

Utilization of Maternal Health Care Services in Bihar

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Improving maternal health has been a great challenge in developing countries like India. This study comprehends women's perceptions of quality and satisfaction with maternal health care services. It was conducted in Bihar using qualitative methods. The findings reveal that there has been an improvement in maternal health, especially with increase in institutional child birth in this region. This can be attributed to the implementation of Janani Suraksha Yojana (JSY). Nevertheless, there are several challenges. To us, the most important need is the humanly treatment and social care that can be generated through social sensitivity and other useful desired behavioural changes.

[Key words: *Maternal Health Care Services, JSY, ASHA, Community Development, Bihar]*

Half a million women die annually and, in addition, three hundred million women in the world suffer from long-term or short-term illness brought about by lack of health care during pregnancy and childbirth (UNICEF 2009). India alone accounts for a fifth of the global maternal mortality (WHO 2005). In India, various efforts have been undertaken under Reproductive and Child Health -phase II (RCH-II) to improve maternal and child health. One seminal effort is the *Janani Suraksha Yojana (JSY)* (MHFW 2005). JSY is a safe motherhood intervention under the National Rural Health Mission (NRHM) and is being implemented with the objective of reducing maternal and neo-natal mortality by promoting institutional delivery among the poor pregnant women. JSY, launched on 12th April 2005, is being implemented in all States and Union Territories with emphasis on low performing States like Uttar Pradesh, Uttaranchal, Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Assam, Rajasthan, Orissa and Jammu and Kashmir. These are called Low Performing States (LPS) as they have low institutional delivery rates.

JSY focuses on poor pregnant women and offers conditional cash transfer (CCT) scheme for institutional deliveries (ibid. 2005). It is a hundred

per cent centrally sponsored scheme and it integrates cash assistance with delivery and post-delivery care. JSY has identified Accredited Social Health Activist (ASHA) as an effective link between the government and the needy pregnant women (GOI 2005, Joshi and George 2012). As per the guidelines of NRHM, role of ASHA, or other link health worker associated with JSY, is to identify poor pregnant woman as beneficiary of the scheme and report or facilitate registration for Antenatal care (ANC). The ASHA is expected to assist pregnant women to obtain necessary certifications wherever necessary as well as assist them in receiving at least three ANC checkups including TT (tetanus toxoid) injection and IFA (iron and folic acid) tablets.

ASHA should also identify a functional government health centre or an accredited private health institution for referral and delivery. They are required to counsel for institutional delivery, escort the beneficiary women to the pre-determined health centre and stay with her till the woman is discharged (MHFW 2006). ASHA is simultaneously responsible for arranging immunization of the newborn till the age of 14 weeks. They must inform about the birth or death of the child or mother to the Auxiliary Nurse Midwife (ANM) or Medical Officer (MO). ASHA workers are expected for post-natal visit within seven days of delivery to track mother's health and facilitate in obtaining care, wherever necessary, counsel for initiation of breastfeeding to the newborn within one-hour of delivery and its continuance till 3-6 months. ASHA is also expected to counsel these women to promote family planning (ibid. 2006).

Each beneficiary registered under this *Yojana* should have a JSY card along with a MCH card. ASHA / AWW (*Anganwadi* Worker) or any other identified link worker under the overall supervision of the ANM and the MO of PHC should mandatorily prepare a micro-birth plan. This will effectively help in monitoring ANC checkups, and the post delivery care. As the cash assistance to the mother is mainly to meet the cost of delivery, it should be disbursed effectively at the institution itself. All mothers irrespective of age, birth order, or income group (BPL & APL) are given cash assistance of Rs. 1400/- in one go at the time of delivery. The success of the scheme would be determined by the increase in institutional delivery among the poor families. ASHA gets an incentive of Rs. 600 for the referral of pregnant woman to a healthcare facility. Through these provisions of the JSY, the utilization of maternal health services, especially in low performing regions, is expected to improve and for this to materialise the role of ASHA workers are expected to be significant.

