

**ASSESSMENT OF THE FACTORS INFLUENCING BIRTH PREPAREDNESS  
AND COMPLICATION READINESS AMONG PREGNANT WOMEN: A CASE  
OF SELECTED HEALTH CARE FACILITIES IN ELDORET, KENYA**

**Jackline Morara**

*Kisii University, Department of Nursing*

*P. O. Box 2340 – 30100*

*Eldoret, Kenya*

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**ABSTRACT:** *Evitable mortality and morbidity remains a formidable challenge in many developing countries, Kenya among them. Countering this challenge due to birth complications then becomes a critical area of concern. The principle and practice of Birth Preparedness and Complication Readiness (BP/CR) in resource-poor settings have the potential of reducing maternal and neonatal morbidity and mortality rates. This paper aims to assess the factors that influence BP/CR among pregnant women attending Antenatal care in selected Health Care Facilities in Eldoret, Kenya. The current maternal mortality ratio is 488 maternal deaths per 100,000 live births (KDHS 2008-9). Most of these deaths occur due to the five leading causes: severe bleeding/hemorrhage (25%), infections (13%), unsafe abortions (13%), eclampsia (12%), obstructed labor (8%), other direct causes (8%), and indirect causes (20%). It is important to note that most of these deaths can be prevented by proper ANC attendances and ensuring the presence of a skilled birth attendant during delivery and/or in case of any complications (Omolo & Kizito, 2010). The study used a descriptive cross sectional approach. Pregnant women seeking antenatal services in 3 health care facilities (Eldoret West Health Centre, Huruma and Uasin Gishu District Hospitals) formed the target population from which a sample size of 273 was obtained using fisher's formula. Data collection was done using questionnaire and analyzed using the SPSS software. Results are presented in tables and narratives. Among the factors established to be the most predictors included maternal education, source of income, pregnancy planning and attendance of Antenatal Care. The study recommends emphasis of Antenatal care education on birth preparedness and complication readiness to improve access to skilled and emergency obstetric care.*

**KEYWORDS:** Antenatal Care, Birth Preparedness, Complication Readiness, Kenya.

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## **INTRODUCTION**

Research has shown that majority (52%) of Kenyan women do not seek antenatal care services early in their pregnancy, this provides little or no time for appropriate screening and management of risk factors, if detected, as well as timely referral (Rogo *et al.*, 2001). As a midwife, over time, the author has observed that although pregnant women attend the Antenatal Care (ANC) throughout their pregnancy, most of them lack knowledge on birth and complication readiness. This makes them ill equipped to meet both their needs and that of their unborn baby. This is common in Uasin Gishu district hospital and many other hospitals around the country (KDHS 2008-9).

It is for the above reasons that this paper explores what influences the BP/CR among pregnant women in the selected health care facilities. With this information, appropriate plans can be made to ensure that women served in Eldoret town health facilities will have adequate information to make informed decisions regarding their pregnancy, delivery and post delivery.

If a woman is not emotionally ready, she may find it difficult to cope with pregnancy changes, giving her more feelings of anxiety, fear, and unhappiness during pregnancy. Financial readiness, on the other hand, is important because pregnancy requires a series of prenatal visits, vitamin and other supplements, as well as preparation for baby's arrival which of course means additional expenses (Fiset, 2005). Getting fit before pregnancy is also essential. The woman's weight and diet is also assessed before conception because these may have significant effects on pregnancy (Fiset, 2005).

### **LITERATURE UNDERPINNING**

Childbirth preparation has long been recognized as having many benefits. Some of the benefits include increased knowledge and acquisition of skills for coping with labor (Schotts, 2003), reduced anxiety on the birthing process, promotion of a positive birth experience (Nichols & Zwelling, 1997), increased health promotion behaviors and the use of fewer medications during labor (Nichols & Zwelling, 1997). Preparations for childbirth will also assist individuals and their families to make informed decisions about their pregnancy and childbirth (Schotts, 2003).

Various factors have been found to influence birth preparations around the world. In Kenya childbirth depends on the level of knowledge of the pregnant woman, husband or in laws (MOH, UON and NCPD, 2002).

