Socio-Demographic Characteristics Of Women Who Attended ANC But Made A Decision Not To Deliver At Health Facility In Kakamega Central Sub-County.

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Objective: *To determine socio-demographic characteristics of women who attended ANC but made a decision not to deliver at health facility in kakamega central sub-county.*
Design: *A community based cross sectional study was undertaken focused on a structured interview method in collecting quantitative data. A sample of332 mothers who attended ANC but did not deliver in a health facility in Kakamega Central subcounty were drawn from a study population. A multistage random sampling method was applied in the selection of a primary data.*
Outcomes: *socio demographic factors that made mothers to decide against health facility delivery despite ANC attendance included economic factors were also collected besides level of health facility. Descriptive statistics and chi-square tests were used describe single variables and to assess associations between variables. The statistical significance level was set at p<0.05. Income source of the women were also associated with the perception on all staff always being available at the facility. Among farmers, 23.1% reported that did not always get enough staff compared to 36.% of business women and 38.2% who also mentioned that staff were not always available. We found significant associations between costs, and other costs.*
***Key words:*** *Health facility delivery, skilled birth attendants, Reproductive age, Maternal health, Utilisation and Barriers*

I. Introduction:

Improving maternal health was one of the UN Millennium Development Goals. Current estimates of maternal mortality ratios in Kenya is at least as high as 560 deaths per 100,000 live births WHO (2008). With a functioning health care system, most maternal deaths are avoidable if complications were identified early.A measure of the proportion of deliveries assisted by skilled attendants was one of the indicators of progress towards achieving Millennium Development Goal (MDG5), which aimed at improving maternal health. In Kenya, Western Rural area, usage of the ANC was high, but the opportunity to deliver in a health services was not fully utilized. Use of professional delivery services is low, and almost 1 out of 5 women delivered unassisted KDHS(2009). Globally, one third of births took place at home without the assistance of a skilled attendant. In Africa, less than 50% of births were attended by a skilled health worker despite an increase from 43% to 57% between 1990 and 2005 in all developing regions. Consequently, two million women had died in Africa during childbirth since 2000.The recently released 2008/9 Kenya Demographic and Health Survey reported MMR of 488/100,000, KDHS(2009)which was an increase from the 2003 survey which reported an MMR of 414/100,000.These requirements could only be found in a health facility..According to KDHS (2009), on women autonomy status, decision making on their health status 27.9 self, 45.4 was jointly as man and wife 26.4 was husband and other was 0.3 (44%) of births in Kenya were skilled deliveries, TBAs 28% relatives and friends 21% an assisted 7% Mothers who had more education or wealth were more likely to be assisted by skilled personnel than those mothers who resided in rural areas or who had less education or wealth. The family and society had a real say in making and carrying decisions and freedom to move about and interact with outside world. In this regard therefore any factor that impeded a woman from seeking care from health facilities could be seen to be hindering her autonomy and right to enjoy better health care. Work and culture dictated that do not allow women to be attended by males who were not their spouses World Bank,(1993) probably due to frequency of disease among them.
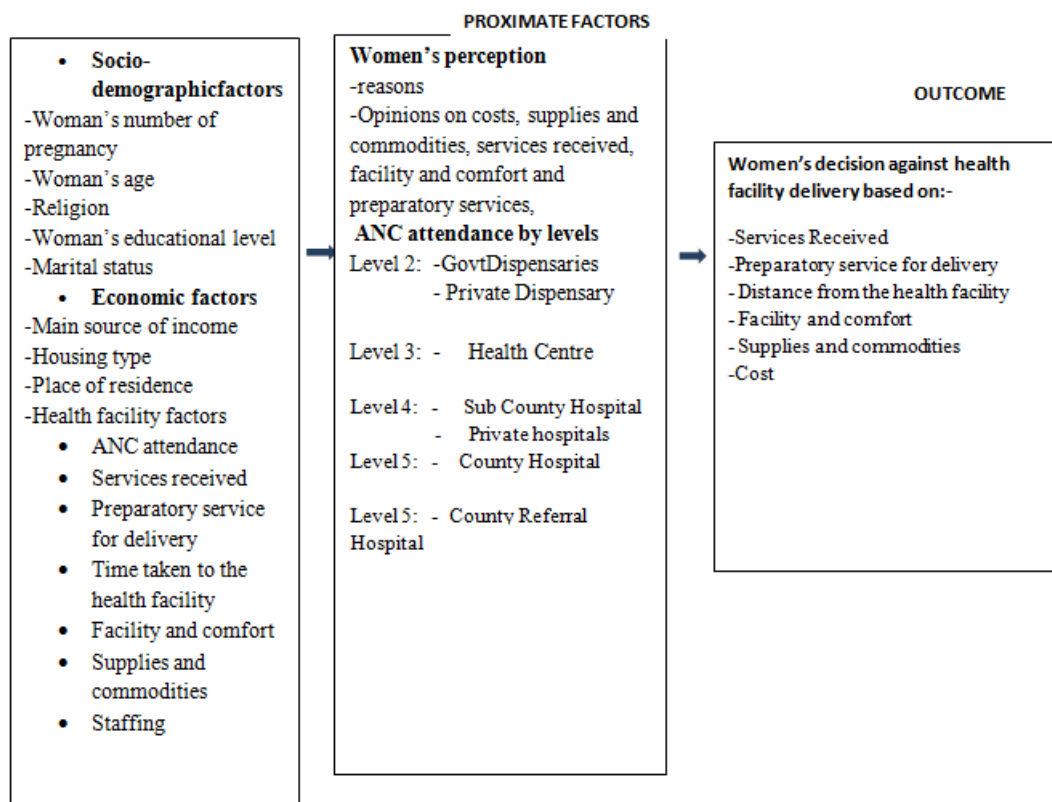
II. Methods:

