DETERMINANTS OF PLACE OF DELIVERY FOR WOMEN OF REPRODUCTIVE AGE IN MURANG'A COUNTY, KENYA

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INTRODUCTION

- Annually half a million women die globally due to pregnancy and childbirth related complications.

- Over 90% of these deaths occur in developing countries, including Sub-Saharan Africa (Oguntunde *et al.,* 2010).

- MDGs 4 & 5 are geared to reducing the child mortality rate & improving Maternal Health respectively (KSPAS, 2008)

- Skilled birth attendance has been shown to reduce Maternal and infant mortality (KDHS, 2014).

- Skilled birth attendances (possibly in health facilities), is the most important path to achieve MDGS 4&5.

INTRODUCTION

- 60% of births in Kenya take place at home without skilled assistance (KDHS, 2014).

- Nationally, Maternal Mortality Rate (MMR) stands at 362/100,000 (KDHS 2014).

- Majority of maternal deaths are due to obstetric complications that could have been prevented with adequate medical care during and after delivery (MoPHS, 2008).

INTRODUCTION

- Over 90% of women in Kenya attend ANC in health facilities but only about 40% deliver at the hospital. (KNBS 2010)

- In Murang'a county, skilled deliveries in the year 2014 were 39.8% (DHIS, 2014)

- Total number of home deliveries in Kandara division over the same period was 1,216 (31%) (DHIS, 2014)

- Little or no study has been done to assess the determinants that influence the place of delivery among mothers in rural Kenya
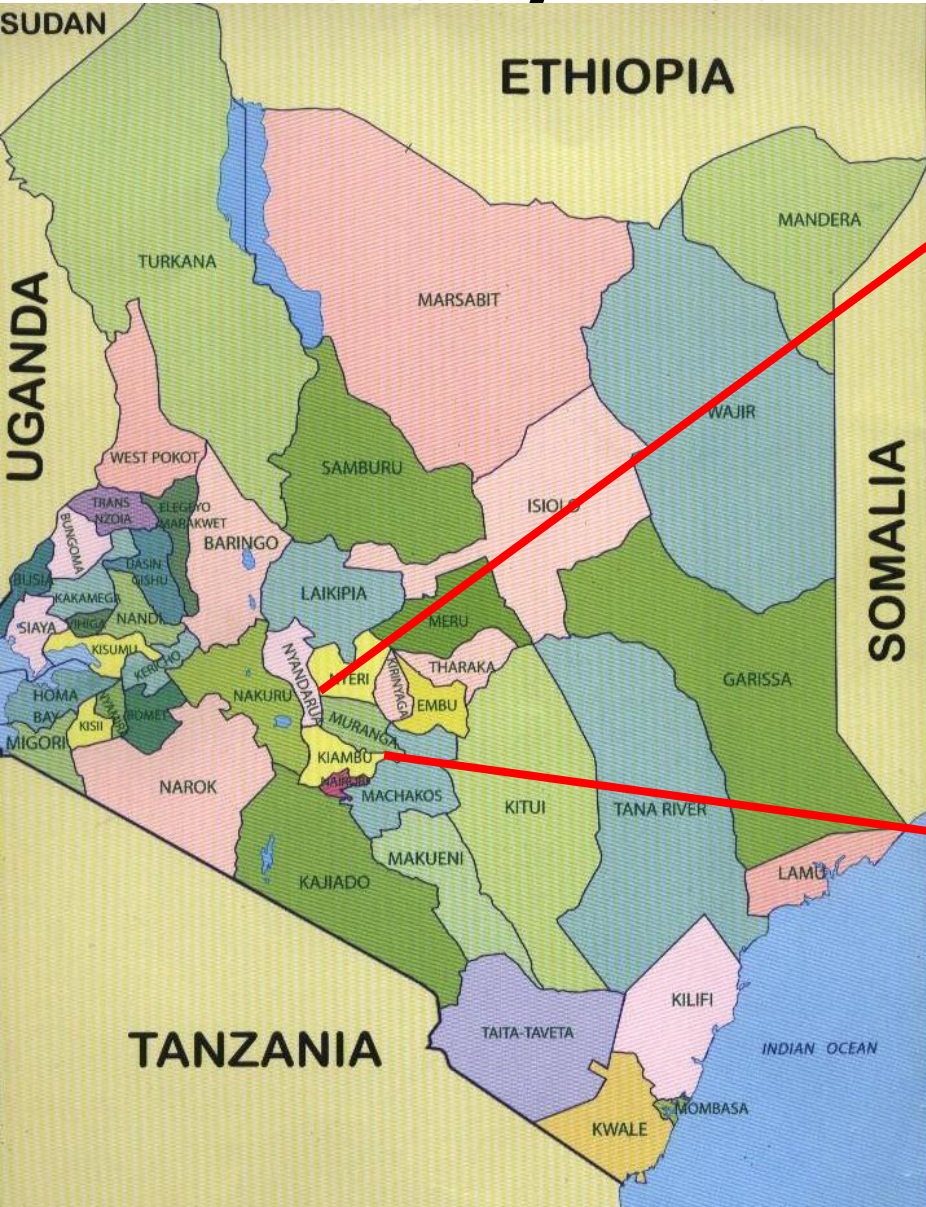
Research Objective