There have been several studies but hardly few have examined the crucial aspect of women's perception on the quality of care provided. This paper is based on a preliminary study conducted to examine women's perceptions of quality and satisfaction with maternal health care. The main objectives of the study were to estimate the current status of satisfaction with maternal healthcare services in the context of JSY in the state of Bihar, India; and to identify the determinants of satisfaction about maternal health care services. This was expected to reveal some key barriers and facilitators in

demand and utilization of maternal health services. Bihar is high focus under NHRM. We chose Patna district which is representative of the situation in the province. In Patna the focus area was Bihta, the upcoming satellite town of Patna, as it is expected to provide better public health care facilities.

Drawing from this study, in this succinct paper, we first take a short, yet comprehensive, look at the available research literature around utilization of maternal health care while keeping the focus around our chosen research inquiry. To reiterate, the objective is to understand the status and the determinants of maternal healthcare services in the background of JSY. However, we vouch that this can only be done when we pay attention to women's perception of what they themselves feel about the status of their healthcare. Similarly, it is only women – the relatively poor and needy in the context of JSY- who can clearly lay out the determinants of their proper maternal healthcare. We proceed with this preview and in the next section we present a glimpse of the literature around this area. Thereafter, we delineate the process and predicaments of our study. The analysis of our generated data helps us reflect the voice, agency, and subjectivity of the women for whom JSY is meant. We reflect and try to recommend points for better utilization of maternal health services in developing regions of the world. We acknowledge the efforts through JSY and we hope to make it better suited for rural women's maternal needs. Nevertheless, we want to understand, with public at large, that it is not about programs or policies but people for whom they are meant.

Literature Review

JSY is a flagship program of the Government of India and lots of efforts are being made for its proper implementation. Despite such efforts, unfortunately, the scheme has only been partially successful as is evident from the various evaluations (Bose 2007, SIHFW 2008, UNFPA 2009, Jain 2010, Santhya et al. 2011, Mangal and Ladha 2012, Dongre and Kapur 2013) carried out in the recent past. These evaluations indicate that there is a high level of awareness about JSY among women in rural areas. As far as source of the awareness of the scheme is concerned most of the mothers, except in Orissa, knew about the scheme from ASHA workers. It was also noted that overall, the combined estimates of five low performing states together indicate that 55 per cent of the births during 2008 occurred in a health institution (government or an accredited private facility) and the direct beneficiaries of JSY were 47 per cent. These studies also indicate that 73 per cent mothers in Uttar Pradesh and 84 per cent mothers in Bihar stayed for a shorter period than the recommended norms under this scheme. This goes to say that although JSY has been able to create awareness about institutional delivery and has been changing the social practice towards instructional delivery. However, several benefits under JSY have not been reached to women for whom it is meant.

Literature review around women's perception of care indicates that more than 90 per cent of the mothers who received incentives reported to have got Rs. 1,400. However, many reported delay in payment. 27 per cent of the

mothers in Bihar reported facing problems and they had to make several contacts to receive the money. Next is Uttar Pradesh and Madhya Pradesh where only 12-13 per cent of the mothers faced similar problems. Thus we see that implementation problem is more in Bihar. Despite this problem, JSY has been able to generate demand for institutional delivery as is attested by several evaluation studies (SIHFW 2008, UNFPA 2008, Jain 2010) which confirms that JSY is most visible due to increasing awareness and it is also effective for promoting institutional delivery.

From the analysis of literature few indicators emerged very prominently relating to utilisation of maternal health care services and maternal satisfaction. The most important was related to providers' behaviour (Ghobashi and Khandekar 2008, Moawed et al. 2009, Dzomeku 2011). All these studies indicate that providers' attitude and behaviour play a very vital role in determining maternal satisfaction. Here, providers include medical personnel (doctors, nurse, ANM) as well as support staff at the health facility. Some of the aspects of this indicator that seemed important for patients are respectful and polite behaviour of staff (Ghobashi and Khandekar 2008, Moawed et al. 2009, Dzomeku 2011), nursing care during delivery and at postpartum period (Chunuan et al. 2003, Moawed et al. 2009), interpersonal aspect of care by staff and patiently listening to the patients (Chunuan et al. 2003, Senarath et al. 2006, Das et al. 2010).