Study Design: This was a community based cross-sectional study.

Study Area: The area of study was Kakamega Central sub county. All the two divisions namely Municipality division and Lurambi division were included in the study.

Study Population: Female reproductive age (15-49years)

Target Population: The target population comprised of mothers aged 15 to 49 years in Kakamega Central Sub County and who attended to ANC but had a home delivery in the 6 months preceding the survey formed the sample frame of the study while the sample size was be drawn from this as indicated in the sampling procedure.

Sample Size: Using the estimated proportion of deliveries attended by unskilled attendants (56%) in Kenya and the prevalence of home delivery in western Kenya was 73.3% as reported by the most recent demographic data available at the time of the study, (KDHS 2008-2009)the sample size was calculated using determination formula by Mugenda and Mugenda (1999). A structured questionnaire was used to obtain demographic data of the mothers.The sample size were women of reproductive age who had delivery in the past 6 months which is 302 were divided proportionately using probability proportional to size of the Total population So the target population was divided as follows:-`

$$n = \frac{Z^2 Pq}{d^2}$$

n= minimum sample size required

Z= Constant for two side 1.96 for 95%

d = absolute precision 0.05(5%)

P= 0.73

q= 0.27

$$n = \frac{(1.96)^2 \times 0.73 \times 0.27}{(0.05)^2}$$

n = 302

10% was added to the minimum sample size to cater for non response. The final sample size was 332.

The data was representative divisional level. According to Nguka and Odebero, (2010)

Data collection procedure: Household survey using structured questionnaires were used for the interview. Both closed ended and open ended questions were utilized for data collection. Questionnaires included items for socio demographic characteristics, economic factors, antenatal care attendance. The women were asked for consent to be interviewed with assurance of non retribution for not participating. Those unwilling to participate were allowed to be excluded in the interview but no one refused. Data was collected on daily basis from morning to evening including weekends for a period of two weeks.The English version of the questionnaires were translated into local language to obtain data from the study participants and ensure they understand the content properly.On daily basis, the researcher was counter check for accuracy and completeness of the filled questionnaires and completed questionnaires were given number after completing the work.