- To assess the determinants influencing the place of delivery among mothers seeking child welfare services in selected facilities in Kandara Sub County; Murang'a County- Kenya
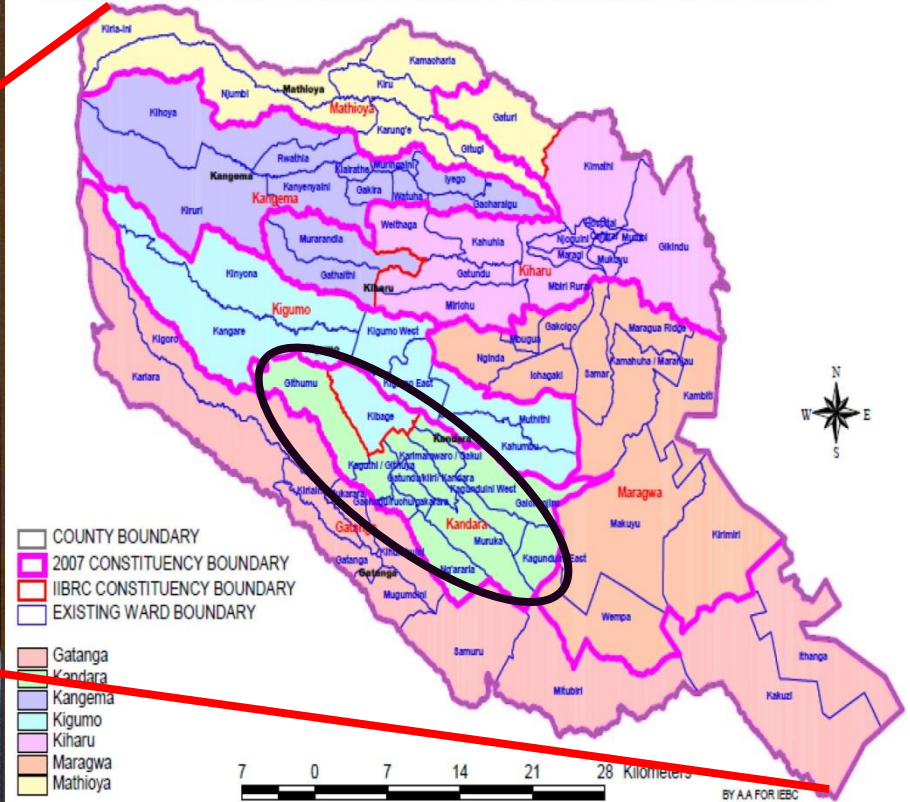
Specific Objectives

1. To determine the socio-demographic characteristics that influence the choice of place of delivery among mothers seeking Child Welfare services.

2. To determine how the accessibility to delivery services influence the place of delivery among mothers seeking Child Welfare services.

3. To determine how knowledge on safe delivery among mothers seeking Child Welfare services influence the place of delivery.

4. To determine how attitude towards health facilities delivery influence the place of delivery among mothers seeking Child Welfare services.

