

Original Article

Maternal Satisfaction with Labour at the University of Ghana Hospital Accra: A Cross Sectional Survey

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Abstract

Information on maternal experience with institutional birth is dearth in Ghana, and the few studies on this subject did not employ standardized internationally validated questionnaires/instruments. Using a structured questionnaire including a modified-Women's Views of Birth Labour Satisfaction Questionnaire four (WOMBLSQ4), this study seeks to evaluate women's birth experience with care during labour, birth, and lying-in period, at the University of Ghana Hospital in Accra. Using a quantitative cross-sectional study approach, 50 puerperal women in the lying-in ward and those seeking postnatal care less than three months after delivery at the University of Ghana Hospital were selected. A structured questionnaire comprising, amongst others, the internationally validated Women's Views of Birth Labour Satisfaction Questionnaire fourth edition (WOMBLSQ4) was administered to respondents. In general, the maternal satisfaction with birth experience at the University of Ghana Hospital was high, with 52% and 38% of mothers rating their overall experience as excellent and good respectively. However, 20% of the participants expressed dissatisfaction with their overall birth experience at the health facility. Partner support received the highest negative rating on the birth experience accounting for 18% followed by continuity of care where 16% of the respondents reported not knowing their caregivers at the time of delivery. Though positive maternal birth experience among respondents was high, steps need to be taken to reduce the gaps in care identified by this study.

Keywords:

maternal experience; birth experience; maternal satisfaction; puerperal; labour.

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Introduction

The experience of labour and delivery, though unique for each woman, significantly involves and impacts the physical, psychological and emotional self of an individual. The experience is associated with physical strain, pain, psychological adjustment, and vulnerability (Naghizadeh, Kazemi, Ebrahimpour, & Eghdampour, 2013). Despite the various interventions for encouraging facility-based deliveries, 27% of deliveries still occur outside health facilities in Ghana (Ghana Demographic and Health Survey, 2014). Among the contributory factors of non-facility delivery in Ghana are poor attitude of health workers and poor quality maternity care (Esen & Sappor, 2013). In situations where persons opt for home birth without skilled attendants, each individual attends at least one antenatal clinic during the course of the pregnancy (Nakua et al, 2015). Most significantly, the rate of unskilled care rendered to these women is high. Largely accounting for this anomaly are unpleasant verbal expressions from health personnel and delay in responding to the calls of the women in labor. Experiences women have in labour are important to improve care particularly to make care provision patient-centered. This makes it imperative to investigate the experiences of mothers during labour in other settings within Ghana.

International, national and traditional clinical measures of the quality of care have been limited to the maternal and perinatal mortality and morbidity rates (Smith, 2001). However, the need for a complementary patient-centered measure of quality led to the acceptance of the mother's satisfaction during the birthing process as the indicator of choice in the evaluation of the quality of maternity services (Bélanger-Lévesque et al, 2014; Smith, 2001). A number of instruments have been developed to assess women's satisfaction with intra partum care and childbirth. These indicators have stemmed from an appreciation of mothers' experiences of institutional childbirth over recent decades (Gärtner et al., 2014; Sawyer et al., 2014). However, the information on maternal satisfaction with institutional birth in low and middle income countries is scarce and the studies on this subject found in the literature did not employ standardized internationally validated questionnaires/instruments. Using a modified-Woman's Views

of Birth Labour Satisfaction Questionnaire Four (WOMBLSQ4), this study evaluated, in a standardized way, women's birth experiences focusing on care received during recent labour, birth, and the lying-in period at the University of Ghana Hospital in Accra.

Design and Methods

Study area

The study was carried out at the University of Ghana Hospital's maternity ward that is found in West Wagon Sub-metropolitan within Accra Metropolitan Area. The University of Ghana (UG) established the University of Ghana Hospital in 1957. It is a quasi-government hospital originally established to care for the health needs of UG students, staff and dependents. As the community started developing, the inhabitants began to seek health care from the hospital. With time, the hospital became a District Hospital and has extensive catchment area. It has a capacity of 130 comprising of general ward, maternity unit, emergency unit, dental unit, surgical unit and operative theatre. Service provided include outpatient, in-patient and specialist service. The hospital has a well-known primary care outreach programme aimed at teaching and advising pregnant women, nursing mothers and the general public about personal hygiene, good nutrition, child care, and immunization against vaccine preventable diseases, family planning and school health services. The hospital receives about 150 antenatal clients monthly and conducts an average of about 60 deliveries in a month. The antenatal clinic is done from Mondays to Thursdays and the postnatal clinic is on Fridays. The maternity ward where respondents were interviewed has a bed capacity of 17 and a 24 hour service and is headed by an obstetrician gynecologist.