Study Instruments: Research data was collected using quantitative methods. Data collection was the first step and involved the use of structured questionnaires and interview to collect the data.Questionnaire was designed in English administered by the researcher and trained enumerators in(local language) to collect data. A structured questionnaire for mothers who could read and write was distributed. Interview for illiterate mothers who could not read or write was done.Socio- demographic factors like woman's parity, woman's age, religion and woman's educational level. Economic factors like woman's occupation, main source of income, housing type and place of residence.

Study Assumptions: This being a cross sectional analytical study, during data collection the study assumed that the information being given was true and not biased. Perspectives of the health care providers on how the services could be improved at the operational level in order to provide better guidelines for planners, administrators and policy makers.

Data Processing and Analysis: Data captured in questionnaires was entered into Access database and cleaned. Data analysis was performed using Statistical Package for Social Sciences (SPSS). Analysis of home delivery practices among the 302 mothers was carried out using the most recent delivery report. Definition home delivery.was considered to be one that was not at a health facility. Differences in proportions were compared using the Pearson's chi-square test for the categorical variables. A two-sided P-value < 0.05 was considered statistically significant. Bivariate analysis was conducted to assess association between the independent variables and the dependent variables These factors included; Socio- demographic factors like woman's parity, woman's age, religion and woman's educational level. Economic factors like woman's occupation, main source of income, housing type and place of residence The dependent variable was women's perception on health facility factors hindering health facility skilled delivery by levels of the health facility attended during ANC which was dichotomized as delivery in the level 2 coded as zero, level 3 coded 2, level 4 coded 3 and delivery at home was coded as one. The results are presented in form of tables and figures.

Ethical considerations: GLUK protocol proposal defense, Ethical review committee for approval. Approval to carry out the study was obtained from Kakamega central sub county Health Management Team. Only those mothers, who met the study requirements, verbally consented and voluntarily signed the consent forms were enrolled into the study. Participants who could not write indicated their consent by a fingerprint. All mothers were assured for confidentiality.

Findings

Socio-demographic characteristics of the mother:

Table1below is the summary of socio-demographic and economic characteristics of the respondents. The result indicate that Lurambi division had more mothers interviewed (77%), 233 than municipality division which were (33%),69. The study targeted mainly females of reproductive age (15-46years) though male Responses were also included demographically since most of the homes were headed by male. Majority of the mother in the study were in the age bracket of 26-30 years which was (26%) 78. These were young mothers in the early age of motherhood. Most mothers interviewed in the areas of study attained primary education which was (44%), 134, and acquired tertially education which was (13%),38. Majority of the mothers interviewed were married (62%) 186. Divorced mothers being lowest at (1%).There were also mothers who were single (21%) 63, widows were at (12%) 36.Religion of Kakamega Central Sub county was majorly indigenous churches (31%) 92. Even so, there is vast choice of religions in the counties. which were Catholic (29%) 89, Protestants (22%) 69, Muslims (15%) 46, Others (2%) 5and none (1%) 1. Most of the mothers in this study were at the range of the age bracket of 26-30 years which was (26%), 78. and most of the mothers did not have any pregnancy complications (58%) 175.

Table 1: Socio-demographic factors

Socio demographics	Categories	N-302	%
1. Place of residence	Lurambi division	233	77%
	Municipality division	69	33%
2. Age(years)	Below 15	3	1%
	16-20	55	19%
	21-25	61	23%
	26-30	78	26%
	36-40	54	18%
	41-50	44	14%
3.Education status	None	36	12%
	Primary	134	44%
	Secondary	94	31%
	Tertiary	38	13%
1. Marital status	Singles	63	21
	Married	186	62
	Widowed	36	12
	Separated	13	4
	Divorced	4	1
3.Religion	Catholic	89	29
	Protestant	69	22
	Indigenous Church	92	31
	Muslim	46	15
	None	1	1
	Others	5	2

Economic factors

Table 2 below is the summary of economic characteristics of the respondents. Main source of income in the households in Kakamega Sub County was farming (53%) 160. This was followed by business (26%) 79, salaried (16%),48 and others(5%)15. Majority of the population reside in temporal housing (50%) 251, this could be explained by high level of poverty in Kakamega Central Sub County. semi-permanent houses (36%) 109 while permanent housing(14%) 42