Study Area: Murang'a County

MURANG'A COUNTY CONSTITUENCIES BOUNDARY WITH CURRENT EXISTING WARDS

COUNTY BOUNDARY
2007 CONSTITUENCY BOUNDARY
IIBRC CONSTITUENCY BOUNDARY
EXISTING WARD BOUNDARY

Gatanga
Kandara
Kangema
Kigumo
Kiharu
Maragwa
Mathioya

Area: 898 mi²
Population: 942,581 (2009)
Kandara : 156,663 (2009)

Study population

- Inclusion Criteria - Mothers aged 18-49 years, had given birth within the last 1 year, seeking Child Welfare services and lived in Kandara Sub County for the same period and of sound mind.

Methodology

- The study used a sample size of 287 respondents.

- Data was collected using questionnaires and Key Informant Information (KII)

- Simple Random sampling method was used to select the health facilities.

- Systematic random sampling method was used to identify the respondents.

- The average daily work load in the sampled facilities was used to determine the interval between the respondents.

Study Results

ANC VISITS

- 97.8% visited ANC clinic during their pregnancy.
- 41.5% of the mothers made the minimum recommended four ANC visits
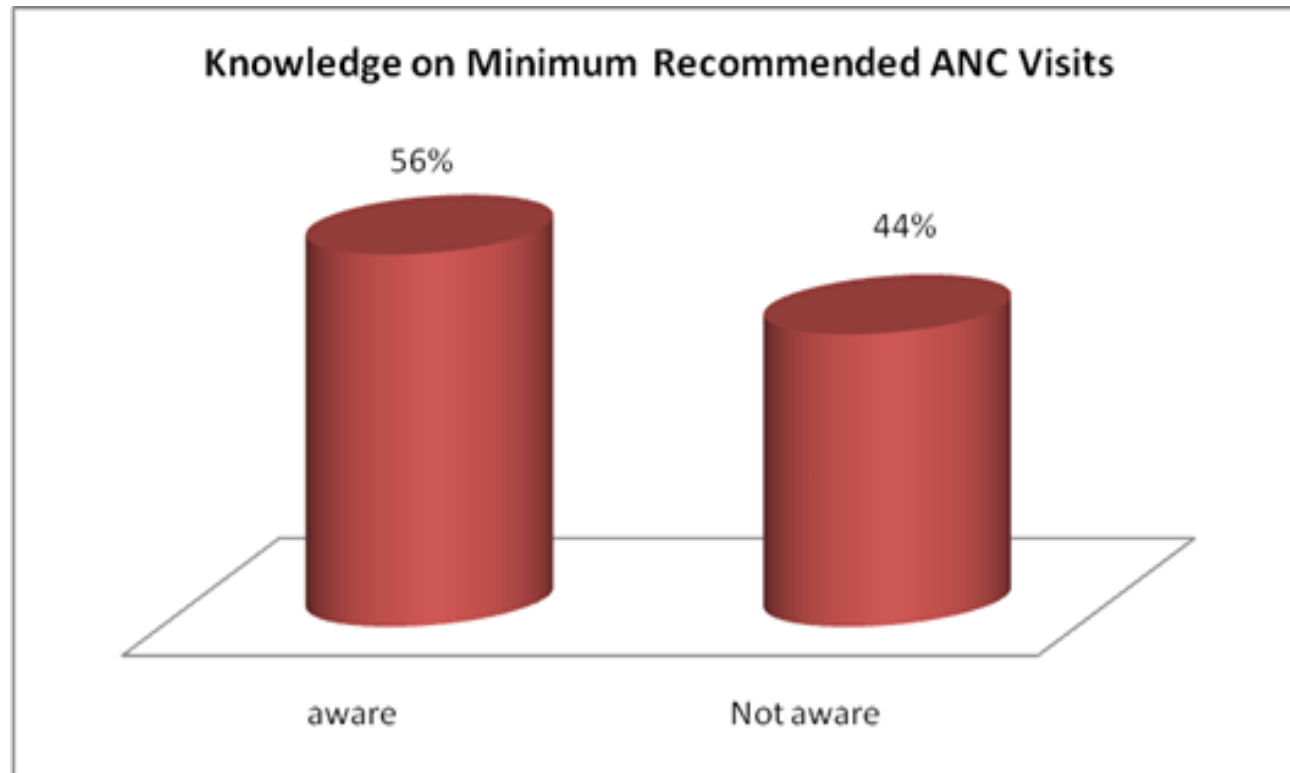
Table 4.4   ANC Visits