Antenatal preparedness involves:

- a. ANC attendance to monitor the progress of both the mother and baby
- b. Making adequate provisions for proper maternal nutrition.
- c. Financial savings for the mother and baby
- d. Arranging for transport to the hospital when labor is perceived
- e. Choosing a birth attendant
- f. Knowledge on danger signs during pregnancy, being ready for any complication and taking appropriate action.

Intra partum preparations include:

- a. Having made preparations for transport
- b. Having identified a health facility and skilled birth attendant
- c. Knowledge on danger signs during labor (Lowdermickl & Perry, 2004).

Post partum preparedness:

- a. Because life-threatening complications can also occur during the early postpartum period, postpartum preparedness is of absolute importance. It involves knowledge of danger signs i.e. (excessive vaginal bleeding, convulsions, loss of consciousness, high fever) and adequate rest. It is also important that mothers provide six completed months exclusive breast feeding

and be familiar with post natal care, childhood immunizations, family planning, and maternal nutrition (Lowdermickl & Perry, 2004).

### **Focused Antenatal Care**

In 2001 the WHO issued guidance on a new model (Focused Antenatal Care) FANC for implementation in developing countries (MOH, 2004). FANC is a type of antenatal care that focuses on ensuring, supporting, and maintaining maternal and fetal well being throughout normal pregnancy and childbirth. It is goal oriented, timely, friendly and simple (MOH, 2004). In FANC the pregnant woman is expected to attend at least four visits during the entire pregnancy and each visit should be goal oriented where specific items such as client assessment, education, prevention, birth plan, detection and management of complications are discussed and documented (MOH, 2004). FANC has 5 objectives, that is; i) Health promotion and disease prevention, ii) Detection and treatment of existing diseases and conditions, iii) Early detection and management of complications, iv) Birth preparedness and v) Complication readiness.

Findings from a study on missed opportunities indicated that though the pregnant women attended ANC services, they lacked knowledge on essential elements of FANC (Anya *et al.*, 2008). This study also indicated that if missed opportunities are addressed it will greatly improve maternal health and reduce maternal deaths (Anya *et al.*, 2008).

In the African culture, knowledge on birth preparedness and complication readiness was passed on by mother in laws and grandparents early in pregnancy. As pregnancy progressed, pregnant women were sent back to their parents for delivery. During this time more knowledge was imparted. Traditional birth attendants were also very useful in childbirth preparations (Maestes, 2003). Nowadays childbirth preparations includes; visits to health care providers, seeking information from media or attending childbirth and parenting classes (MOH,UON and NCPD, 2002), hence this study on Birth Preparedness and Complication Readiness (BP/CR) as the currently adopted strategy.

### **Factors Influencing Birth Preparedness and Complication Readiness**

Pregnant women and newborns need timely access to skilled care during pregnancy, childbirth, and postpartum periods. Too often, their access to care is impeded by delays in deciding to seek care, reach care or receive the care they require (Thaddeus & Maine, 2004). These delays May be due to; logistical and financial concerns, unsupportive health care policies, gaps in services delivery or inadequate community and family awareness of birth preparedness and complication readiness.

Delays in seeking care for pregnant women may be caused by:

- a. failure to recognize danger signs of pregnancy and complications, failure to perceive the severity of illness, financial implications, previous negative experiences with the healthcare system, and transportation difficulties.
- b. the distance from a woman's home to the health facility or health care provider, the condition of roads, and lack of emergency transportation.

- c. unprofessional attitudes of providers, shortages of supplies and basic equipment, a lack of healthcare personnel and poor skills of healthcare providers.

The causes of these delays are common and predictable. However, in order to address this problem; women, families, the communities, care providers, and facilities that surround them must be prepared in advance for rapid emergency action (Thaddeus & Maine, 2004).

Knowledge of the danger signs is the first step to timely referral for essential obstetric care. Mona Moore *et al.* (2002), in a Homabay study to investigating factors influencing women's use of skilled care concluded that, poor knowledge on key danger signs indicated poor awareness. This was due to absence of relevant intervention within the health facilities that would promote BP/CR, poor utilization of available health care services and poor information given to the pregnant women during ANC visits (Sjogren, 1996).