Apart from these, two other crucial indicators of maternal satisfaction were quality of care (Uzochukwu et al. 2004) and clinical aspect of care (Pena et al. 2009). Quality of care included ANC, PNC as well as the care provided during delivery (Uzochukwu et al. 2004, Fawole et al. 2008). While clinical aspects of care were limited to patients' satisfaction regarding technique and process of anaesthesia (Srivastava et al. 2009), pain management during labour (Sadla et al. 2001, Srivastava et al. 2009), experience of caesarean operation and method and process of labour induction. Interestingly, indicators like, wait time for check-up, admission and delivery; infrastructure of the facility; adequate information provided to the patients; gender of the provider, and distance to the facility were of equal importance to maternal satisfaction (Fawole et al. 2008, Aniebue and Aniebue 2011). Women were more satisfied if the wait time was less, and they had to travel short distance for availing services at the facility, as well as when providers explained to them the actual proceedings and provided necessary information. All these were applicable for both ANC and the time of delivery. Moreover, if the providers were female it had a positive impact on maternal satisfaction.

It was also noted that expenditure for ANC and buying medicines during pregnancy and at time of delivery affected maternal satisfaction. However, cleanliness of the facility, including toilets and running water; as well as confidentiality during check-up and delivery were other factors that influenced maternal satisfaction. We have noted that while most of the studies were conducted were from the perspective of the provider. Hardly any study is

done from the perspective of the clients (i.e., women) for whom this scheme is meant. Therefore, the objective of understanding the status and the determinants of maternal healthcare services in the background of JSY from the perspective of women is important. This also attests the growing belief in both contemporary epistemological as well methodological post-formal discourses of keeping the researched at the centre.

The Study

This study was conducted in the state of Bihar, which is one of the high-focus states under NRHM (MHFW 2005). Among the 38 districts of Bihar, Patna being the state capital is most representative of the socio-economic status of the state. Patna has a total population of 4,718,592 of which 58% are rural population (Census of India 2011). The MMR in Patna is 256 while the TFR is 2.3 (RGI 2011). Despite having the highest proportion of institutional births (58.3%), Patna ranks lowest in terms of MCH (GoB 2013). Due to these collective reasons Patna district was chosen. Here the focus area was Bihta, the upcoming satellite town of Patna, where new educational institutions, including the permanent campus of IIT Patna and other facilities are being setup. The point we are trying to make is that Bihta is expected to provide public health care facilities and, therefore, would serve as an important space to evaluate an important public policy of the government.

Qualitative methods were used in this study to focus on understanding perceptions, issues and challenges regarding maternal satisfaction with health services. Thirty two in-depth interview (IDIs) and eight focus group discussions (FGDs) were conducted in the community with women and the service providers at the primary level. The women included those who have recently delivered as well as expectant mothers. The study focused at Level I facilities in the public health system. Level I facilities include births at Health Sub Centres, Primary Health Centres, Additional Primary Health Centres and at home. In this district only normal deliveries happen at the Community Health Centres, so these facilities are also part of the study. Accordingly, data of deliveries conducted between June 2013 to August 2013 was obtained from the district health information system and a list of functional Level I facilities were identified.

From each functional facility the list of women who had delivered in the mentioned timeframe was obtained from ASHAs and the respondents were selected randomly. In order to understand issues and challenges regarding maternal satisfaction with health services, in-depth interviews and FGDs were also conducted with ASHA, Traditional Birth Attendant (TBA) and ANM as they are the first contact point in providing maternal health care at Level 1 facilities. First in-depth interviews were conducted and, based on the response and preliminary analysis of the findings, the FGD guide was further refined and discussion was conducted. The respondents were mostly 18-28 years old and were mostly illiterate. Only a few had achieved a primary level of education. Most of the respondents were lower caste Hindus. This can be attributed to the

findings of an earlier study (Raj and Raj 2004) which examined the caste variation in reproductive health status of women. The majority of them have Below Poverty Line (BPL) cards and their husbands work as casual labourers. In most of the cases they have 2-3 children.

During the course of our research we realized that the women for whom JSY was meant were heavily reliant on the ASHA workers. One can understand this reliance as the population of the study was mainly low caste, rural, and illiterate. Due to this we had to go through ASHA workers to the participants. Nevertheless, our aim was to understand the experiences of women and, therefore, when we got in touch with them we tried our level best, using social science methodologies, to comprehend their experiences and expectations regarding maternal health. Several factors emerged from the analysis of our data. Some of these substantiated the existing research literature while some complemented them. However, some stood out and they guide us to necessitate a fresh look at maternal health and the approaches we have for it.

