

Predictors of Women's Perception of Intrapartum Care in a Secondary Health Facility in Calabar Metropolis, Cross River State, Nigeria

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Abstract

Introduction: The study investigated the predictors of women's perception of intra partum care in a secondary health facility in Calabar Metropolis. Four research questions and one hypothesis guided the study.

Methods: The study adopted a descriptive survey design. Simple random sampling technique was used to select 175 for the study. A self-developed well validated four sections questionnaire with reliability co-efficient of 0.78 was the instrument for data collection. Data were analyzed using simple percentages and hypothesis was tested using Chi-square analysis at 0.05 level of significance.

Results: The results revealed that 136 (77%) respondents had good knowledge, 107 (61.1%) had positive attitude. Influence of educational attainment on perception was 90 (51.4%) positive. There was significant association between age and women's perception with χ^2 calculated of 23.82 greater than χ^2 critical of 11.07 with 5 degree of freedom.

Conclusion: The conclusion revolves around these findings. It was recommended that the health facility should define the universal norms of what pregnant women should expect from the facility during intra partum period.

Keywords: Intra partum care; Predictors; Perception; Secondary health facility; Nigeria

Introduction

Every year over 130 million babies are born globally and more than 6.3 million deaths occur during the prenatal period [1]. Past studies has revealed that an estimated 300,000 maternal deaths have occurred related to childbirth as a result of poor intra-partum care [2]. Most global maternal and newborn deaths are avoidable with quality health care provision and can be prevented [3,4]. Also, past studies have reported that 21% women in the world who receive midwife-led care were less likely to have a fetal loss before 24weeks' gestation, but rather were more likely to have spontaneous vaginal birth [5]. The contributing factors to these death could be attributed to the place and care during delivery [6]. However it is important to offer intra-partum care that is responsive to clients' needs as certain factors could influence these needs as well as their perception of the intra-partum care they received (WHO) [3]. Based on the information provided above, the researchers sought to examine the predictors of women's perception of intra-partum care in a secondary health facility in Calabar metropolis Cross River State, Nigeria, the result of the findings will be used to enhance the quality of intra-partum care rendering to them in this facility.

Research questions

1. What are women's perception (opinion) toward intra-partum care in Secondary health facility in Calabar?
2. How does the knowledge on intra-partum influence women's perception of intra-partum care in Secondary health facility in Calabar?
3. How does attitude of health care workers affects women's perception of intra-partum care in Secondary health facility in Calabar?
4. What is the influence of educational status on women's perception of intra-partum care in Secondary health facility in Calabar?

Research hypothesis

There is no significant relationship between age and women's perception of intra-partum care in Secondary health facility in Calabar.

Empirical review

Perception of intra-partum care among women: Brown et al. carried out a randomized study about promoting childbirth companions in South Africa [7]. Findings from the study showed that 311 out of the 481 pregnant women had positive perceptions about intra-partum care. Results also revealed that 250 women were of the opinion that intra-partum determines the outcome of every pregnancy after labour. The remaining 231 women were of the opinion that intra-partum care is very essential if the women must come out of the labour room alive. Similar findings were made by [8]. In their study on factors influencing rising maternal mortality rates in China between 1998 and 2008, results showed that women's perception of intra-partum care was positive in their study. It was discovered that most of the women (76.3%) were of the opinion that intra-partum care is only necessary for pregnant women who go through severe labour pains.

Level of knowledge on intra-partum and women's perception of intra-partum care: Results from a study on maternal satisfaction and pain control in women choosing natural childbirth, showed that there was adequate knowledge on intra-partum care among pregnant women

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Received: May 02, 2019; **Accepted:** June 04, 2019; **Published:** June 11, 2019

Citation: Neji OI, Ndukaku N, Kalu UV, Blessing O (2019) Predictors of Women's Perception of Intrapartum Care in a Secondary Health Facility in Calabar Metropolis, Cross River State, Nigeria. J Preg Child Health 6: 415. doi:[10.4172/2376-127X.1000415](https://doi.org/10.4172/2376-127X.1000415)

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in Ghana [9]. Findings showed that 143 out of 183 nursing mothers claimed that the intra-partum care had to do with all the nursing intervention and care employed by midwives in order to ensure that pregnant women deliver their children successfully. More than half (62.4%) of the participants claimed that labour pains management through medical and nursing care strategies is one of the ways by which midwives deliver quality intra-partum care. Few of the participants (31.8%) acknowledged that the use of anaesthesia was part of intra-partum care practices that ensured safe delivery.