Mihret and Mesganaw in a study assessing knowledge and practices on BP/CR in Ethiopia identified poor comprehensive knowledge and practices on birth preparedness and complication readiness in the area. From the study, community based education on BP/CR and pregnant women empowerment through expansion of educational opportunities are important steps in reducing maternal mortality. Therefore, it is our responsibility as health care providers to give due emphasis to BP/CR (Mihret & Mesganaw, 2008).

A Ghanaian study identified the following service-related problems influencing BP/CR; no provision for medicine or intravenous fluids, absence of doctors at delivery centers, fear of referral to hospital, fear of surgery and ignorance regarding delivery center care. Patient-related factors included the following; the mothers preferred delivering at their parent's home in the village, others were inhibited by mothers-in-law or mothers, labor pains started at night and therefore, did not get time to go to the hospital as delivery happened quickly (Banza *et al.*, 2004).

Being pregnant at a planned or unplanned time could also affect a woman's reaction towards having her baby (Klerman, 2001). Results from an Ethiopian study indicated that, a woman who had planned for the pregnancy was more likely to prepare for childbirth. The study also revealed that married women were more likely prepare for childbirth and its complications compared to non married women. This may be because married women may have wanted and planned for the pregnancies, which enables them to demand for better services and preparations. Another explanation could be that the unmarried women may not want to be known as pregnant (Mihret & Mesganaw, 2008).

A woman's perception of her pregnancy is one of the most important factors which could affect her personal health and well-being, her feelings towards her baby and her thoughts and childbirth preparations (Klerman, 2001). In most normal pregnancies, women experience anxiety and depression as well as positive feelings of excitement and hopefulness. Women with marital problems, those with inadequate social support and those with conflict about their own identity, will experience greater emotional stress and will not prepare for birth adequately (Inyangala, 2008).

Support provides a sense of security in pregnancy and childbirth. Social support, positive prenatal care experiences, support from one's partner and positive stories from previous experiences, created

a sense of security to pregnant women (Melender & Lauri, 2002). The study also explored causes of fear during pregnancy and childbirth and the following were identified; fears based on uncertainty, lack of experience with childbirth, inadequate knowledge, or negative experiences during pregnancy and childbirth. Coping with fear occurred through talking to people in their social networks, healthcare professionals or through seeking information from books. Professional support and childbirth education were especially helpful (Melender & Lauri, 2002).

Satisfaction with prenatal care and subsequent utilization of those services, were found to be important (Handler *et al.*, 2003). In a Uganda study, women preferred to deliver in health facilities, however, they did not do so because of the following barriers; the expensive mamma kits that were required, labor starting at night in absence of transportation and inaccessible health units that are often closed at night. Other barriers cited were health workers' rudeness, corrupt tendencies and absenteeism from work. Given these barriers in accessing the formal health system, the possibility of getting services on credit from traditional birth attendants (TBAs) to offset delivery expenses was considered an easier option (Handler *et al.*, 2003). If the clients are satisfied with care, they will prepare for pregnancy and delivery better (Waiswa *et al.*, 2008).

In many societies in the world, cultural beliefs and lack of awareness inhibit preparation in advance for delivery. Since no action is taken prior to the delivery, the family tries to act only when labor begins. The majority of pregnant women and their families do not know how to recognize the danger signs of complications. When complications occur, the unprepared family will waste a great deal of time in recognizing the problem, getting organized, getting money, finding transport and reaching the appropriate referral facility (Moore *et al.*, 2002).

The poor are defined as those who cannot afford basic needs; food and non food items. In Kenya more than half of the Kenyan population is poor and women are the majority. Given that most of the Kenyan population lives below the poverty line, it is consequently difficult to pay health care fees at one go (UN, MDG, 2008). Poor women are more likely to die of pregnancy or childbirth because they tend to live further away from health facilities due to lack of money, lack of money and transportation is a barrier to seeking care and identifying and reaching medical facilities. To tackle this problem and reduce maternal mortality, a significant step towards poverty eradication must be taken (UN, MDG, 2008). As a BP/CR strategy it is recommended by the WHO that savings be made in advance, this will cater for food and non food items and meet the hospital bill.