Study Population

The study targeted puerperal mothers at the University of Ghana. The inclusion criterion was women who have experienced recent labour and delivery at the University of Ghana hospital. Also, those receiving post-natal care for less than 3 months and consented to the study were included. Mothers receiving post-natal care for 3 months and beyond were excluded from the study.

Study Design and Participant Recruitment

A cross-sectional approach was adopted to evaluate women's birth experiences with care during a recent labour, delivery and immediate lying-in period. Using a convenience sampling technique, a total of 50 participants were involved in the study. Puerperal mothers in the lying-in ward and those seeking postnatal care at the University of Ghana Hospital within the period of the study were selected and those who voluntarily accepted to participate in the study were enrolled. A structured questionnaire including an internationally validated Women's Views of Birth Labour Satisfaction Questionnaire fourth edition (WOMBLSQ4) (Smith, 2001) was administered.

Statistical analysis

Each variable was analyzed and the outcome of the analysis was presented using tables and figures.

Computer based statistical packages Graph pad 6, was used to analyse the data.

Results

Socio-Demographic Data

General Demographic Information of Mothers Seeking Maternity Care at the University of Ghana Hospital

The average age of respondents surveyed for this study was 29.58 ranging from a minimum of 24 years to a maximum of 41 years. The majority of the mothers (58%) who participated in this study were younger than 30 years. Eighty eight percent (88%) of respondents were married and 86% of them had attained at least secondary education at the time of this study. Most of the mothers (84%) were Christians and the majority were gainfully employed working in the formal sector (64%). (Table 1).

Table 1: General Demographic Information of Mothers Seeking Maternity Care at the University of Ghana Hospital, Accra

Parameter	Frequency	Percentage
Total Respondent	50	100
Age Range		
<30	29	58.00
30-35	14	28.00
>35	7	14.00
Marital Status		
Single	3	6.00
Co-Habitation	3	6.00
Married	44	88.00
Educational Status		
None	2	4.00
Basic	5	10.00
Secondary	16	32.00
Tertiary	27	54.00
Maternal Religion		
Christian	42	84.00
Muslim	4	8.00
Traditional	2	4.00
Others	2	4.00
Employment Status		
Formal	32	64.00
Informal	13	26.00
None	5	10.00

Maternal Experience with Labour and Immediate Lying-In Care at The University of Ghana Hospital, Accra

In general, the maternal satisfaction with birth experience at the University of Ghana Hospital was high, with 52% of mothers rating their overall experience as excellent and 38% rated good. However, 20% of the participants expressed dissatisfaction with their overall birth experience at the health facility. Participants reported positive experiences with the support they received from the health professionals at the facility during the period of delivery and immediate lying-in care with none rating this domain of birth experience as poor. On the maternal control domain, most of the participants surveyed (98%) felt they

were allowed to have control over the delivery process. As seen in Table 4, though most of the participants in the study felt their expectation for the delivery experience was met, 6% of the respondents felt it did not meet their expectation. Partner support received the highest negative rating of 18% followed by continuity of care. Ten percent (10%) of mothers indicated that pain management before delivery was poor while 14% also felt pain management after delivery was poor. Most of the women said their babies were presented to them to hold within one hour after birth. The participants were also very happy with the delivery environment and the education they received after birth. (Table 4).

Table 2: Rating of Maternal Experience with Labour at the University of Ghana Hospital stratified by various domains.

Parameters	Poor	Good	Very Good	Excellent
General Satisfaction	5(10)	19(38)	0(0)	26(52)
Birth Experience Domains				
Professional Support	0(0)	7(14)	12(24)	31(62)
Control	1(2)	29(58)	16(32)	4(8)
Expectation	3(6)	6(12)	15(30)	26(52)
Partner Support	9(18)	9(18)	6(12)	26(52)
Pain Mgt before Delivery	5(10)	11(22)	10(20)	24(48)
Holding Baby	2(4)	17(34)	15(30)	16(32)
Pain Mgt after Delivery	7(14)	13(26)	25(50)	5(10)
Continuity	8(16)	10(20)	8(16)	24(48)
Environment	2(4)	2(4)	11(22)	35(70)
Education after Birth	0(0)	9(18)	24(48)	17(34)