In a study on knowledge and attitude of women toward focused ANC in Cross Rivers State, findings showed that 81.2% of clients had adequate knowledge of intra-partum care [10]. Thus, this knowledge translated to their willingness and acceptance rate of intra-partum care from traditional birth attendance. Lundgren, investigated maternal satisfaction and pain control in women selecting natural childbirth [9]. It was discovered that many women who choose natural childbirth for labour ultimately requested epidural analgesia to control labour pain as an intra-partum care strategy. Findings from the study showed that 117 out of 183 nursing mothers had adequate knowledge of intra-partum care. The intra-partum care that were known to these women were: Monitoring of uterine contractions by nurses, determination of fetal position by abdominal palpation, monitoring of contractions by palpation, monitoring of fetal heart rate, monitoring of amniotic fluid and management of labour pain.

Attitude of health care workers and women's perception of intra-partum care: In a randomized study about promoting childbirth companions in South Africa Brown et al., it was reported that most pregnant women claimed that health care workers with negative attitudes always make them perceive intra-partum care to be a fear-filled experience with lots of negative consequences, psychologically and physically [7]. Statistically, it was proven that a significant correlation existed between the attitude of health care workers and the perception of intra-partum care among pregnant women. In another study on factors influencing rising maternal mortality rates in China between 1998 and 2008, results showed that there was a significant relationship between attitude of healthcare workers and women's perception of intra-partum care in their study [7]. It was discovered that pregnant women tend to perceive intra-partum care to be very effective and less painful whenever they are delivered by health care workers with positive attitude. Ojong et al., reported that although perception of intra-partum care was good among women, the kind of attitude skillful midwives/nurses portray before pregnant determined the kind of perception of intra-partum care that may exist among pregnant women [10]. In a study on FANC in South East Nigeria posited that the perception of intra-partum care among pregnant women was basically determined by the attitude of health care workers who are in charge of caring for them [11]. They stated that the more nice and kind health care workers are to pregnant women, the more positive pregnant women become satisfied about the process of child birth and the quality of care they are receiving during child birth.

Educational status and women's perception of intra-partum care: In their study on factors influencing rising maternal mortality rates in China between 1998 and 2008 opined that acceptance of intra-partum care from the hands of medical professional was higher among the educated women than women with low educational status [7,12]. Also opined that clients with higher educational level had a good perception of intra-partum care than those with just secondary educational level. This also agrees with Omah, who investigated the relationship between formal education and the perception of intra-partum care among

pregnant women in Nigeria [13]. He found out that formal education was significantly correlated to perception and attitude pregnant women have concerning intra-partum. Study in Nigeria, stated that among the Yoruba women, age, misery, anger, misconception and anxiety were some factors associated with women's perception of intra-partum care [14]. In support of the above, Ojong et al., findings showed that 81.2% of client would only accept intra-partum care from traditional birth attendance and perception was influenced by negative impact of cultural factors [10]. These factors included their traditional beliefs that TBAs were more experienced and caring in delivering intra-partum care. Statistically, a relationship between the age of pregnant women and their perception of intra-partum care.

Application of Health Belief Model (HBM) to the study: Health Belief Model (HBM) developed by Becker and Rosenstock in 1974 was used as the conceptual frame work for this study. The HBM is one of the most widely used conceptual framework for understanding health behaviours and is believed to lay the foundation for this study which enables the researcher to discover what is known or unknown about the topic of interest.

According to the HBM, individuals' intentions to participate in preventive health behaviour are determined by five main factors, namely:

- i. **Perceived susceptibility:** That is the person's subjective perceptions of the likelihood of experiencing a specific disease or condition that would adversely affect their health risk. It describes the women's behavior towards intra partum care as their health belief, attitude and perception.
- ii. **Perceived severity or perceived seriousness:** It is their perceptions regarding the effects of not seeking care during intra partum period on time.
- iii. **Perceived benefits:** Complying with and practicing health behaviors such as registering for antenatal care, immunization and follow up care depends on the women's perceived susceptibility and perceived benefits of such practices.
- iv. **Perceived barriers:** It is the women's perceptions of impediments associated with not seeking intra partum care. Perceived barriers explain their belief about the services as being favorable or unfavorable.
- v. **Cues of action:** These include a diverse range of triggers such as perception of complication, social influence, health education campaigns, media reports and mass media campaigns which will triggers their action towards intra partum care (Figure 1).