No ANC visit	6	2.2
One visit	12	4.3
Two visits	58	20.1
Three visits	91	31.9
Four visits and above	120	41.5
Total	**287**	**100.0**

Distant to the Health Facility in Km

- 64.1% had a facility within 5 kms
- 28.8% within 5-10 kms.
- 0nly 0.3% had facility >21 kms away

Distant to the Health Facility in Km	Number	Percent %
1 to 5 kilometers	183	64.1
6 to 10 kilometers	82	28.8
11 to 15 kilometers	8	2.8
16 to 20 kilometers	11	4.0
21 kilometers and above	3	0.3
Total	**287**	**100.0**

Knowledge on minimum ANC visits

- 56.0% (95% CI= 50.3% – 61.7%) of the respondents were aware of the four minimum recommended ANC visits as shown in the figure above.
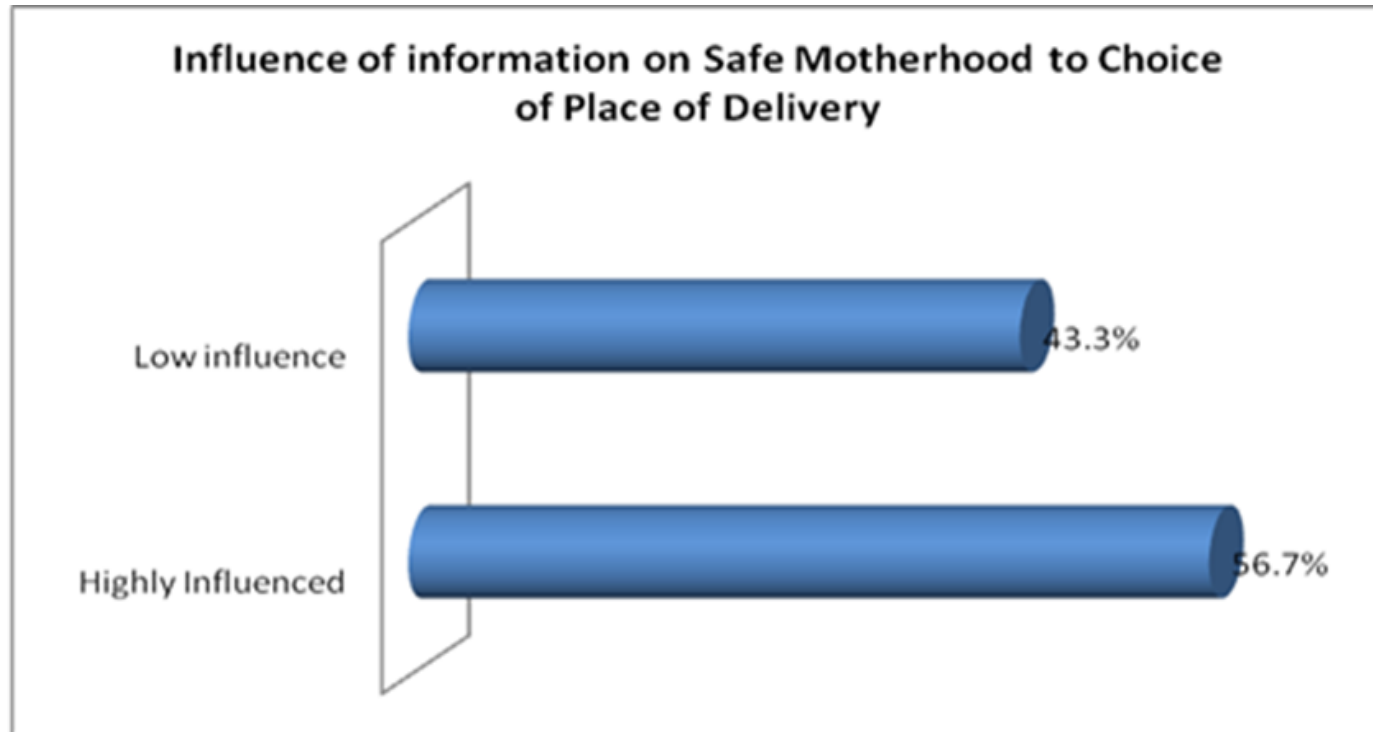
Knowledge on danger signs in pregnancy