Analysis of the Study

One of the prominent themes that emerged from our data was the role of facilitators in determining utilisation of maternal health care services as well as maternal satisfaction. Our analysis of data corroborates that women who chose to have institutional deliveries were highly influenced by the community health worker- the ASHA. The majority of women, who had institutional delivery reported that they were advised by an ASHA for it. As we know the role of ASHA workers is manifold. Most of the pregnant women seemed to be satisfied with ANC care provided by ASHA and AWW. Many-a-time, ASHA also took them to the facility for ANC and for conducting some blood or urine tests- if prescribed by a doctor.

Our study suggests that once the process sets in with awareness created by the facilitator like ASHA, there are both trickledown as well as ripple effect- suggesting thereby a horizontal as well as vertical awareness creation among the expected recipients of JSY. We found that several women chose to have institutional deliveries based on the pleasant experience reported by other women in the village. Then there are comparisons between institutional and non-institutional delivery by women in the community based on their personal experiences. One of our respondents, whose first child was born at home, stated that these days they feel it is better to have institutional delivery as at home it becomes difficult to handle medical complications. Her first child was born at home and the second at a government health facility.

The monetary incentive provided under JSY scheme acts as a major motivation for institutional delivery in this region. According to the respondents it was more expensive to deliver at home than at the facility, where certain costs, like buying medicines, paying doctor's fees, and the *dai* are taken care of. However, women still have to spend quite a bit at the hospital, mainly in form of tips to nurse, *dai*, and sometimes for buying certain medicines and/injections. Regardless of such expenses, poor and needy women perceive institutional

delivery to be monetarily more beneficial. Though there is a time lag between the birth of the child and when they get money from JSY scheme, yet they feel more secured to incur such expenses in the anticipation that it would be covered by the money they receive from JSY scheme.

The provisions of free medicines, saline water and injections, which are provided before and during child delivery also adds to the success of JSY. Though some women had to buy medicines and/injections from the pharmacy they did not complaint as they considered it to be crucial for the delivery care. Given the relatively lower socio-economic background of the participants, they did not have toilet facility in their house, and, hence they were pleased with the level of cleanliness of the facility, labour room and toilets. As most of the respondents lived with joint family in houses with one room, it was difficult to maintain level of privacy during delivery at home. Often make shift arrangements are made for the purpose in few cases. The situation is reported to be worse if the woman is at her husband's place and her behaviour at this point is judged by her mother-in-law and other members from her husband's side. On the contrary, at the facility delivery takes place in a designated room where other than medical personnel only ASHA and *dai* are present. In women's perception this makes them feel better and not under behavioural surveillance of the in-laws. Though many suggested that they would prefer their family members to be present in the labour room, they were quite clear that they would prefer their mothers to be with them.

It is also found that women are more satisfied with the process of delivery care at the facility than during ANC and/PNC (Post Natal Care). Perception of good care of PNC at the facility was not much highlighted by women. One of the reasons for this was because they spent very short time at the PNC ward. It was interesting to note that most of the women came back home from the facility within few hours after delivering the baby. None of them were aware that they should be in the PNC ward for a minimum period of 24 hours after delivery. However, despite the short stay there were certain infrastructural issues which women considered to be important to improve the quality of services. Such issues included providing them with proper bed and beddings at PNC ward, supply of food for women at the facility during PNC. Though there were no facilities provided for the family members, such as, furnished waiting area, women did not complaint about it, because due to fewer loads at PNC, often empty beds were available which were used by woman's family members to take some rest, if needed.

On the other hand, there seemed to be a lack of continuum between ANC and PNC provided by ASHA even for institutional deliveries, and it emerged as a major challenge regarding satisfaction with maternal health services. It also became evident that women's perception of good care concentrated more on the delivery care at the facility rather than ANC and PNC. Pain management was a vital issue. Even many women who had home births, had called a private doctor for providing pain relieving medicines and/injections

during delivery. Women were also satisfied with the promptness of services provided at the facility. Though this can be explained mainly by the fact that since there is lesser load at the level 1 facility, they can offer immediate service to women. Another reason attributed to promptness is the fact that most of these women reach the facility at the critical stage of labour hence requires instant attention. It was gleaned from interviews and FGDs that sometimes women do wait for few hours at the facility before they delivered. However, women did not complaint about such waits for per them it was needed based on their labour condition.

