



Research Paper

Determinants of clients' readiness to seek preconception care in health facilities in Kisumu County of Kenya.

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ABSTRACT :Preconception care, as part of the national policy framework, is recognized as an important contributor to non-communicable disease prevention and control. Non improvement in maternal and neonatal health indicators in Kenya has been associated with poor access to skilled attendance throughout the continuum (preconception included) of care. Health providers' personal and patient factors pertaining to a health care organization and the broader environment affect the delivery of health care services including preconception care. Preconception care is an intangible product of a health care system and thus often difficult to assess. The key constraint limiting progress is the gap between what is needed and what exists in terms of skills and availability of human resources, infrastructures; drugs, supplies and equipment in the face of increased demand; ineffective referral and weak management systems. Thus the need to determine factors that could promote demand and uptake of PCC preconception care provision. Assessing the strengths and weaknesses of the preconception care system in a place contributes to the preconception care implementation strategy for action in each country as recommended by WHO. This cross-sectional design study, quantitatively assessed the rate of preconception care provision and how it is influenced by the characteristics of possible clients, their level of satisfaction and their readiness to seek this service within health facilities in Kisumu County of Kenya. Data on clients' views on preconception care, clients experience or practice on preconception care and perceived cost of receiving preconception care (time, finance) was elicited using the exit interviews. data was entered onto SPSS where descriptive and inferential analysis was done. The study demonstrated that more than half the clients interviewed were satisfied with the services they received. Furthermore those who lived further away from facilities (OR=0.49, $P<0.001$), those who visited facilities which were found in rural areas (OR=0.47, $P=0.01$) and those facilities providing only outpatient services (OR=2.15, $P=0.01$) were significantly satisfied at $p<0.05$ Those who were older than 25 years of age (OR=0.48, $P<.001$), reside in rural areas (OR=1.641, $P=0.014$), had a higher level of education (OR=2.42, $P<.001$), had had previous pregnancies (OR=2.45, $P=0.003$), were married (OR=1.71, $P=0.045$) and have ever heard of preconception care (OR=5.58, <0.001) were likely to express their intention to accept care if offered. The results will inform programs targeting to increase integration of reproductive services including preconception care so as to improve obstetric outcomes and thus reduce the earlier mentioned indicators.

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I. BACKGROUND

Despite efforts to achieve the millennium development goals as by the target year of 2015 the maternal and neonatal morbidity and mortality have remained persistently high in Kenya. Millennium development goal 4 aimed at improving maternal health through its targets of reducing, by three quarters, maternal mortality ratios between 1990 and 2015 and achieving universal access to reproductive health services. The specific indicators for the first target: maternal mortality ratio per 100,000 live births in Kenya in the year 1990 was 490 (World Bank, 2015). Reducing this figure by three quarters meant reducing it to about 123 deaths per 100000 thousand live births. Unfortunately, at 362 per 100000 live births (KNBS, 2015) it has barely reduced. Sustainable development goal three highlights the fact that only half the women in developing countries have received the health care they need. Therefore, one of its targets is to reduce maternal mortality to less 70 per 100,000 live births (UN, 2015).

Preconception care is the provision of biomedical, behavioral and social health interventions to women and couples before conception occurs. It aims at improving their health status, and reducing behaviours and individual and environmental factors that contribute to poor maternal and child health outcomes (WHO, 2013).

It has been theorized that reaching prospective parents before the onset of pregnancy is crucial for effective preconception care. But research has shown that women do not actively seek preconception care consultation, nor do they enthusiastically accept the offer to attend a consultation (Erasmus Mc, 2015). Little is known about the lack of readiness to seek this services especially in Kenya and Kisumu County thus the need to explore the understanding of women in the study setting and their partners on preconception care.

Mazzaet. al, 2010, looked at the perception of women on the preconception care. Most women were unaware of the need to attend for preconception care and were surprised at the breadth of issues involved. Women also felt general practitioners (GPs) should be more proactive in promoting preconception care availability but acknowledged that they themselves had to be thinking about pregnancy or becoming pregnant to be receptive to it. Barriers to peri-conception folate supplementation included confusion about reasons for use, dose, duration, timing and efficacy of folate use. Enablers included the desire to do anything they could to ensure optimum pregnancy outcomes, and promotional material and letters of invitation from their GP to advise them of the availability and the need for preconception care. Perspectives of women on this service in this study setting is not yet documented.

II. METHODS

In a cross-sectional study, exit interviews were done using a semi structured interview guidereproductive health services clients in 28 health facilities within Kisumu County. The facilities were purposively sampled, four from each of the 7 sub counties. Data on clients' views on preconception care, clients experience or practice on preconception care and perceived cost of receiving preconception care (time, finance) was elicited from 284 women of child bearing age who were seeking care in this facilities between June and November 2018.