Table 2: Economic factors

Economic Factors	Categories	N=302	%
House Type	Temporal		50
	Semi-permanent		36
	Permanent		14
Main Source of income	Farming		53
	Business		26
	Salaried		16
	Others		5

ANC Services

Most of the women started their first ANC attendant when they are 2nd trimester (80%)243 and only (18%) 53 started their ANC at the 1st trimester. Most women had 3 ANC attendances at (44%) 133. Only (9%) of the women had 4 ANC visits. Most women preferred to have their 1st ANC and last ANC attendance at level 5 which was (55%) 166 and (66%) 198 respectively. The private hospitals and lower level public hospital were least preferred (5%) 16.The overall reason for change of facility was lack of supplies and commodities.The major complications experienced were pregnancy related (47%) 143. followed closely by malaria (42%) 127, still 5%, 14 and others (6%), 18.

Association between socio demographic factors and women's decision not to deliver in a health facility:

In Table 2 below education level of the women was found to have significantly associated with two out of seven health facility factors, staff availability(p=0.049) and facility and comfort (p= 0.025) The mothers with tertially education were mostly affected at 80% with staff availability and unfriendliness. There was also a strong association between education level and facility and comfort (p=0.025) with the mothers who did not have any form of education highly affected (100%), with inadequate space and poor comfort. The other health facility factors services received, preparatory service of delivery, supplies and comfort, time taken to the health facility and cost) were insignificant. Decision not to delivery based on adequacy of space was associated with education level of the woman (p=0.025).

Marital status of the woman was associated with her decision not to deliver at the health facility based on health facility factor of not always getting enough staff at the facility during ANC visits(P=0.011). Single women (51.7%) and widows (45.5%) reported that their decision not do delivery at the health facility was based

on not always finding all the staff they needed during the ANC. The result further indicated that number of previous pregnancies was associated with decision based on not receiving any advice on whether to delivery (p<0.0001) The result indicated that majority 66.7% of those who had had 5-6 pregnancies reported not receiving any advice, compared 23.6% who had 1-2 previous pregnancies or 27.9% who had 2-3 pregnancies and who also reported not receiving any advice on where to deliver. The results further indicated that a woman's decision against health facility decision based on how long it took to reach facility was associated with number of previous pregnancies. Majority of who visited level 3; health centre, 62.5% of them had also that they spend more than one hour o health facility. Similarly those who had 3-4 previous, 59.6% of them spend more than an hour to hospital compared to only 31.1% of those who spent more than one hour but had 1-2 previous pregnancies. Though the ages of the mothers was not classified, there was significant association between mothers decision against hospital delivery and services received (p=0.004)and staff unavailability and friendliness (p=0.000)

Table 2: P- Values for associations of socio-demographic characteristics and health facility factors