Individual and group discussion with women suggests that while the facilities and the facilitators are important but the treatment at the facility and by the facilitator(s) are more significant. On several occasion, ill treatment at the government facility is reported. This issue did not come to surface in the first round of the interview but gradually when women started trusting us they started speaking about their experiences in detail. The catch was to discern “what is” and “what ought to be.” As soon as we started asking them what you think the facilities should be- the concerns started flowing. We listened emphatically the discussion that zeroed around inhuman treatment received by the women from various quarters. Soon the positive aspects were overshadowed by the negativity around treatment received during pregnancy and child birth. Women reported that they were discriminated because of their gender, caste, class, as well as literacy level.

We intend to move beyond what is visible at the surface level and look from the perspective of women’s expectations in the next section.

Discussion on the Study

There is plethora of literature which suggests that women are mistreated and there are seminal scholars’ theories to comprehend the same. Butler (2006) helps us with the concept of “gender performativity” which suggests that gender roles are socially constructed and that women learn to perform the given social roles. They inculcate social norms and values for conforming to the rules laid out by the male dominated society. However, one has to understand that during procreation (read, child birth) performativity takes back-seat to the actualities of the human body. The women’s body at this point of time goes through huge amount of pain and subsequent pleasure of child birth. Therefore, we reiterate that at this time humanly need of women overshadows gender performativity. Precisely due to this gender discrimination should not happen at least around pregnancy and child birth. If this is checked, then there will be corresponding change in maternal and infant mortality in low performing states of a developing country like India.

Further comprehension of the shared narratives of “what is” and “what ought to be” by women, it is found that caste more than gender creates differences and, thereby, discrimination for women in this region. While all women face discrimination, lower caste women are treated badly by the health care providers. In one of our earlier study (Raj & Raj 2004), which was based

on the NFHS data, it was noted that there are considerable caste differentials of reproductive health status of women in undivided Bihar, Bengal, and Orissa. Bihar ranks lowest. Here the hold of caste in the everyday experiences of people is paramount. The women often complained that if service providers were from the upper caste, they were not treated with respect. We must re-instate that most of the women accessing JSY in this study are of low caste. The doctors and other staff at the hospital have been found very indifferent. One of the service providers categorically told us that the low caste rural women should be happy that they are given money as well as facility and that they should not worry about the facilities and treatment they get.

While sharing their experiences, lower caste women mentioned that upper caste medical personnel would try to avoid touching them. These acts, they stressed, is more painful when women are going through physical pain. The pain management, therefore, is needed both at the physical as well as social level. The point, then, is that JSY instead of being an empowering scheme becomes more a tool for further shaming lower caste women. Attempt at institutionalization of childbirth to reduce maternal mortality may succeed at statistically, but they are not empowering for women. Our social institutions are laden with deep seated prejudices that differentiate and discriminates people on the basis of gender and caste. It is important, therefore, to correct the rules governing different social institutions in our society.

Discrimination is also noticed due to class differences of these rural women. Even among the lower caste, those who are affluent do not avail of JSY. Those who avail JSY are relatively poor. It is their economic position, then, that compels them to utilize JSY and the novelty shown around this policy instrument. Neither, it is about the provisions revealed to be distributed through JSY. Also, the reason why ASHA workers were nodal can be attributed to the fact that given the socio-economic condition, the rural poor pregnant women have limited exposure and knowledge about the available health facilities, and, hence they rely totally on the advice of health workers. The JSY scheme has a major role to play and ASHA workers can be very instrumental. They motivate women to visit the facility for delivery for the good care that pregnant women will receive. The monetary benefits must be an encouragement for ASHA workers (see, Joshi and George 2012). The kind of incentives given to the ASHA, and as Joshi and George (2012) opines, makes them more inclined towards the healthcare system and not the community. This, then, neglects the necessity of the community. One important suggestion would be to provide continuous training to ASHA workers to make them aware of the social hurdles and guide them with the practices for better maternal healthcare. This and other issues are delineated in the following section which is brief with useful suggestions and points to ponder.