Descriptive statistics were done and presented in contingency tables. Bivariate analysis was done on the variables"Age Group, Occupation, Residence, Education, Average Monthly Income, Marital Status, Previous pregnancies. Chi square statistic was used to test differences in proportions. Similarly significant values were regressed against provision of preconception care.

The instruments were based on a checklist of clinical issues of preconception published by New York state department of health (ACOG, 2013). They were tested in two facilities which were not sampled then refined by the research team. The exit interview schedules were translated into Kiswahili and Dholuo to promote understanding and the responses back translated into English.

Permission to conduct the study was sought from the MMUST School of Graduate studies (SGS), County Director of Medical Services, and the National Council for Science and Technology (NCST). Ethical clearance was sought from the MMUST Ethics and Research Committee. Study does not involve in any invasive procedures or risky procedures. In carrying out the study, informed consent was sought with full information being provided and comprehension being affirmed (Appendix 3). Confidentiality was ensured through anonymity (using unique numbers), privacy during interviews and withdrawal at any point was be allowed. For further inquiry into the research the respondents were provided with the contacts of the principle investigator. The questionnaires were destroyed soon after data entry. During analysis personally identifiable information was coded. Spreadsheets were password protected and encrypted. Facility names and key informants' names were not be used during reporting.

III. FINDINGS AND DISCUSSION

This study sought to determine the clients' characteristics that could promote demand and uptake of PCC. It specifically looked at the clients satisfaction on services received at the hospital which make up preconception care package and their readiness to use others incase offered.

The study demonstrated that more than half the clients interviewed were satisfied with the services they received. Furthermore those who lived further away from facilities (OR=0.49, P<0.001), those who visited facilities which were found in rural areas (OR=0.47, P=0.01) and those facilities providing only outpatient services (OR=2.15, P=0.01) were significantly satisfied at **p≤0.05**.

Table 1. Client determinants of satisfaction

Characteristic	Grouping	SATISFACTION WITH PCC		OR	95% CI	P Value
		Satisfied	Not Satisfied			
Facility level ²	Level 3 and Below	36 (53)	32(47)	1.1	0.74-1.62	0.641
	Level 4 and Above	109 (50.7)	106 (49.3)			
Location of Facility	Urban	127 (49.6)	129 (50.4)	0.47	0.26-0.84	0.01
	Rural	19 (67.9)	9(32.1)			

Services	Out Patient Only	19(67.9)	9 (32.1)	2.15	1.19-3.86	0.01
	Out/In Patient	127 (49.6)	129 (50.4)			
Service delivery Area	MCH	118 (49.7)	119 (50.3)	0.65	0.42-1.03	0.063
	Maternity	28 (60.2)	19 (39.8)			
How long to Facility ²	Up to 30 min	104 (47.5)	115 (52.5)	0.49	0.33-0.74	<0.001
	More than 30 Min	42 (64.8)	23 (35.2)			
How Much to facility 2	Up to 50	117 (50.9)	113 (49.1)	0.89	0.58-1.36	0.592
	More than 50	29 (53.8)	25(46.2)			

On readiness to seek care, clients with various characteristics significantly showed readiness to seek PCC services as depicted in table 16 below. Those who were older than 25 years of age (OR=0.48, P<.001), reside in rural areas (OR=1.641, P=0.014), had a higher level of education (OR=2.42, P<.001), had had previous pregnancies (OR=2.45, P=0.003), were married (OR=1.71, P=0.045) and have ever heard of preconception care (OR=5.58,<0.001) were likely to express their intention to accept care if offered.

Table 2. Client related determinants of readiness to use the services

Characteristic	Grouping	UTILIZATION OF 50% PCC Package		OR	95% CI	P Value
		Yes	No			
Age Group	25 and Below	27 (17.2)	132 (82.8)	0.48	0.32-0.72	<.001
	Above 25	38 (30.1)	87 (69.9)			
Occupation	Employed	32 (26)	91 (74)	1.37	0.92-2.04	.118
	Unemployed	33 (20.4)	128 (79.6)			
Average Monthly Income (KSh)	Above 5000	38 (26)	110(74)	0.86	0.47-1.61	.644
	5000 and Below	39 (28.9)	97(71.1)			
Residence	Rural	33 (28)	85 (72)	1.64	1.10-2.43	.014
	Urban	32 (19.2)	134 (80.8)			
Education	Secondary and Tertiary	54 (27.3)	141 (72.7)	2.42	1.48-3.97	<.001
	Primary	13 (13.5)	76 (86.5)			
Marital Status	Married	56 (24.9)	167 (75.1)	1.71	1.01-2.89	.045
	Not Married	12 (16.3)	54 (83.7)			
Previous pregnancies	More than 1	58 (27)	157(73)	2.45	1.34-4.48	.003
	None	7 (13.1)	47 (86.9)			
Ever heard of Preconception care	Yes	62 (29)	152 (71)	5.58	2.74-11.35	<.001
	No	5 (6.8)	65 (93.2)			

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