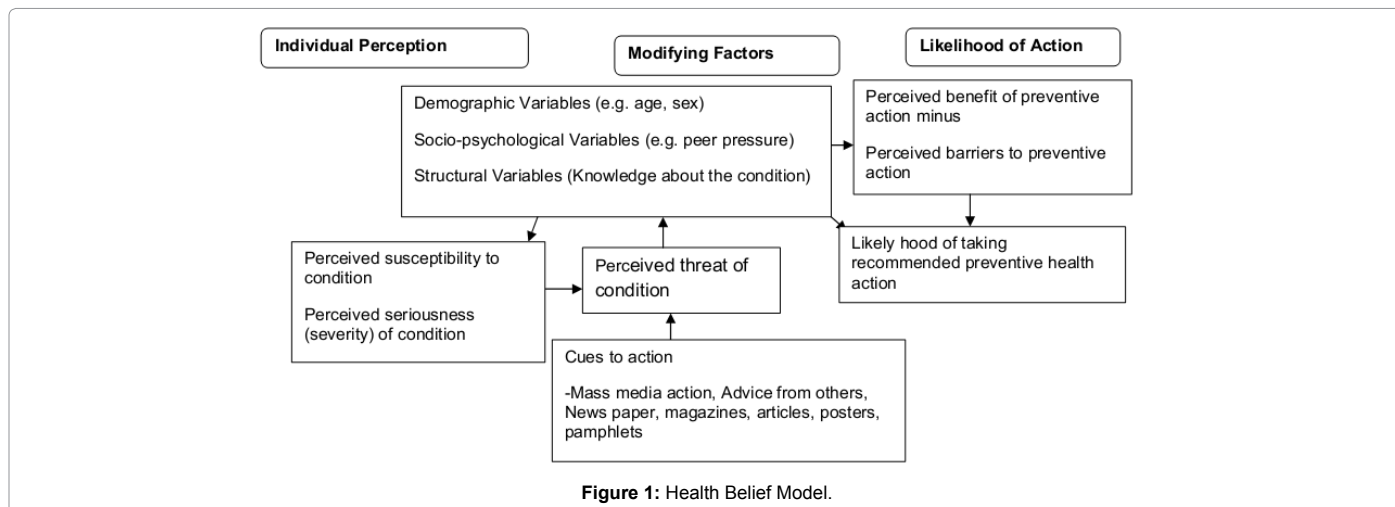
Materials and Methods

Research design

Descriptive survey design was adopted for the study.

Research site

The study site is a Secondary health facility, which is located in Calabar Municipality along Mary Slessor Avenue. The hospital is a state owned institution established 7th November, 1991. The hospital offers primary and secondary healthcare and serves as a training Centre for medical, nursing and paramedical personnel and also serves as a research center. This site was chosen because it is known for delivering quality intra-partum case services for pregnant women.



Target population

The target population consisted of all the women of child bearing age attending antenatal clinic in the secondary health facility within the period of the research from January 2019-March 2019. These were all the women who were either nursing mothers or mothers of at least one who were found in General Hospital. This summed up to 312.

Accessible population

The accessible population was made up of women found in postnatal ward who had registered with the Antenatal Clinic of General Hospital. These summed up to 175.

Sample and sampling technique

Simple random sampling technique was used to select the respondents while the sample size was calculated using Taro Yamane's sample size formula as shown below. Target population was 312 and the sample size is 175.

$$n = \frac{N}{1 + N(e^2)}$$

Instrument for data collection

A self-developed validated questionnaire was used to elicit data from the respondents. The instrument was divided into five (5) sections. Section A sought information on respondents socio demographic data, Section B is on women perception on intra-partum care, Section C is women's knowledge on intra-partum care, Section D attitude of healthcare workers on women's perception of intra-partum care, Section E is on educational status and women's perception on intra-partum care.

Validity of instrument

Face validity and content validity of the research instrument was established by the researchers.

