mothers and sisters as opposed to their husband's mother. Social networks were very important in acquiring

information, and women preferred these face-to-face interactions as compared to mass media sources. Women made use of both specialized information sources and ordinary sources of information.

5. WOMEN'S CARE-SEEKING EXPERIENCES DURING PREGNANCY

Overall women delayed seeking care in the formal medical sector, and reported barriers associated with accessing care. Most women cited financial reasons as the primary barrier to seeking any form of prenatal care. Private medical care was considered expensive, while the public health care system was not perceived to be "free" either. More than half of the women (60%) reported a time during their pregnancy when they wanted to seek care but were unable to go. Beyond medical care, several women also reported additional costs of transportation, and care of dependents. Husbands also reported loss of wages in the event of accompanying their wives to the medical facility.

The second barrier that emerged from the interviews was the inherent belief that pregnancy was a natural phenomenon that did not merit any care, hence no information was required as a coping mechanism. Women also relied on unspecialized and available sources such as mother-in-law or husbands for advice or information regarding their pregnancy. Many mothers-in-law who were interviewed regarded themselves as the gateway of information, and forbade their sons and daughter-in-law to look for information elsewhere. Women pointed to their own dependent and subservient position at the domestic front as an impediment to making health-related decisions, and relied upon the elder cohorts of women for support and advice.

Therefore, the presence of a co-residing mother-in-law was a barrier to seeking information regarding pregnancy. Mothers-in-law also expected household chores to be completed on time before women could dedicate some time out for their individual needs, therefore their presence was detrimental in more ways than one. Child care duties also emerged as a barrier to seeking care. Women cited existing children and their needs as important duties, and reported having to attend to them before heeding to their own.

The third theme that emerged from the interviews was the fear of disclosing pregnancies to others. Women often delayed care-seeking as they did not want to declare their pregnancies. While the arrival of a baby was considered good news, a recurrent theme of 'buri nazar' emerged from the interviews of the pregnant women and other older cohorts of women. 'Buri nazar' can be defined as a external vibe of a negative nature that emanates from people when they hear good news regarding others. Culturally, this vibe is not appreciated and has to be avoided at all times. Women cited this as a risk factor for the health of their babies, therefore mothers and mothers-in-law avoided disclosing housing pregnancies, and restricted movement of their daughters and daughters-in-law. Discussion of pregnancy was also not allowed, therefore information-flow regarding pregnancy is curtailed to a large extent.

Finally, and most importantly, themes relating to the perception of quality of care in public hospitals emerged in various discussions. Our paper focuses on the women's perceptions of maternal health service quality. Babakus and Mangold (1992) have noted that functional and technical qualities of any health care organization have to be managed effectively for an initiative to be a success. Technical quality refers to the aspect associated with diagnosis and procedures while the functional aspect relates to the manner in which services are delivered to the patients. While the former is considered to be within the jurisdiction of health care professionals and administrators , functional quality is usually considered to be the primary determinant of client's perceptions about service quality as the users find it extremely difficult to assess the technical quality in an accurate manner due to lack of information. Client perceptions are increasingly becoming important in evaluation of health care quality as their perceptions can be utilized for meaningful changes in the health care system. Moreover, including client perceptions allow for a holistic study that allows for greater reliability, and validity of an evaluation of service quality. In the maternal health context, women's perception of health care can impact utilization of health services, and in turn impact maternal health goals. It is due to all these reasons that in addition to maintenance of professional standards of performance, accreditation of health care centres, patient perception is now being considered an important aspect of quality assessment of health care centres.

Based on the interviews conducted, women reported several barriers to care-seeking, and consequent health care utilization with regards to pre-natal care packages, institutional deliveries, and regular check-ups. Women reported having to wait for long hours to secure appointments. Inadequate and substandard quality of communication with health staff was also pointed out as a barrier to seeking care and information. Women unanimously reported health staff using decent language with them. Approximately 67% of women reported receiving less than 5 minutes of total interaction with health staff. Doctors also echoed similar views in their interviews. One noted that the flaw in the system was that counseling was not provided to the pre-natal patients.