Socio-demographic	Unsatisfactory service during ANC	Poor preparatory service for delivery	Long distance to the health facility for ANC service	Poor facility and comfort	No/ inadequate supplies/com modities	High cost of delivery	Poor staff availability and unfriendliness
Education level	P=0.587	P=0.682	P=0.792	P=0.025	P=0.274	P=0.792	P=0.049
1=None	7(77.8)	7(77.8)	9(90.0)	9(100)	10(100)	9(90.0)	5(50.0)
2=Primary	74(81.3)	69(75.0)	81(88.0)	82(89.1)	76(82.6)	81(88.0)	48(51.6)
3=Secondary	112(86.2)	88(67.2)	109(82.6)	115(87.1)	103(78.0)	109(82.6)	86(66.7)
4=Tertiary	10(71.4)	11(73.3)	13(86.7)	13(86.7)	10(66.7)	13(86.7)	12(80.0)
5=N/A	1(100.0)	1(100)	1(100.0)	1(100)	1(100.0)	1(100.0)	0(0.0)
Marital status	P=0.096	P=0.062	P=0.313	P=0.589	P=0.505	P=0.050	P=0.011
1=Single	70(79.5)	64(72.7)	5(5.7)	81(91.0)	74(83.1)	83(93.3)	43(48.3)
2=Married	112(86.2)	95(70.9)	5(3.7)	114(85.1)	103(76.9)	105(78.4)	89(67.4)
3=Widowed	10(90.9)	4(36.4)	0(0.0)	10(90.9)	10(90.9)	10(90.9)	6(54.5)
4=Separated	9(90.0)	8(80.0)	0(0.0)	10(100.0)	9(90.0)	9(90.0)	8(80.0)
5=Divorced	3(60.0)	5(100.0)	1(20.0)	5(100.0)	3(60.0)	5(100.0)	5(100.0)
Age	P=0.004	P=0.107	P=0.158	P=0.208	P=0.695	P=0.504	P=0.000
Parity	P=0.050	P=0.000	P=0.000	P=0.144	P=0.419	P=0.000	P=0.000
1=1-2	79(76.0)	81(76.4)	8(7.5)	99(92.5)	83(77.6)	100(93.5)	59(54.6)
	90(88.2)	75(72.1)	1(1.0)	91(87.5)	84(80.8)	76(73.1)	77(75.5)
2=3-4	22(88.0)	8(33.3)	0(0.0)	18(75.0)	23(92.0)	24(96.0)	8(33.3)
3=5-6	8(100.0)	5(62.5)	0(0.0)	6(75.0)	6(75.0)	6(75.0)	4(50.0)
4=More than 6							

Association between economic factors and reasons behind a woman's decision not to deliver in a health facility

In Table 2below, out of seven health facility factors, four factors including staff availability and friendliness, cost and preparatory service for delivery show significant associations with income sources. Income source of the women was significantly associated of services received during ANC service, (p=0.000), preparatory service for delivery (p=0.035), staff availability and friendliness (p=0.001) and cost (0.006). Other health factors were insignificant. Majority of those who were salaried (91.5%, n=51) made their decision based on charges were the facility compared to 70% who were farmers of those who were famers who also based their decision on charges. Income source of the women were also associated with the perception on all staff always being available at the facility. Of those who farmers, 23.1% (n=9) reported that did not always get enough staff compared to 36.% of business women and 38.2% (n=21) who also mentioned that staff were not always available Income source was also associated with the receipt of advice on where to delivery (p=0.035). Amongst those were 37.5% made their decision based on not receiving compared 32.5% who were business women and 16.7% who had other income sources but also complained of not receiving any advice on where to deliver.There was no significant association between house type where the women live and all the seven health facility factors.

Table 3: P- Values for associations of economic characteristics and health facility factors

Economic factors	Unsatisfactory service during ANC	Poor preparatory service for delivery	Long distance to the health facility for ANC service and delivery	Poor facility and comfort	No/ inadequate supplies/commodities	High cost of delivery	Poor staff availability and unfriendliness
Income	P=0.000	P=0.035	P=0.897	P=0.471	P=0.991	P=0.006	P=0.001
1=Farming	34(89.5)	32(80.0)	32(80.0)	39(97.5)	32(80.0)	28(70.0)	30(76.9)
2=Business	109(87.2)	85(67.5)	102(81.0)	110(87.3)	102(81.0)	108(85.7)	80(63.5)
3=Salaried	48(88.9)	35(62.5)	44(78.6)	47(83.9)	44(78.6)	51(91.1)	34(61.8)
4=Others, Specify	5(83.3)	5(83.3)	5(83.3)	5(83.3)	5(83.3)	4(66.7)	2(33.3)
5=N/A	8(36.4)	19(95.0)	17(77.3)	19(90.5)	17(77.3)	22(100.0)	5(22.7)
House type	P=0.387	P=0.263	P=0.117	P=0.724	P=0.548	P=0.280	P=0.156
1=Permanent	55(83.3)	42(63.6)	45(68.2)	56(84.8)	56(84.8)	60(90.9)	45(68.2)
2=Semi Permanent	118(81.4)	110(74.3)	89(60.5)	133(89.3)	118(79.2)	123(82.6)	89(60.5)
3=Temporal	31(91.2)	23(67.6)	17(48.6)	31(91.2)	27(77.1)	30(85.7)	17(48.6)