Reliability of the instrument

The reliability was done using test-retest method, thereafter the two scores were correlated using Cronbach Alpha coefficient and the reliability estimate of 0.78 was gotten after two weeks interval.

Method of data collection

The questionnaire was administered to the respondents face to face

by the researchers and the same was completely filled and retrieved at the spot.

Data analysis procedure

The data that was collected was analyzed using percentages and frequencies, while the hypothesis was tested using the Chi-Square statistic test analysis at a 0.05 level of significance.

Ethical consideration

Administrative permit was sought from the management of the facility. The consent of the respondents was adequately gained by giving them adequate information to enable them to express their feelings. The researchers reassured the participants that all information was only for academic purpose so as to maintain confidentiality and anonymity. Participation was voluntarily and respondents are free to withdraw from the study at any point.

Results

Socio-demographic data of respondents

The results on Table 1 revealed:

Age: Out of the 177 respondents, 17 (9.7%) were between 18-22 years of age, 36 (20.6%) were between 23-27 years, 59 (33.7%) were between 28-32 years, 33 (18.9%) were between 33-37 years, 28 (16.0%) were between 38-42 years and 2 (1.1%) were 43 years and above of age.

Marital status: Most of the respondents, 69 (39.4%) were married, 45 (25.7%) were single, 36 (20.6%) were separated, 23 (13.1%) were widowed and 2 (1.1%) were divorced.

Religion: Out of the 175 respondents, 167 (95.4%) practised Christianity while 3 (1.7%) practised Islam and 5 (2.9%) practised traditional religion.

Educational qualification: Majority of the respondents, 29 (16.6%) had only attained primary educational level, 81 (46.3%) had attained secondary educational level and 59 (33.7%) had attained tertiary educational level.

Parity: Out of the 175 respondents, 69 (49.7%) had between 1-3 children, 83 (47.4%) had between 4-6 children while 5 (2.9%) had 7 children and above.

Variable	Frequencies	Percentage (%)
Age		
18-22 years	17	9.7
23-27 years	36	20.6
28-32 years	59	33.7
33-37 years	33	18.9
38-42 years	28	16
43 years and above	2	1.1
Total	175	100
Marital status		
Married	69	39.4
Single	45	25.7
Separated	36	20.6
Widowed	23	13.1
Divorced	2	1.1
Total	175	100
Religion		
Christianity	167	95.4
Islam	3	1.7
Traditional	5	2.9
Total	175	100
Educational qualification		
Primary	29	
Secondary	81	46.3
Tertiary	65	37.1
Total	175	100
Parity		
01 Mar	87	49.7
04 Jun	83	47.4
7 children and above	5	2.9
Total	175	100

Table 1: Socio-demographic data of respondents (n=175).

Research question one

What are women's perception (opinion) toward intra-partum care in secondary health facility in, Calabar? (Table 2).

By application of weighted mean scores, results in Table 2 showed that 90 (51.4%) respondents with individual mean scores that were ≥ 5.2 were considered to possess positive perception of intra-partum care. Also, 85 (48.6%) respondents with individual mean scores that were <5.2 were considered to possess negative perception of intra-partum care.

Research question two

How does the knowledge on intra-partum influence women's perception of intra-partum care in secondary health facility in, Calabar? (Table 3).

The results in Table 3 showed that 136 (77.7%) pregnant women's with mean scores ≥ 9 were considered to have good knowledge with positive perception of intra-partum care while 39 (22.3%) pregnant women's with mean scores <5 were considered to have poor knowledge with poor perception of intra-partum care.

Research question three

How does attitude of health care workers affects women's perception of intra-partum care in secondary health facility in Calabar Metropolis? (Table 4).

Perception	Mean score	Frequency %
Positive	≥ 5.2	90 (51.4)
Negative	<5.2	85 (48.6)

Table 2: Women's perception of intra-partum care (n=175).

Knowledge	Mean scores	Frequency %
Good	≥ 9	136 (77.7)
Poor	<5	39 (22.3)

Table 3: Knowledge on intra-partum and women's perception of intra-partum care (n=175).

Classification of level of attitude	Mean scores	Frequency %
Positive attitude	≥ 6.7	107 (61.1)
Negative attitude	<6.7	68 (38.9)

Table 4: Attitude of health care workers and women's perception of intra-partum care (n=175).