Data is presented as figure with corresponding percentage in parenthesis. Mgt-management. Poor (< 50%), Good (50-59%) Very Good (60-69) and Excellent (≤ 70%) of percentage total domain score

Pregnancy Outcome with General Satisfaction of Birth Experience At University of Ghana Hospital

As shown in Figure 1A, negative maternal birth experience was higher among primiparous mothers (14.3%) compared to their multiparous counterparts (8.3%). Mothers who underwent caesarean section had less negative maternal birth experience (7.1%) than those who underwent spontaneous vaginal delivery (11.8%) (Figure 1B). Though the vast majority

of mothers whose babies were diagnosed as sick at delivery rated their birth experience as excellent, this group had a higher number of dissatisfaction (16.5%) compared to those who delivered healthy babies (9.3%) (Figure 1C). Mothers whose babies were admitted to the Mother Baby Unit recorded higher negative maternal birth experience (20%) than those who were not admitted (9.1%) (Figure 1D).

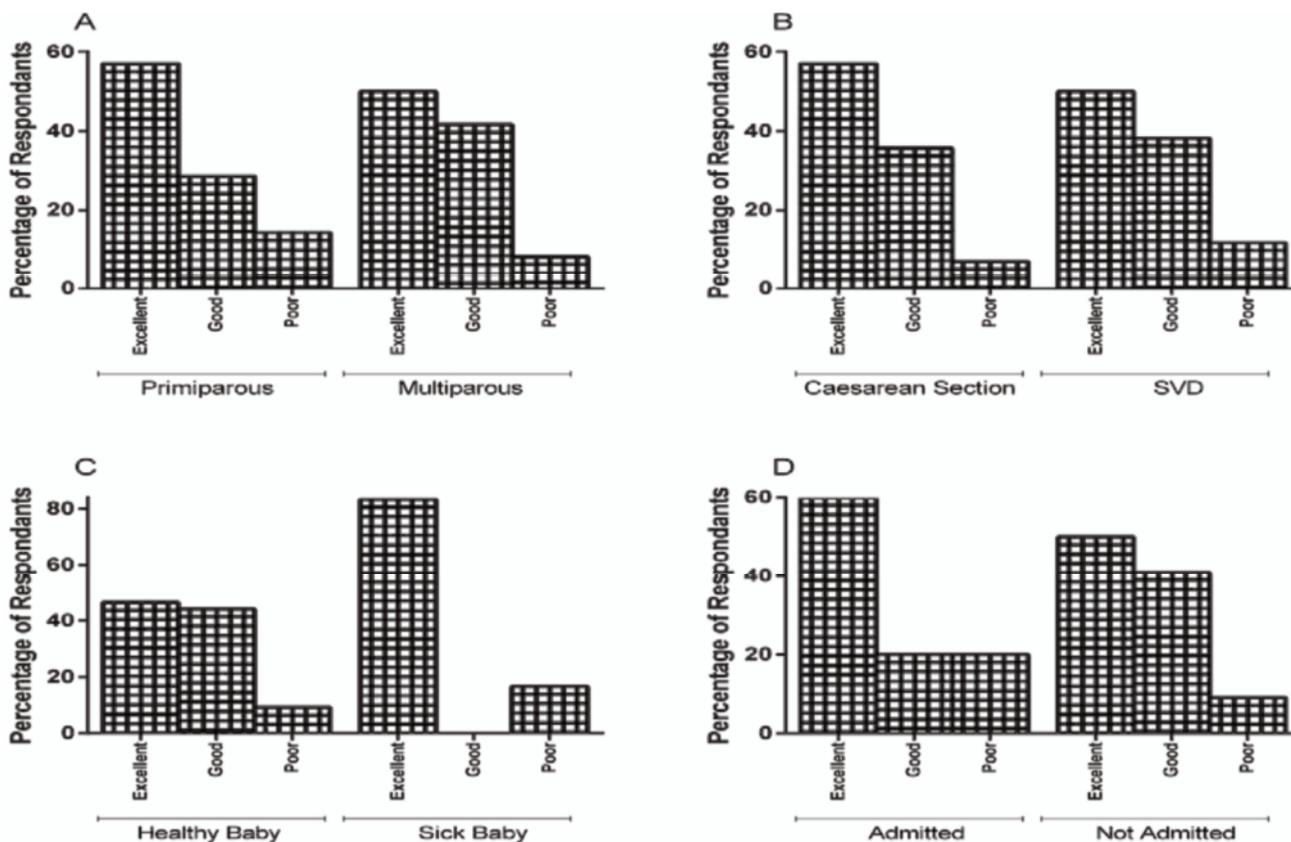


Figure 1: General Satisfaction of Birth Experience among Women Seeking Maternal Care at the University Hospital Stratified by Obstetric and Gynaecological Outcome. A-Number of Birth, B-Mode of Delivery, C-Diagnosis at Birth and D-Admission after Birth.