III. Findings:

Socio-demographic characteristics and decision against health facility deliveries findings in our study population points to a socio-demographic profile similar to other areas with a high fertility rate, high infant mortality and low socio-economic status. Over 26% of the mothers were between 26-30 years, reflecting a relatively young age at marriage. However, there seemed to be an increase in the number of unmarried women, which could be explained by changing socio-demographic factors, such as increased education and income status among young women.This could also be explained by the possibility of women being in marriages due to economic support from their husbands who maybe the only bread-winners. Also the luhya culture impresses marriage this could be the reason as to separated mothers being lowest at 4%. There is a vast choice of religion in the county; the mothers enjoy freedom of worship. Kakamega Central Sub County has two divisions namely municipality division and Lurambi division. Lurambi division had more mothers interviewed (77%), 233. This is attributed to the fact that Lurambi division covers a wider area than municipality division which were (33%),69 . The study targeted mainly females of reproductive age (15-46years) though male Responses were also included demographically since most of the homes were headed by male. Majority of the mother in the study were in the age bracket of 26-30 years which was (26%) 78. These were young mothers in the early age of motherhood.Education level of the women was found to have significantly associated with two out of seven health facility factors staff availability and facility and comfort staff availability and friendliness in table 2 below . The mothers with tertially education were mostly affected at with staff availability and unfriendliness. There was also a strong association between education level and facility and comfort with the mothers who did not have any form of education highly affected**.** Marital status of the woman was associated with her decision not to deliver at the health facility based on health facility factor of not always getting enough staff at the facility during ANC visits. Single women and widows reported that their decision not do delivery at the health facility was based on not always finding all the staff they needed during the ANC.The result further indicated that number of previous pregnancies was associated with decision based on not receiving any advice on whether to delivery. The result indicated that majority of those who had had 5-6 pregnancies reported not receiving any advice, compared those who had 1-2 previous pregnancies or those who had 2-3 pregnancies and who also reported not receiving any advice on where to deliver.

The results further indicated that a woman's decision against health facility decision based on how long it took to reach facility was associated with number of previous pregnancies. Majority of who visited level 3; health centre, of them had also that they spend more than one hour o health facility. Similarly those who had 3-

4 previous, spend more than an hour to hospital compared to only of those who spent more than one hour but had 1-2 previous pregnancies. Though the ages of the mothers was not classified, there was significant association between mothers decision against hospital delivery and services received and staff unavailability and friendliness. This was similar by study in Nepal which found out that women living more than one hour away from a health facility are 8 times less likely to use health facility during delivery (Wagle et at 2004). Most mothers interviewed in the areas of study attained primary education which was 44%, 134, compared to those that acquired tertially education which was 13%,38. These points to the fact that the level of education is still low in Kakamega Central Sub County despite the proximity of the MasindeMuliro University of Science and Technology and presence of many schools being in the sub county. These findings were as those found by KDHS (2009) those mothers who attained primary education were 56.9%. Main source of income in the households in Kakamega Sub County was farming (53%) 160. These would be explained because its largest part is in peri urban and rural setting with land for agriculture supported with good climate and fertile soil for agriculture. This was followed by business (26%) 79, salaried (16%), 48 and others(5%)15.Majority of the mothers interviewed were married (62%) 186. This could be explained because most women could be in marriages due to economic support from their husbands who maybe the only bread-winners. Also the luhya culture impresses marriage this could be the reason as to divorced mothers being lowest at (1%). There were also mothers who were single (21%) 63, this could be explained by some mothers being more educated with a better economic status and therefore empowered to make independent decision. Widows were at (12%) 36.Religion of Kakamega Central Sub county are majorly are indigenous churches (31%) 92. Even so, there is vast choice of religions in both counties. This indicates that there is generally acceptance of many religions in the area which were Catholic (29%) 89, Protestants (22%) 69, Muslims (15%) 46, Others (2%) 5and none (1%) 1. The mothers enjoy freedom of worship therefore no one religion has a monopoly in the sub-county.Majority of the population reside in temporal housing (50%) 251, this could be explained by high level of poverty in Kakamega Central Sub County. semi-permanent houses (36%) 109 while permanent housing(14%) 42. According to KDHS (2009), the findings were similar more than half of Kenyan households (55 percent) live in dwellings with floors made of earth, sand, or dung. The next most common type of flooring material is cement, accounting for 41 percent of households. (p.24) . In a study in rural Zambia high status of occupation are associated with greater with greater wealth, making it easier for the family to pay costs associated with skilled delivery care Gabrysch&Campbell (2009). As per economic Characteristics of Women and Home Deliveries, Majority of the population reside in temporal housing (50%) 251, this could be explained by high level of poverty in Kakamega Central Sub County. semi-permanent houses (36%) 109 while permanent housing(14%) 42.According to KDHS (2009), the findings were similar more than half of Kenyan households (55 percent) live in dwellings with floors made of earth, sand, or dung. The next most common type of flooring material is cement, accounting for 41 percent of households. Although we did not formally test associations between various economic characteristics and decision against health facility delivery, our descriptive analysis points to a strong presence of contextual determinants on the decision for home deliveries. Specifically, low level of education, young age at marriage and dependence on farming suggests a state of powerlessness with regard to decision making within the household. That socio-demographic, and specifically education and income strongly influence delivery practices is a well known phenomenon. Our study findings closely resemble other studies carried out in regions that score very low on the Kenyan poverty index. For instance, Nyanza and Coast province still record high rates of home deliveries, followed by western province. Our findings also corroborate the findings of other studies across Africa which show a clear relationship between maternal decision making power and delivery outcomes.