Consequently, by application of weighted mean scores, results in Table 4 showed that the attitude of health workers had a 61.1% positive influence on 107 pregnant women's perception of intra-partum care while it had a 38.9% negative influence on 68 pregnant women's perception of intra-partum care.

Research question four

What is the influence of educational status on women's perception of intra-partum care in secondary health facility in Calabar? (Table 5).

The above results on educational attainment and women's perception of intra partum care revealed that, majority of the women 40 (22.9) with tertiary education had positive perception. While most women 44 (25.2) with secondary education had negative perception towards intra partum care. One would expect the women with primary education to have negative perception but reverse is the case in this result.

Hypothesis one

Table 6 shows that the X^2 calculated of 23.82 was greater than the X^2 critical of 11.07 with 5 degrees of freedom and P-value of 0.025. This implies that the null hypothesis is rejected and the alternative is upheld. Therefore, there is a significant relationship between age and women perception of intra-partum care in Secondary health facility in Calabar.

Educational status	Positive perception (%)	Negative perception (%)	Total (%)
Primary	13 (7.4)	16 (9.1)	29 (16.5)
Secondary	37 (21.1)	44 (25.2)	81 (46.3)
Tertiary	40 (22.9)	25 (14.3)	65 (37.2)
Total	90 (51.4)	85 (48.6)	175 (100)

Table 5: Educational status and women's perception of intra-partum care (n=175).

Age of pregnant women	Women's perception		Total	df	X^2 cal	X^2 crit	p-value
	Positive (%)	Negative (%)					
18-22 years	7 (4.0)	10 (5.7)	17	-	-	-	-
23-27 years	8 (12.6)	28 (16.0)	36	-	-	-	-
28-32 years	40 (30.9)	19 (10.9)	59	-	-	-	-
33-37 years	15 (14.3)	18 (10.3)	33	5	23.819	11.07	0.025
38-42 years	18 (14.8)	10 (5.7)	28	-	-	-	-
43 years and above	2 (1.1)	0 (0.0)	2	-	-	-	-
Total	90	85	175	-	-	-	-

Table 6: Contingency chi-square analysis showing relationship between age and women's perception of intra-partum care in General Hospital, Calabar (n=175).

Discussion

Research question one

From the findings in this study, it was revealed that majority of the respondents possessed positive perception of intra-partum care while few of them possessed negative perception of intra-partum care. This was as a result of most of them disagreeing that quality intra-partum care is not only for women who have been to tertiary institutions, not only for women who understand English and not for only women with secondary school certificates. The finding is in line with the observations of Brown et al., where many women had positive perceptions about intra-partum care [7]. The above findings also support the study of Lundgren, who reported that there was high level of positive perception toward intra-partum care among nursing mothers [9].

Research question two

From the findings in this study, it was revealed that the majority of the pregnant women had good knowledge of intra-partum care with positive perception of intra-partum care due to health education given during care of labour, pregnant women's knowledge of nurses monitoring of their uterine contraction, labour pain management via massage of women's waist during labour and receiving of pain relief drugs. The findings is in line with Lundgren study on maternal satisfaction and pain control in women electing natural childbirth which many women with good knowledge of intra-partum care choose natural childbirth for labour ultimately as long as epidural analgesia were used to control labour pain as an intra-partum care strategy [9]. This finding revealed that knowledge was the key to positive perception.

Research question three

In assessing how the attitude of health care workers affects women's perception of intra-partum care in the facility, the findings revealed that majority of the pregnant women stated that they refused intra-partum care from abusive nurses, impatient health care workers and aggressive nurses give them wrong impressions of intra-partum care, kind nurses make them have confident in the efficacy of intra-partum care and nurses' lateness to work gives pregnant women a wrong impression of intra-partum care. The above findings is supported by Ojong et al., who discovered that the kind of attitude skillful midwives/nurses portray before pregnant determined the kind of perception of intra-partum care that may exist among pregnant women [10]. This agrees with the study of Naithani, who reported pregnant women's perception of intra-partum care was basically determined by the attitude of health care workers who are in charge of caring for them [12].