Delivering carefully developed messages through the mass media, especially the radio is an attractive and feasible strategy that has proven successful with HIV/AIDS in the country (Waiswa *et al.*, 2008). Another vital part of the strategy would be to clearly identify the barriers to individual counseling at the clinic level and institute appropriate interventions to ensure that the peculiar circumstance of each pregnant woman is dealt with (Waiswa *et al.*, 2008). On the other hand, pregnant women would be unable to make optimal use of the information they have been provided if services are not readily available. Therefore, improving access to services that they have been advised to make use of is vital. In our context, this would mean improving the access to skilled attendance at delivery particularly for rural women.

**METHODOLOGY**

In this study, the author considered three health care facilities Maternal and Child Health units of level 4 (Uasin Gishu District Hospital, Huruma District Hospital) and level 3 (West Health Centre) located in Eldoret town.

The study population comprised of pregnant women of reproductive age group (15-49) yrs, who had attended two or more antenatal visits during the data collection period. This is because health education on birth preparedness and complication readiness is first introduced during the first visit and emphasized during subsequent visits. A descriptive cross sectional design in a quantitative approach was used.

The sample size was calculated using Fischer's formula, with a 95% confidence interval and a sampling error of 0.05. From the health facilities records, the population of pregnant women that had attended the ANC between the months of 1<sup>st</sup> august 2009 to 31<sup>st</sup> July 2010 was as follows:

$$N = \frac{\text{No. of ANC attendance for one year}}{12 \text{ months}}$$

West health centre: 1537 pregnant women had attended ANC throughout the year with an average of 129 women per month

$$1537/12 = 129$$

Huruma District hospital: 2800 pregnant women had attended ANC throughout the year with an average of 233 women per month.

$$2800/12 = 233$$

Uasin Gishu District hospital: 6917 pregnant women had attended ANC throughout the year with an average of 576 women per month.

$$6917/12 = 576$$

The target population from the three health facilities was:

$$N = 129 + 233 + 576$$

$$N = 938$$

Since the sampling population was less than 10000, the sample size was adjusted using Fisher's recommendation formula:

$$n1 = n / 1 + n/N$$

$$383 = 1 + 383/938$$

$$n = 273$$

Sample size = 273 women.

To determine the number of participants in each health facility, proportional sampling was done as shown below:

$$n = \frac{\text{No. of ANC attendance per month} \times \text{Sample Size}}{\text{Target population}}$$

$$1. \text{ West Health Centre} = \frac{129}{938} \times 273 = 37 \text{ women participated in the study.}$$

$$2. \text{ Huruma District Hospital} = \frac{233}{938} \times 273 = 68 \text{ women participated in the study.}$$

3. Uasin Gishu District Hospital =  $\frac{576}{938} \times 273 = 168$  women participated in the study.

Data collection was done by help of questionnaires which were administered in a private room provided by the unit in charges of the various health facilities, this guaranteed utmost confidentiality and privacy during the data collection period. The questionnaires were administered prior to the ANC check up to ensure that the results obtained were accurate and not influenced in any way by the care givers.

Data was then coded and entered into SPSS data software for analysis. The SPSS was used to calculate the mean value for continuous variables and frequencies for categorical variables. A p-value of  $< 0.05$  was considered statistically significant.

## RESULTS AND DISCUSSION

### Factors That Influence Birth Preparedness

#### *Bivariate Analysis*

A bivariate analysis was carried out on selected demographic characteristics to assess for factors that influence birth preparedness. Planned/perception of pregnancy P(0.001), education level P (0.005), source of income P (0.013) and number of times attended ANC in the current pregnancy P (0.001) were found to be significantly associated with birth preparedness ( $P < 0.05$ ) as shown in table 1.