5.3: ANC visits and services

The highest total Pregnancy in a life time in the study was in the range of (1-2) which was (45%) 137. This could be explained by the fact that most of the mothers in this study were at the range of the age bracket of 26-30 years which was (26%), 78. These were young mothers. Most of the mothers did not have any pregnancy complications (58%) 175. This can be explained by high attendance to ANC (98%) and presence of many health facilities in the area. This was similar to a study done in rural Tanzania in which more than ninety percent of women attend ANC but less than half of them deliver in a health facility. Magoma et al (2010). Furthermore, most of the mothers attained basic education to understand care during pregnancy though majority only attended to ANC as a requirement. These findings were similar to WHO report (2005), Antenatal care is not just a way to identify women at risk of troublesome deliveries. Women expect that antenatal care will help them deal with the health problems that can occur during pregnancy itself. WHO(2005). Survey KDHS (2009), among women who received antenatal care for their most recent birth in the five years before the survey, 43 percent reported that they had been informed of the signs of pregnancy complications. The major complication experienced were pregnancy related (47%) 143. followed closely by malaria (42%) 127, still 5%, 14 and others 6%, 18.

Similarly in The World Health Report (2005) stated that although progress had been made globally in terms of increasing access and use of one antenatal visit, the proportion of women who are obtaining the recommended minimum of four visits was too low. The first consultation was often late in pregnancy, whereas maximum benefit requires an early initiation of antenatal care. Antenatal care was given by doctors, midwives and nurses and many other cadres of health workers.). Yanagisawa et al in Cambodia found that antenatal care was a positive determinant of facility delivery only for women who attended the service four times or more Yanagisawa et al (2006). This might be due to the fact that during ANC visit, especially if started early, women are provided with health education and information about the benefit of delivering in health facility.

Our analyses showed that majority of mothers were advised to deliver at the county general hospital or in private facilities. The explanation for this phenomenon could be that government dispensaries are run by very few staff who offer all the services. This may lead to lack of time to offer comprehensive preparatory service for delivery. Despite this remarkable finding, there was only weak or no difference in actual quality of intrapartum services provided by different facility levels. For example, descriptive analysis showed that women reported more comfortable stays in private hospitals compare to public hospitals, however bivariate analysis using chi-square statistics revealed no associations between comfort and level of facility. Similar findings (no difference by facility) were observed with regard to missing supplies. Univariately, women reported that they were provided with supplies and commodities as required, with private hospitals scoring highest in terms of commodities and supplies. This could be explained by the fact that private hospitals are in business oriented hence they give quality care by providing supplies and commodities required in order to attract clients Furthermore, the county and sub county hospitals are normally better staffed than the government health centers and government dispensaries . However, bivariate analysis did not reveal significant associations between availability of commodities and supplies and choice of facility for delivery.