Socio-Demographic Characteristics With General Satisfaction of Birth Experience at a Hospital in Ghana

Positive maternal satisfaction with birth experience was associated with lower level of maternal education with only mothers with maternal educational levels above basic education expressing negative birth experience (Figure 2A). Higher antenatal attendance was also associated with positive maternal birth experience with greater percentage of mothers who attended less than four times of antenatal reporting negative birth experience (14.35%) than those who attended ANC four or more times during pregnancy (7.7%) (Figure 2C).

Discussion

In the current study, the frequency of antenatal care (ANC) attendance was very satisfactory with the majority of the mothers attaining the minimum required four visits. The obstetric information showed that most of the mothers delivered through spontaneous vaginal delivery (SVD). The fact that a majority of the mothers utilised ANC is encouraging and this might be related to the educational level of the mothers. This assertion is supported by a study conducted in northern Nigeria which observed that there was a significant association between education and ANC service utilisation (Ejembi, Alti-Muazu, Chirdan, Ezeh, & Sheidu, 2004). Previous studies have pro-

posed that ignorance of and misconceptions about the purpose of ANC, and financial constraints are the dominant underlying factors in delayed utilisation of ANC (Gharoro & Igbafe, 2000; Oyibo, Ebeigbe, & Nwonwu, 2011).

The experience of childbirth is an important life event for women. Generally, a high maternal satisfaction with birth experience at the University of Ghana Hospital was observed with most of the mothers rating their overall experience as excellent. However, a significant minority (20%) expressed dissatisfaction with their overall birth experience at the health facility. Participants reported very positive experiences with the support they received from the health professionals at the facility during the period of delivery and immediate lying-in care. None of the participants rated this domain of birth experience as poor. Available guidelines in high income countries in midwifery care highly advocate continuous support for mothers throughout labour (Munro & Spiby, 2000). All the puerperal mothers in the current study received support from the Ghanaian health professionals and this promoted mothers' satisfaction in their labour and immediate post-natal experience. On the maternal control domain, majority of the participants surveyed reported they were allowed to have control of the entire delivery process and were not ordered about on what to do. Although most of the participants in the study thought their expectations for a positive delivery experience were met, a few of the respondents were disappointed. Hence, it is imperative that the hospital management identifies why the few respondents' expectations were not met so as to take steps to address them. Partner support received the highest negative ratings followed by continuity of care whereas a smaller proportion of the respondents reported not knowing their careers at the time of delivery. Some of the mothers reported that pain management before and after delivery was poor. Finally, most of the women said their babies were presented to them to hold at the appropriate time. Participants were also very happy with the delivery environment and the education they received after birth.

Since pregnancy and childbearing have brought risks to women throughout history, it is very important that health professionals give mothers first class obstetric

care during pregnancy and childbirth. This could result in reduction of maternal mortality which is seen as a key indicator of women's health status (Akum, 2013). Childbirth changes life forever in a process that is renewed with every child that the woman gives birth to (Lundgren, Karlsdottir, & Bondas, 2009) and extends far beyond the specific experience in birth (Brathwaite & Williams, 2004). The health professionals at the University of Ghana Hospital should be encouraged to do more to reduce childbirth complications as a traumatic birth experiences could have a long lasting effect on the woman's health and well-being as well as the relationship to the baby (Beck, 2006).

Existing literature expresses labour support as the presence of an empathic individual who comforts a woman and provides other physical and psychosocial assistance to help her cope with the difficulties of labour, and birth (Hodnett, 2002). The presence of family members/partners is one of the key aspects that women believe constitutes good care, whether they deliver at home or at an institution. The presence of a family member provides the labouring woman with emotional support in an unknown hospital environment (Mahdi & Habib, 2010). The Mother-Friendly Childbirth Initiative recommends that a birth centre should offer the mother unrestricted access to the birth companion of her choice including father, partner, children, family members and friends (Shobha & Jayprakashkumar, 2013). Interestingly, partner support received the highest negative rating in the current survey. This is because the structural layout of the maternity unit, particularly the labour wards, does not accommodate partners in labour. Efforts should be made to change the physical structure of the labour ward in order to facilitate the presence of male partners at deliveries without compromising the privacy of other labouring women. Women's emotional experiences are an important outcome of labour (Waldenstrom, 2003). Birth experiences are very individual and have personal meaning for women.