Recommendations from the Study

We believe that since ASHA are nodal therefore a formal training procedure would go a long way in becoming game changer in rural India. In the

absence of formalized training and with uprooting traditional practices, we are actually creating a vacuum in maternal health care, especially in rural areas. Trained ASHA will be able to comprehend the agency of women and not treat them as someone who needs help. ASHA can also be empowered with education to delve into social stigma and ways to address them.

As we have seen factors that influence women's decisions whether to have institutional or home births are interpersonal behaviours of the providers, influence of community health workers in deciding the place of delivery, accessibility of the health facility, emotional support during delivery, belief in clinical care in terms of presence of skilled staff, availability of medicine and lastly the cost of the services. We have also seen that they are "what is" and once we delve into "what ought to be", we start getting field information that makes us question whether childbirth assisted through JSY is empowering. Women want to be treated humanely during delivery – interpersonal behaviours, such as treating individuals with dignity and respect, and providing emotional support, can influence the demand for services.

Publicly available, accessible and affordable transport is a major factor in ensuring that women choose to go to facilities for delivery. Availability of manpower and provision of medicine during delivery care needs to be addressed. Costs and cash incentives do matter, and women are careful to calculate formal and informal costs in making their choices about place of delivery. Therefore, facility managers need to be aware of and prevent all manner of efforts that seek to impose "fees" on the woman availing of services. Understanding women's perception of quality and addressing them in facility based quality assurance program can not only bridge the demand and supply perspective but also can increase facility based delivery by providing safe, affordable and respectful care.

References:

- Aniebue, U.U. and P. N. Aniebue. 2011. 'Women's perception as a barrier to focused antenatal care in Nigeria: the issue of fewer antenatal visits', *Health Policy and Planning*. Vol. 26, pp.423-28.
- Bose, Ashish. 2007. 'Speeding up reduction in maternal mortality: Chasing a mirage?' *Economic and Political Weekly*. Vol. 42, No.3, pp. 206-8.
- Bruggemann, O.M. et al. 2007. 'Support to woman by a companion of her choice during childbirth: a randomized controlled trial', *Bio Medical Centre Public Health*. Vol. 4, pp.5-11.
- Butler, Judith. 2006. *Gender Trouble: Feminism and the Subversion of Identity*. Routledge: New York.
- Census of India. 2011. *Provisional Population Tables*. Office of the Registrar General & Census Commissioner, New Delhi: India.
- Chunuan, S.K. and W.C. Kochapakdee. 2003. 'Patient satisfaction with nursing care received during the intrapartum period', *Thai Journal of Nursing Research*. Vol. 7, No.2, pp.83-92.
- D'Ambruso, L., M. Abbey and J. Hussein. 2005. 'Please understand why I cry out in pain: women's accounts of maternity services during labour and delivery in Ghana', *Bio Medical Centre Public Health*. Vol. 5, pp.140-51.
- Das, P. et al. 2010. 'Client satisfaction on maternal and child health services in rural Bengal', *Indian Journal of Community Medicine*. Vol. 35, No.4, pp. 478-81.
- Dongre, A. and A. Kapur. 2013. 'How is Janani Suraksha Yojana performing in backward districts of India?' *Economic and Political Weekly*. Vol. 48, No.42, pp.53-59.
- Dzomeku, M. V. 2011. 'Maternal satisfaction with care during labour: A case study of the Mampong-Ashanti district hospital maternity unit in Ghana', *International Journal of Nursing and Midwifery*. Vol. 3, No.3, pp. 30-34.