**Table 1: Factors that influence birth preparedness**

Variable	Birth preparedness		
	Yes	No	P -value
<b>Marital Status</b>			
Single /divorced			
Separated	27	22	
Married	0	1	
	114	109	0.582
<b>Education level</b>			
None			
Primary	1	0	
Secondary	30	55	
post secondary	63	49	
	47	28	0.005
<b>Employment status</b>			
Formal employment			
Self employed	26	25	
Unemployed	42	35	
	20	21	0.925

<b>Housewife</b>	48	48	
<b>Source of income</b>			
<b>Wages</b>			
<b>Business</b>	31	50	
<b>Farm outputs</b>	51	35	
<b>Relatives</b>	08	06	
<b>Others</b>	38	32	0.013
	10	5	
<b>Religious affiliations</b>			
<b>Christian</b>			
<b>Non-Christian</b>	138	120	0.248
	8	0	
<b>Number of ANC attendance</b>			
<b>Once</b>			
<b>Twice</b>	13	18	
<b>Thrice</b>	40	58	
<b>More than four times</b>	49	33	
	37	14	
			0.001
<b>Parity</b>	1(0,2)	1(0,2)	0.330
<b>Perception of pregnancy</b>			
<b>Planned</b>			
<b>Not Planned</b>	113	49	0.001
	25	73	

### ***Multivariate Analysis***

Factors found to be associated with birth preparedness in the bivariate analysis were then settled into a multivariate analysis model for further analysis. According to the multivariate logistic regression analysis, level of education (P=0.014), source of income (P=0.008), number of ANC attendance (P=0.004), perception of pregnancy (P= 0.000) were found to be significant predictors of birth preparedness as shown in table 2.

Planning/perception of pregnancy (P= 0.000), number of ANC attendance (P=0.004), level of education (P=0.014) and source of income (P=0.008) were found to be significant predictors of birth preparedness. Pregnant women with planned pregnancies were six times more likely to prepare for birth than their counterparts (OR=5.544, 95 % CI= 2.783, 11.044). Those who had attended ANC three or more times were more likely to be prepared (OR=0.529, 95 % CI=0.214, 1.303) than those with less than three times ANC attendance (OR=0.227, 95 % CI 0.062, 0.828). Those with tertiary education were more likely to be prepared for birth compared to those with primary and secondary education. From this analysis, those whose source of income was wages were less likely to be prepared for birth compared to those with relatives as source of income as shown in table 2.

**Table 2: multivariate analysis of factors that influence birth preparedness**

	B	S.E.	Sig.	OR	95.0% C.I. for OR	
					Lower	Upper
<b>Source of income (Ref-relatives)</b>			<b>.008</b>			
Wages	-	.416	.002	.279	.124	.632
Business	1.275					
Farm output	-.070	.392	.858	.932	.432	2.011
<b>Education(Ref- primary)</b>			<b>.014</b>			
Secondary	.383	.789	.627	1.466	.313	6.878
Tertiary	.041	.337	.913	1.042	.497	2.183
	.285	.34	.40	1.33	.683	2.592
		0	2	0		
<b>Perception of pregnancy(planned)</b>	1.713	.352	<b>.000</b>	5.544	2.783	11.044
<b>No. of times attended ANC(Ref-4 or more times)</b>			<b>.004</b>			
Once	-	.660	.025	.227	.062	.828
Twice	1.483					
Thrice	-	.455	.001	.220	.090	.537
Constant	1.513					
	-.637	.460	.166	.529	.214	1.303
	1.208	.624	.053	3.348		

In this study maternal education was found to be a strong predictor in birth preparedness. A multivariate analysis showed that those with tertiary education were more likely to be prepared for birth compared to those with primary and secondary education (P value 0.014). Findings from this study concur with those from Ekabua's Nigerian study where maternal educational status was found to be the best predictor of awareness of birth preparedness (Ekabua *et al.*, 2011). Similar findings were seen in a study carried out in an Ethiopian study (Cronin & McCarthy, 2003), where literate pregnant women were found to be more likely to be prepared for birth than the illiterate pregnant women (Mihret & Mesganaw, 2008). A study by (Sood *et al.*, 2004) indicated that the Birth Prepared Index increased with level of knowledge, those with secondary education (p value 0.000) were more prepared than those with primary education (P value of 0.003).