Patient satisfaction is widely recognized as a legitimate measure of quality health care (Sharma & Kamra, 2013; Singh, Goswami, & Nagaonkare, 2013). The current survey observed that positive maternal satisfaction with birth experience was associ-

ated with lower level of maternal education as only mothers with educational levels above basic education expressed negative birth experience. This finding agrees with a study by Mselle, Moland, Mvungi, Evjen-Olsen, & Kohi (2013) which posited that because of higher expectations, educated groups and patients with higher social class are often less satisfied than less educated groups. Higher antenatal attendance was also associated with positive maternal birth experience with greater percentage of mothers who attended less than four times of antenatal expressing negative birth experiences than those who attended ANC four or more times during pregnancy. Pregnancy is considered a phase in life that makes great demands on the woman's ability to adapt and adjust physically, psychologically and socially. Therefore, the antenatal period provides an opportunity for reaching out to pregnant women and providing them with care that will enhance their optimum health and the wellbeing of their unborn infants. Our findings suggest that exposure to "routine" antenatal care can also guide or influence the pregnant woman's expectations (Mathibe-Neke, 2008).

Implications for midwifery practice

The findings indicated that though positive maternal birth experience among respondents was high, steps need to be taken to improve care during labour, delivery and the immediate lying-in. Regular patient surveys on maternal satisfaction should be conducted on regular bases to inform quality of midwifery

care to help improve care and evidence-based midwifery care.

Conclusion

The study observed a high maternal satisfaction with birth experience at the University of Ghana Hospital as mothers rated their overall experience as excellent and good respectively. High Maternal satisfaction with the birth experience was associated with low levels of maternal education and also among multiparous mothers. Exposure to regular care influences the pregnant woman's expectations. Also, mothers who underwent (cesarean section) C/S had a better birth experience with those who had (spontaneous vaginal delivery) SVD reporting negative birth experiences. The study also identified that the incidence of the sick child and hospitalization of the child negatively impacted on the satisfaction and experience of most women during their maternal stay at the University of Ghana.