The interviews also provided areas for exploration of motivators to seek information/health care during pregnancy. Despite barriers and fears, many women were also motivated and able to obtain care at some point in pregnancy. The primary motivator for obtaining information and care was the health of the baby. Husbands and other members of the family were considered as motivators as well as barriers to seeking care and advice. Finally the direct experience of other pregnant women was considered as a powerful motivator for seeking care and advice. For example, upon hearing other's

complications during their pregnancy motivated women to seek proper and specialized advice from medical practitioners.

Several other inferences from this study merit attention. While a majority of women in this study are likely to seek information from their doctors, a large number are obtaining their information elsewhere. Barriers related to the perception of quality of care may be a deterrent to seeking information and care from medical facilities. Women in the study group reported having encountered situations making them dislike public health facilities. Although, there is an extensive network of public health delivery system in place, perceived poor quality of care such as overcrowding, lack of confidentiality, lack of empathy, poor staff behavior, long waiting times, distance from home, and lack of proper discussion and counseling from health care providers are some of the major reasons why women and their families lose trust in the public health delivery systems. This line of reasoning resonates with prior research done in resource-limited regions (Odberg Pettersson, Christensson,Gomes de Freitas, & Johansson, 2004; Thaddeus & Maine, 1994; White et al., 2006). Women seeking-information from sources other than healthcare providers poses yet another area of serious concern i.e. the accuracy of the information. Women consult their husbands, co-sisters, mothers, and mothers-in-law who may or may not be knowledgeable or experienced enough to deal with their questions. Additionally, health personnel such as midwives may also be unprepared to recognize and deal appropriately with pregnancy complications, especially at the more peripheral level. A study in Maputo established that warning signs are known to just a few (20-24%) of the nurses/midwives (Zanconato, Msolomba, Guarenti, & Franchi, 2006).

The results of this study also show that a large proportion of women have had repeated antenatal care visits and some of them met the basic requirements of at least 4 antenatal care visits as per the new WHO model. However, they were not benefitting from effective information, education, and communication (IEC) which together form one of the primary purposes of antenatal care. For example, almost 62% of the women were unable to recognize and name any danger sign or complication during pregnancy.

A cursory and direct observation of the study sites indicate that these women spent about 3-4 minutes or less with their healthcare providers, with history taking often incomplete and counseling minimal. Similar observations have been made in countries like The Gambia, and Nepal (Anya, Hydara, & Jaiteh, 2008). Communicating effectively under this circumstance can prove to be a highly challenging endeavor. The health systems in these countries may or may not be the same as that of India; nevertheless it suggests that the challenge to provide adequate antenatal IEC is not unique to the study setting.

6. LIMITATIONS

The interpretations of the findings of this study require caution because of certain limitations. First, low-income and village resident women were recruited from government hospitals and were connected with the public health system. Women who may not have begun prenatal care may exhibit different patterns of care-seeking. Additionally, this study employed a convenience sampling method. Thus the findings may not be generalizable to all pregnant women.

Second, hospital staff assisted in the recruitment of participants, and some pregnant women may have felt uncomfortable declining participation in the study. Social desirability biases may have affected some of the responses provided by the study group. Since the survey interviews were conducted face-to-face, respondents may have felt pressured to answer what they thought would please the interviewer. Therefore, it is possible that respondents might have exaggerated or underreported on some counts.

In spite of these limitations, this study makes some important contributions in the field of communication, and health marketing field, importantly, this study situates Indian pregnant women from low resource-settings within the literature, using a theoretical framework.

7. FUTURE RESEARCH

Care -seeking is a complex process that involves not only the information-seeker but also its surroundings. Future research should focus on not only the pregnant woman but also other key-individuals such as household members and health personnel. Involving the mother-in-law, empowering the health care worker are some of the key-individuals that interventions can focus on.

During the screening stage, pregnant women under the age of 18 were deemed ineligible to participate in this study. This is definitely a subgroup requiring special attention, and future research should consider this age group, given that they are particularly exposed to complications such as pre-eclampsia and eclampsia, prolonged and obstructed labor leading to death or

long-term morbidity (Zanconato, Msolomba, Guarenti, & Franch, 2006).

Testing theory among pregnant populations may further the knowledge on their information insufficiencies, help meeting their unmet needs, and create efficacy-based interventions.