In a study by Mihret and Mesganaw (2008), maternal education was a strong predictor in preparation for birth, Literate mothers were about two times more likely to be prepared for birth than illiterate women (OR= 2.25, 95% CI=1.31, 3.88). Findings from this study may mean that the more education one has the more empowered one is to prepare for birth.

Planning for pregnancy in this study was found to be a strong predictor of birth preparedness (P value 0.000). Those with planned pregnancies were almost six times more likely to prepare for birth than those with unplanned pregnancies. Similar findings were seen in a study by (Mihret & Mesganaw, 2008), where the respondents with planned pregnancies were more prepared for childbirth than those who had not planned their pregnancy. In a study carried out in Kakamega PGH, (Inyangala, 2008), women who had planned their current pregnancy were well prepared for birth than their counterparts. This study reveals that those with planned pregnancies may have wanted the best for themselves than those without planned pregnancies, thus influencing the preparations undertaken.

From this study, respondents who had attended four or more ANC visits were more likely to be prepared for birth than those with less than 4 times ANC attendance (P value of 0.004). Similar findings were observed in a study by Mihret and Mesganaw (2008), where mothers who received advice during ANC follow up were more likely to prepare for birth than those who did not attend ANC more than once. Similar findings were also observed in a study carried out at Kenyatta National Hospital (KNH) Mutiso and Quresh (2008), where majority of the respondents were not prepared for complications due to the fact that the majority of pregnant women do not attend ANC as required.

Similar findings were also observed in a study conducted in India (Agarwal *et al.*, 2010) where pregnant women who attended antenatal care service were well prepared for birth than those who did not seek ANC services and those by (Allysin *et al.*, 2006), where pregnant women with more antenatal care visits were more likely to prepare for birth ( $p=0.003$ ). This may be because it is assumed that during ANC visits knowledge on birth preparedness is imparted, therefore the more one attend ANCs the more prepared they will be.

Source of income in this study was found to be a strong predictor of birth preparedness with a (P value of 0.008). In studies carried out by (Mihret & Mesganaw, 2008) and by (Sood *et al.*, 2004), it was revealed that source of income was a significant predictor of birth preparedness. These findings indicate that source of income empowers the woman to save and plan for childbirth.

### **Factors that influence complication readiness**

To assess for factors that influence complication readiness both the bivariate and multivariate analysis was carried out on the selected demographics as presented in this section

The bivariate analysis showed that education level ( $P= 0.013$ ), employment status ( $P= 0.008$ ) and perception of pregnancy ( $P= 0.021$ ) were found to be significantly associated with complication readiness as shown in table 3.

**Table 3: Factors that influence complication readiness**

Variable	Complication Readiness		
	Yes	No	P-value
<b>Marital Status</b>			
<b>Single</b>			
<b>Separated /divorced</b>	36	11	
<b>Married</b>	1	0	
	158	61	0.717
<b>Education level</b>			
<b>None</b>			
<b>Primary</b>	1	0	
<b>Secondary</b>	56	27	
<b>Post secondary</b>	75	35	
	63	9	<b>0.013</b>
<b>Employment status</b>			
<b>Formal employment</b>			
<b>Self employed</b>	43	8	
<b>Unemployed</b>	57	20	
<b>Housewife</b>	33	8	<b>0.008</b>
	58	38	
<b>Source of income</b>			
<b>Wages</b>			
<b>Business</b>	54	28	
<b>Farm outputs</b>	62	25	
<b>Relatives</b>	10	4	
	11	15	0.141
<b>Religious affiliations</b>			
<b>Christian</b>			
<b>Non-Christian</b>	192	72	0.564
	3	0	
<b>Number ANC attendance</b>			
<b>Once</b>			
<b>Twice</b>	27	4	
<b>Thrice</b>	72	26	
<b>More than four times</b>	58	24	
	32	19	
			0.119

<b>Parity(IQR)</b>	1(0,2)	0(0.1)	0.104
<b>Perception on this pregnancy</b>			
<b>Planned</b>	124	38	
<b>Not Planned</b>	62	36	
			<b>0.021</b>

A multivariate logistic regression analysis showed that planning/perception of pregnancy (P= 0.010) and employment status(P=0.023) were found to be a significant predictor of complication readiness as shown in table 4.