- Fawole, A.O. et al. 2008. 'Clients' perceptions of the quality of antenatal care', *Journal of the National Medical Association*. Vol. 100, No.9, pp.1052-58.
- Ghobashi, M. and R. Khandekar. 2008. 'Satisfaction among expectant mothers with antenatal care services in the Musandam region of Oman', *Sultan Qaboos University Medical Journal*. Vol. 8, No.3, pp. 325-32.
- Government of Bihar (GoB). 2013. *District Patna: District Health Action Plan 2012-2013*. National Rural Health Mission, Government of Bihar: Patna.
- Government of India (GoI). 2005. National Rural Health Mission, *Guidelines for ASHA – Accredited Social Health Activist* (URL: http://mohfw.nic.in/NRHM/asha.htm#_abt), accessed on January 2010.
- Government of Maharashtra (GoM). 2008. *Incentive Structure of ASHAS in Thane District*. Thane District Health Office. Government of Maharashtra: India.
- Jain, A.K. 2010. 'Janani Suraksha Yojana and the Maternal Mortality Ratio', *Economic and Political Weekly*. Vol. 45, No.11, pp. 15-16.
- Joshi, S.R. and M. George. 2012. 'Healthcare through community participation: Role of ASHAs,' *Economic and Political Weekly*. Vol. 47, No.10, pp. 70-76.
- Mangal, S. and S. Ladha. 2012. 'Evaluation of safe motherhood practices in relation to Janani Suraksha Yojna', *The Indian Journal of Research and Reports in Medical Sciences*. Vol. 2, No.3, pp.5-8.
- Mebazaa, M.S. et al. 2010. 'Reduction of Bupivacaine dose in spinal anaesthesia for caesarean section may improve maternal satisfaction by reducing incidence of low blood pressure episodes', *M.E.J. Anesthesia*. Vol. 20, No.5, pp.673-78.
- Ministry of Health and Family Welfare (MHFW). 2005. *Operational guidelines for implementation of JSY*. Government of India: New Delhi.
- Ministry of Health and Family Welfare (MHFW). 2006. *Janani Suraksha Yojana: Features and Frequently asked questions and answers*. Government of India, New Delhi.
- Moawed, S.A.A., et al. 2009. 'Identification of factors associated with maternal satisfaction with primary health care center in Riyadh City', *Tanta Medical Journal*. Vol. 37, pp.1-15.
- Pena, Y.F. et al. 2009. 'Maternal satisfaction with maternal-infant nursing care in Campeche, Mexico', *Rev Latino-am Enfermagem*. Vol. 17, No.5, pp. 645-50.
- Raj, P. and A. Raj. 2004. 'Caste variation in reproductive health of women in Eastern Region of India: A study based on NFHS data', *Sociological Bulletin*. Vol. 53, No. 3, pp. 326-46.
- Registrar General of India (RGI). 2011. *Annual Health Survey, 2010-2011 Fact Sheet*. Office of the Registrar General & Census Commissioner, New Delhi: India.
- Sadler, L.C., T. Davison and R.M. Lesleyu. 2001. 'Maternal satisfaction with active management of labour: A randomised controlled trial', *Birth: Issues in Perinatal Care*. Vol. 28, No.4, pp.225-35.
- Santhya, K.G., et al. 2011. *Effects of the Janani Suraksha Yojana on maternal and newborn care practices: Women's experiences in Rajasthan*. Population Council: New Delhi.
- Seranath, et al. 2006. 'Factors determining client satisfaction with hospital-based perinatal care in Sri Lanka', *Tropical Medicine and International Health*. Vol. 11, No.9, pp.1442-51.
- Srivastava, U., et al. 2009. 'Patient controlled epidural analgesia during labour: Effect of addition of background infusion on quality of analgesia & maternal satisfaction', *Indian Journal of Anaesthesia*. Vol. 53, No.6, pp.649-53.
- State Institute of Health and Family and Welfare (SIHFW). 2009. *Janani Suraksha Yojana:II Concurrent evaluation*. State Institute of Health and Family and Welfare. Jaipur:India.
- UNFPA. 2009. *Concurrent assessment of Janani Suraksha Yojana (JSY) in selected states*. New Delhi: United Nations Population Fund – India.
- UNICEF. 2009. *Coverage Evaluation Survey. National fact sheet*. UNICEF India Country Office: New Delhi.
- Uttekar B. L. et al. 2008. *Assessment of Janani Suraksha Yojana in Uttar Pradesh*. Centre for Operations Research and Training. Vadodara: India.
- Uzochukwu, B.S.C. et al. 2004. 'Community satisfaction with the quality of maternal and child health services in Southeast Nigeria', *East African Medical Journal*. Vol. 81, No.6, pp. 293-99.
- WHO. 2005. *The world health report 2005: make every mother and child count*. World Health Organization: Geneva, Switzerland.

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