8. LESSONS LEARNED

The Indian government hospital needs to work harder to improve the perception of quality in the maternal health context. Physician availability, mode and depth of communication with clients, as well as poor staff behavior have been reported by women. Chattopadhyay (2013) notes

that government hospitals are sites for corruption and outlines various ways in which corruption and malpractice take place. Some of these practices create barriers to care-seeking for low-income women. Policy makers need to consider the requirements and opinions of low-income women to effect substantial change and significant improvement in the quality of maternal health care services for better utilization of service provided. The communication aspect of the doctor-patient relationship must be reviewed, and adequate training must be given to doctors in order to impact patient satisfaction. Similar training ought to be given to allied medical staff (Anganwadi workers, ASHA, nurses, para-medical staff) that can reach women at various levels. Apart from the mode of communication, depth of communication must be stressed as well.

REFERENCES

[1] S.R. Crozier, S.M. Robinson, S.E, Borland, K.M. Godfrey, C cooper, and H.M Inskip.., "Do women change their health behaviours in pregnancy? findings from the Southampton women's survey. " Paediatr Perinat Epidemiol. 2009 Sep;23. 5.:446-53. Sep. 2009.

[2] E. Hotham, R. Ali, J. White and J. Robinson, J "Pregnancy-related changes in tobacco, alcohol and cannabis use reported by antenatal patients at two public hospitals in south Australia." Aust N Z J Obstet Gynaecol. 48.3.248-54 Jun. 2008.

[3] T. Pasinlioğlu. "Health education for pregnant women: the role of background characteristics" Patient Educ Couns. 53.1.101-6. Apr.2008.

[4] C. Moorman, and E. Matulich. " A model of consumers' preventive health behaviors: The role of health motivation and health ability." J of Consumer Res., 208-228. Sep. 1993.

[5] D. Warner and D.J. Procaccino. "Toward wellness: Women seeking health information" Journal of the Am Soc for Inf Sci and Technol, 55(8), 709-730. Jun. 2004.

[6] WHO (2010).**Trends in Maternal Mortality: 1990 to 2008**Estimates developed by WHO, UNICEF, UNFPA and The World Bank.Switzerland: WHO.

[7] R.K. Rai, and T.H.Tulchinsky. "Addressing the Sluggish Progress in Reducing Maternal Mortality in India."Asia-Pacific J. of Public Health. 27.2.NP1161-9. Mar. 2012 .

[8] S.J. Goldie, S. Sweet, N. Carvalho, U.C.M.Natchu, and D. Hu, D. "Alternative strategies to reduce maternal mortality in India: A cost-effectiveness analysis." PLoS Medicine. 7.4. e1000264. April. 2010.

[9] International. IIfPSIaM. National Family Health Survey [NFHS-3], 2005-06, India: Key Findings. Mumbai: IIPS, 2007.

[10] J.E.Lawn, K. Kerber, C.Enweronu-Laryea, and S.Cousens, S. " 3.6 million neonatal deaths--what is progressing and what is not? "Semin Perinat, 34. 6. pp. 371-386. Dec. 2010.

[11] G.L. Darmstadt, Z.A Bhutta, Z. S. Cousens, T. Adam, N. Walker, N., and L. de Bernis. "Evidence-based, cost-effective interventions: How many newborn babies can we save?" Lancet, 365. 9463. pp. 977-988. Mar. 2005.

[12] JL. Alvarez, R, Gil, V.Hernández, V., and A. Gil, "Factors associated with maternal mortality in sub-saharanafrica: An ecological study." BMC Public Health. 9. 1. 462. Dec .2009.

[13] K. Hill, K. Thomas ,C. AbouZahr et al. "Estimates of maternal mortality worldwide between 1990 and 2005: an assessment of available data". Lancet.370.1311-1319. Oct. 2007.

[14] Z. Matthews, S. Mahendra, A. Kilaru, S., Ganapathy, "Antenatal Care, Care-seeking and Morbidity in Rural Karnataka, India: Results of a Prospective Study." Asia-Pacific Pop J. 16 .2.pp. 11-28. Jun. 2001.

[15] J. Thassri, N. Kala, L.Chusintong et al. "The development and evaluation of a health education programme for pregnant women in a regional hospital, southern Thailand". J Adv Nurs.32.6.pp.1450-1458. Dec. 2000.