Conflicts of interest

The authors have no competing interests to disclose

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References

- Ajibade, BL, Oladeji, MO, Oyedele, EA, Amoo, PO, & Makinde, OY. (2013). Antenatal Patients Level of Satisfaction Toward Service Rendered by Health Workers in Selected Primary Health Centers of Ejigbo Local Government, Osun, State Nigeria. *European Journal of Business and Management*, 5(28), 189-196.
- Akum, FA. (2013). A Qualitative Study on Factors Contributing to Low Institutional Child Delivery Rates in Northern Ghana: The Case of Bawku Municipality. *Journal of Community Medicine Health Education*, 3(6), 6-15.
- Beck, CT. (2006). Pentadic cartiography: Mapping birth trauma narratives. *Qualitative Health Research*, 16(4), 453-466.
- Bélanger-Lévesque, Marie-Noëlle, Pasquier, Marilou, Roy-Matton, Naomé, Blouin, Simon, & Pasquier, Jean-Charles. (2014). Maternal and paternal satisfaction in the delivery room: a cross-sectional comparative study. *BMJ Open*, 4(2), e004013.
- Brathwaite, AC, & Williams, CC. (2004). Childbirth experiences of professional Chinese Canadian women. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 33(6), 748-755.
- Ejembi, CL., Alti-Muazu, M., Chirdan, O., Ezeh, HO., & Sheidu, S. (2004). Utilization of maternal health services by rural Hausa women in Zaria environs, northern Nigeria: Has primary health care made a difference? *Journal of Community Medicine and Primary Health Care*, 16, 47-54.
- Esen, Reuben K, & Sappor, Mary-Margaret. (2013). Factors Associated With the Utilization Of Skilled Delivery Services in The Ga East Municipality Of Ghana Part 2: Barriers To Skilled Delivery. *International Journal of Scientific & Technology Research* 2(8).
- Gärtner, Fania R, Freeman, Liv M, Rijnders, Marlies E, Middeldorp, Johanna M, Bloemenkamp, Kitty WM, Stiggelbout, Anne M, & van den Akker-van, M Elske. (2014). A comprehensive representation of the birth-experience: identification and prioritization of birth-specific domains based on a mixed-method design. *BMC Pregnancy and Childbirth*, 14(1), 147.
- Gharoro, EP., & Igbafe, AA. (2000). Antenatal care: Some characteristics of the booking visit in a major teaching hospital in the developing world. *Medical Science Monitor*, 6, 519-522.
- Hodnett, E. D. (2002). WITHDRAWN: Caregiver support for women during childbirth. *The Cochrane Database of Systematic Reviews*, (1), CD000199. <https://doi.org/10.1002/14651858.CD000199>
- Lundgren, I., Karlsdottir, SI., & Bondas, T. (2009). Long-term memories and experiences of childbirth in a Nordic context: a secondary analysis. *International Journal of Qualitative Studies on Health and Well-being*, 4, 115-128.
- Mahdi, SS., & Habib, OS. . (2010). A study on preference and practices of women regarding place of delivery. *Eastern Mediterranean Health Journal*, 16(8), 874-878.
- Mathibe-Neke, JM. (2008). The expectations of pregnant women regarding antenatal care. *Curationis* 31(3), 4-11.
- Mselle, LT., Moland, KM., Mvungi, A., Evjen-Olsen, B., & Kohi, TW. (2013). Why give birth in health facility? Users' and providers' accounts of poor quality of birth care in Tanzania. *BMC health services research*, 13(1), 174-186.
- Munro, J., & Spiby, H. (2000). Guidelines for midwifery led care in labour. Retrieved from https://www.researchgate.net/profile/Helen_Spiby/publication/242194516_Guidelines_for_midwifery_led_care_in_labour/links/555082cb08ae93634ec8e07f.pdf
- Naghizadeh, Somayyeh, Kazemi, Azita Fathnejad, Ebrahimpour, Mehdi, & Eghdampour, Faride. (2013). Assessing the factors of mother's dissatisfaction with labor and delivery care procedure in educational and non-educational hospitals in Tabriz. *European Journal of Experimental Biology*, 3(6), 132-139.
- Ghana Statistical Service (GSS), Ghana Health Service (GHS), and ICF International (2015). Ghana Demographic and Health Survey 2014. Rockville, Maryland, USA: GSS, GHS, and ICF International.
- Nakua, E. K. Sevugu, J. T., Dzomeku, V. M, Lipkovich, H. R., Otupiri, E. & Owusu-Dabo, E. (2015) Home birth without skilled attendants despite Millennium Villages Project interventions in Ghana: insight from a survey of women's perceptions of skilled obstetric care. *BMC Pregnancy and Childbirth*, 15(243).
- Oyibo, PG., Ebeigbe, PN., & Nwonwu, EU. (2011). Assessment of the risk status of pregnant women presenting for antenatal care in a rural health facility in Ebonyi State, South Eastern Nigeria. *N Am J Med Sci*, 3, 424-427.

- Sawyer, A., Rabe, H., Abbott, J., Gyte, G., Duley, L., & Ayers, S. (2014). Measuring parents' experiences and satisfaction with care during very preterm birth: a questionnaire development study. *BJOG: An International Journal of Obstetrics & Gynaecology*.
- Sharma, SK., & Kamra, PK. (2013). Patient Satisfaction with Nursing Care in Public and Private Hospitals. *Nursing and Midwifery Research Journal*, 9(3), 1-12.
- Shobha, M., & Jayprakashkumar, M. (2013). Client's Perspective on Obstetric Care Received at 24X7 Primary Health Centres of a District Located in Western India. *Innovative Journal of Medical and Health Science*, 3(3), 136-139.
- Singh, AK., Goswami, D., & Nagaonkare, SN. (2013). A Study of Quality of Care and Customer Satisfaction in the Obstetrics and Gynaecology Department of the Government Medical College Hospital-Garhwal (uttarakhand). *Indian Journal of Public Health Research & Development*, 4(3), 15-18.
- Smith, LFP.(2001). Development of a multidimensional labour satisfaction questionnaire: dimensions, validity, and internal reliability. *Quality in Health Care*, 10(1), 17-22.
- Waldenstrom, U. (2003). Women's memory of childbirth at two months and one year after the birth. *Birth*, 30(4), 248-254.