The above findings may point to a disparity between perceptions or expectations about the quality of care in health facilities and actual quality of care in these facilities. For instance, pre-natal women may harbor unrealistic expectations about the nature of care in private facilities, but in reality, as evidenced from the analysis, there is little or no difference in quality of care between the different levels.

The only significant finding concerning services at different levels of facilities was to do with costs. We found positive associations between level of medical facility and costs, and other costs. Contrary to conventional beliefs about free maternity care, our findings point to a systematic misunderstanding of the concept "free" in maternity services and care. Although few studies have been published since the declaration of free maternity services, anecdotal reports already suggest the existence of misunderstanding and distortions of free maternity care. Nevertheless, it is possible that extra costs incurred by mothers in the form of gloves, intrapartum medications, gauze; and other supplies represent a significant financial burden.

Most of the women interviewed started their first ANC attendant when they are 5 months pregnant (42%), 127. This could be explained by the fact that most women confirm that they were pregnant late and could be that the women don't know the importance of early ANC attendance. These findings are similar with the KDHS (2009) which indicated that in Kenya, less than half (47percent) of pregnant women make four or more antenatal visits. Sixty percent of urban women make four or more antenatal care visits. Moreover, most women do not receive antenatal care early in the pregnancy. Only 15 percent of women obtain antenatal care in the first trimester of pregnancy, and only about half (52 percent) receive care before the sixth month of pregnancy (KDHS 2009) Similarly in The World Health Report (2005) stated that although progress had been made globally in terms of increasing access and use of one antenatal visit, the proportion of women who are obtaining the recommended minimum of four visits was too low. The first consultation was often late in pregnancy, whereas maximum benefit requires an early initiation of antenatal care. WHO (2005)

Ideally it is recommended by the Kenyan government that women have at least 4 ANC visit yet in only (9%) of the women had 4 ANC visits.. According to Carolyn J Tann et al(2007)In total 413 women reported on their most recent pregnancy. Antenatal care attendance was high with 96% attending once which was similar and 69% the recommended four times which was contrary to our findings. The findings correlate with a study done in Rwanda where by odds of delivering at the health facility for women who attended ANC more than four visits were higher than those who attended only once Umurungi Y,(2010)

Most women interviewed preferred to have their 1st ANC and last ANC attendance at Kakamega County hospital which was (55%) 166 and (66%),198 respectively .This could be explained by the fact that it is a level 4 hospital had better facilities and well-staffed. The private hospitals were least preferred and the main reasons would have been the cost of care . Carolyn j Tann et al (2007) in their study found out that Entebbe General Hospital, the major provider of governmental health services in the area, is located centrally within Entebbe town for both antenatal and delivery care.

IV. Conclusion and recommendation:

Maternal health care services provided in a health facility is widely recognized as an important protective factor against maternal morbidity and mortality. In Kakamega Centre sub County there is a high ANC attendance (98%) for at least one visit but health facility delivery is very low (23%0. This is very low compared to the national rate of (44%).Factors that are making these women to decide against health facility delivery are enormous. Level of education especially women with tertially education and availability of staff made them to decide against health facility delivery. Marital status and missing of most staffs during ANC visit especially for single women and widows made them not to deliver in a health facility. In this study age, type of housing, religion, services received during had no significant association.

V. Recommendations

The discussions held support the need for a constructive, collaborative approach to promoting change. None of the suggested strategies listed below is unique to the context of the study. The need for a multi-level, multi-pronged approach to overcoming barriers to hospital delivery was clear. The recommended interventions target improved access to resources (economic), within the context of a national policy of cost-sharing for health services:

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