Research question four

From the findings in this study, it was revealed that educational status had low influence on the perception of intra-partum care of most of the respondents with primary education, moderate influence on the perception of intra-partum care of few respondents with secondary education, high influence on the perception of intra-partum care of few respondents with tertiary education. This was as a result of most of them disagreeing that quality intra-partum care is not only for women who have been to tertiary institutions, not only for women who understand English and not for only women with secondary school certificates. The finding is in line with the observations of Omah, in their study that formal education was significantly correlated to perception and attitude pregnant women have concerning intra-partum [13]. The above findings also support the study of Ojong et al., who reported that clients with higher educational level had a good perception of intra-

partum care than those with just secondary educational level [11].

Hypothesis

The result of hypothesis one revealed a statistical significant relationship between age and women's perception of intra-partum care in the facility. The above result was supported by WHO, who reported in their work that a relationship between the age of pregnant women and their perception of intra-partum care [15]. This finding is in line with the findings of Yoruba, who reported that age, was one of the factors influencing women's perception of intra-partum care [14].

Limitation

The limitation of the study was the lackadaisical attitude of the respondents towards their responses on questionnaires item, this was overcome by explaining to the women that their responses will only be used for research purposes and to enhance quality care.

Conclusion and Recommendations

Conclusion

With the results obtained from the study, it revealed that the pregnant women with positive perception of intra-partum care also had good knowledge of it. Also in socio demographic variables, age influenced pregnant women's perception of intra-partum care in the facility. Thus, it was concluded that sensitization of pregnant women on intra-partum care should be carried out in antenatal clinics found in both rural and urban areas.

Recommendations

- The hospital should define the universal norms of what the pregnant women should expect from their facility during the intra-partum period.
- The government should strengthen the referral system and antenatal care offered at the health centres to enable the mothers reach health facilities in time.

References

1. Khayat R, Campbell O (2014) Hospital practices in maternity wards in Lebanon. *Health Policy Plan* 15: 270-278.
2. Ronsmans Graham WJ (2014) Maternal mortality: Who, when, where and why? *Lancet* 368: 1189-1200.
3. Kassebaum NJ, Barber RM, Bhutta ZA, Dandona L, Gething PW, et al. (2015) Global, regional and national levels of maternal mortality, 1990-2015: A systematic analysis for the global burden of disease study. *Lancet* 38: 1775-1812.
4. Spector JM, Lashoer A, Agrawal P, Lemer C, Dziekan G (2013) Designing the WHO safe childbirth checklist program to improve quality of care at childbirth. *Int J Gynaecol Obstet* 122: 164-168.
5. Esienumoh EE, Okon IE, Ojong IN, Akpan MI, Armon MA, et al. (2015) Perception and practice of midwife-led model of care among skilled birth attendants in selected health facilities in a southern state in Nigeria. *Int J Nurs Midwife Health Relate Case* 1: 1-16.
6. Institute of Medicine (IOM) (2013) Report of the IOM working party on antenatal and intra-partum care. IOM, London, UK.
7. Brown H, Hofmeyr GJ, Nikodem VC, Smith H, Garner P (2007) Promoting childbirth companions in South Africa: A randomized study. *BMC Med* 5: 7.
8. Feng XL, Xu L, Guo Y, Ronsmans C (2012) Factors influencing rising maternal mortality rates in China between 1998 and 2008. *Midwifery* 16: 303-316.
9. Lundgren I (2004) Releasing and relieving encounters: Experiences of pregnancy and childbirth. *Scand J Caring Sci* 18: 368-375.
10. Ojong IN, Uga AL, Chiotu CN (2015) Knowledge attitude and practice focused

- ante natal care services in University of Calabar teaching hospital, cross river state, Nigeria. *Int J Nurs Midwife Health Relate Case* 1: 14-23.
11. Ojong IN, Nwonu E, Akpan MI (2016) Health care providers knowledge and practice of focused ante natal care in cottage hospital, Enugu, south east Nigeria. *Global J Pure Appl Sci* 22: 243-247.
 12. Naithani J (2011) A retrospective analysis of maternal and neonatal mortality at a teaching and referral hospital in Kenya. *Reprod Health* 10: 13-24.
 13. Omah I (2012) Relationship between formal education and the perception of intra-partum care among pregnant women in Nigeria. *J Midwife Women's Health* 8: 452-473.
 14. Yoruba E (2010) Women speak out about their needs for care during pregnancy and delivery. *J Midwife Women's Health* 4: 345-349.
 15. World Health Organization (2010) Trends in maternal mortality: 1990 to 2008. Geneva, Switzerland.