Those with planned pregnancies were two times more likely to be ready for the complications than those with unplanned pregnancies (OR= 2.242, 95% CI =1.210, 4.157). Those who were unemployed were three times more likely to be prepared for complications than their counterparts.

**Table 4: Multivariate analysis of factors that influence complication readiness**

	<b>B</b>	<b>S.E.</b>	<b>Sig.</b>	<b>OR</b>	<b>95.0% C.I. for OR</b>	
					<b>Lower</b>	<b>Upper</b>
<b>Level of education (Ref- primary)</b>			.214			
Secondary	.656	.481	.179	1.97 2	.741	5.031
Tertiary	.801	.456	.079	2.22 7	.194	5.447
<b>Employment status (Ref- Student)</b>			<b>.023</b>			
Formal employment	.395	.514	.442	1.48 5	.542	4.066
Self employment	.127	.593	.830	1.13 6	.355	3.629
Unemployed	1.203	.498	.016	3.33 0	1.255	8.834
<b>Perception (planned)</b>	.808	.315	<b>.010</b>	2.24 2	1.210	4.157
Constant	- 2.483	.837	.003	.084		

Employment status (P value 0.008) of the pregnant woman is a strong predictor of complication readiness. A multivariate analysis revealed that those who were unemployed were three times more likely to be ready for complications than those who were employed (P value of 0.023). Similar results in Burkina Faso (Allysin *et al.*, 2006), show that employment status was a significant predictor of complication readiness.

However, these study findings differ with those from KNH (Mutiso and Quresh) and Ethiopia (Mihret and Mesganaw, 2008), where pregnant women who were employed were found to be more prepared for complications than those who were not employed. This may be because the employed pregnant women may have the funds to meet the cost of complications if they arise, therefore they would not really bother to get prepared for complications.

Planning for pregnancy in this study was a significant predictor of complication readiness. The multivariate analysis showed that those with planned pregnancies were twice likely to be prepared for complications than those with unplanned pregnancies (P value 0.010). Similar findings were observed in an Ethiopian study Mihret and Mesganaw, (2008) where women with planned pregnancies were more likely to prepare for complication than those with unplanned pregnancies. This finding may indicate that married women may have wanted the pregnancy and therefore may have demand better services.

## **IMPLICATION TO RESEARCH AND PRACTICE**

Proper ANC attendance by pregnant women plays a significant role in childbirth preparation. Several factors influence preparations undertaken by pregnant women, among them: the social environment, stresses experienced during pregnancy/delivery and culture. Additionally, pregnant women may be uninformed about coping strategies and resources they can use to prepare themselves for delivery. Thus, studying factors influencing birth preparedness and complication readiness among pregnant women will lead to a better understanding of the issues pregnant women face, their impact on preparedness for birth and complication, and the midwives expected role. An essential outcome of this research is the discernment of midwifery practices which need change to improve services offered to pregnant women within Eldoret town.

## **CONCLUSION**

Clients who plan for the pregnancy are more likely to be ready for birth and its complications. This may be because since they plan to get pregnant they may want the best services for their pregnancy. From this study employed pregnant women were less prepared than those who were unemployed, this finding may be attributed to fear of the unemployed to finance their care in-case of a complication, and thus they are more prepared for complications. From this study it is unfortunate to know that pregnant women lacked sufficient knowledge on birth and complication readiness. This makes them ill- equipped to make informed choices that will contribute to the well-being of their unborn child and themselves.

## RECOMMENDATION

Women have BP/CR in place. However, emphasis should be placed on identifying target groups and practice gaps, for intensified health education.

Learning institutions should incorporate birth preparedness and complication readiness in their syllabus.

Antenatal care education should place emphasis on birth preparedness and complication readiness to improve access to skilled and emergency obstetric care.

## Future Research

The author recommends a study to assess the implementation level of birth preparedness and complication readiness by the pregnant women.

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