Knowledge on danger signs	Number	Percent %
Mentioned one danger sign	104	36.5
Mentioned two danger sign	106	37.2
Mentioned three danger signs	48	17.0
Mentioned four danger signs	15	5.3
Mentioned more four danger signs	14	4.0
Total	**287**	**100.0**

- Most of the respondents 210 (73.7% (95% CI= 68.5% - 78.9%)) were only able to mention one or two danger signs.

- 68 (26.3% (95% CI= 21.1% - 31.5%)) mentioned three or four danger signs while 14 (4.0%) mentioned more than four danger signs

Influence of information on Choice of Place of Delivery

- Majority agreed information on safe motherhood influences choice of place of delivery

Influence of information on Safe Motherhood to Choice of Place of Delivery

Category	Percentage
Low influence	43.3%
Highly Influenced	56.7%

Cost of Travel

- While 22.9% walked to the facility, 44% incurred a cost of > Kshs.50 (US$0.50)

Cost of Travel	Frequency	Percent %
Walk to the facility	65	22.9
1 to 50 shillings	126	44.0
51 to 100 shillings	64	22.6
101 to 150 shilling	8	2.8
15 to 200 shillings	17	5.3
201 shillings and above	7	2.5
Total	**287**	**100.0**

Influence of Cost of Travel

Influence of Cost of Travel	Number	Percent % (± 95% CI)
High extent	130	45.2 ± 4.8
Medium extent	72	25.4 ± 4.6
Low extent	85	29.4 ± 5.3
Total	287	100.0

Regression Analysis

- Multiple linear regression analysis models show the relationship between various determinants of choice of place of birth for child bearing age women with specific reference to Kandara Sub-county.

- The coefficient of determination (R^2) and correlation coefficient (r) shows the degree of association between choice of place of birth and variables under study.

- The research findings indicated that there was a very strong positive relationship (r= 0.852) between the variables.

- The study also revealed that 72.7% of choice of place of birth performance could be explained by the determinants under study as shown in the Table below.

Regression analysis

	Un-standardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	0.864	0.730		1.184	0.245
Socio-demographic	0.266	0.254	0.310	0.048	0.034
Knowledge	0.253	0.244	0.323	1.039	0.047
Attitude	0.136	0.232	0.157	0.587	0.050
Accessibility	0.147	0.358	0.172	0.410	0.049

ANOVA TEST

Table 4.14 shows the results of ANOVA test which revealed that the combined independent variables have significant effect on choice of place of birth. This can be explained by high F values (8.746) and low p values (0.003) which are less than 5% level of significance.

Table 4.14 ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	1.518	286	.138	8.746	.003
Residual	**.185**	**1**	**.185**		
Total	**1.702**	**287**			

Socio-demographic characteristics

- Women who had attained tertiary education level (48.9%) or a married woman (80%) preferred delivering in health facility than at home. This is similar to findings by Gabrysch *et al*, (2011) in rural Zambia. Focus on increasing skilled deliveries should therefore be on women with lower level of education and the single mothers.

- Those who relied on their husbands for financial support (39.3%) were more likely to deliver at home. This draws a convergence with Gabrysch *et al*. (2011). This emphasizes the need to make women more self-reliant or to make more effort in increasing male involvement in antenatal services.

CONCLUSION

The results of this study show that:

- Socio-demographic factors are the biggest determinants of whether a mother will deliver in a health facility

- Knowledge on safe delivery and accessibility to delivery services have marginal influence on the place of delivery among mothers from this area

- The mothers' perception on the health facilities did not seem to have any significant influence on the place of delivery among mothers from this area.

ACKN0WLEGEMENT

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VISION

"To be a Global Centre of Excellence in Education, Research and Innovation in Science and Technology."

ACKN0WLEGEMENT

- THE COUNTY GOVERNMENT OF MURANGA