Effect of Community Health Strategy Policy on Client Perception of Maternity Delivery Services in Kakamega County

Chesire Faith^{1,*}, Wafula Ouma Charles¹, Oyugi Henry², Ochieng Beverly³

¹Department of Health Services Management, Faculty of Tropical Institute of Community Health and Development, Great Lakes University of Kisumu, Kenya

²Department of Measurements, Faculty of Tropical Institute of Community Health and Development, Great Lakes University of Kisumu, Kenya

³Department of Community Development and Health Promotion, Faculty of Tropical Institute of Community Health and Development, Great Lakes University of Kisumu, Kenya

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Abstract Perceived client satisfaction is considered an outcome of health care utilization. Many interventions have been put in place to improve client satisfaction of maternity delivery services. Community participation through community health strategy is one such intervention rolled out in Kenya in 2006. This study examined the effect of community health strategy policy on perception of client satisfaction of maternity delivery services in Kakamega County, Kenya. This was an analytical comparative study design utilizing quantitative data derived from a cross sectional survey among women of under five years old children. Data was collected from four purposively selected administrative units also referred to as sub location. Two sub locations were selected from Butere Sub County where community health strategy policy is implemented while two control sub locations from the neighbouring Khwisero sub county that had not launched community health strategy in the two sub locations. Both Sub Counties are from Kakamega County. Data processing and analysis was done using Statistical Package for Social Sciences (SPSS) version 20 and Microsoft Excel. Chi square test was used at p-value of < 0.05 considered for statistically significance difference. And odds ratio used to assess strength of associations. The findings showed that a high proportion (83.9%) of women in community health strategy implementing sites were more likely to be satisfied with the quality of maternity delivery services compared to their counterparts in the non-implementing sites (52.4%). Irrespective of age, education level, group belonging and main household income source, the differences in perceived client satisfaction remained statistically significant between implementing and non-implementing sites while the within site comparison showed no significant in difference due to women characteristics at p value < 0.05 . This study showed

that women in the strategy implementing sub locations were satisfied with maternity delivery services while their counterparts of non-implementing sub locations showed poor client satisfaction perception for the service. Results of this study imply that community strategy policy has potential to improve the perception on client satisfaction for maternity delivery services and for maternity delivery users. In view if this, the scale up of the strategy will go a long way in improve hospital based deliveries and therefore a strategy to reduce maternal mortality.

Keywords Community Health Strategy, Maternity Delivery Services, Client Satisfaction, Community Participation

1. Introduction

Despite efforts to realize the national millennium development goal 5 target regarding utilization of skilled delivery, in Kenya only 44 per cent of mothers use skilled care at delivery while only 47 per cent of expectant mothers complete the recommended 4+ antenatal care visits (KDHS 2008/9)⁽¹⁾.

As a result of low rates of women utilizing maternity care at delivery, a majority of women continue to deliver under conditions that subject them to higher risks resulting to complications and maternal deaths (KNBS ICF Macro, 2010)⁽²⁾. The overall effect of this is translated into prolonged withdrawal of productive man hours (WHO, UNICEF, UNFPA and World Bank, 2012)⁽³⁾ and persistent national poverty levels (KDHS, 2010)⁽⁴⁾. In a systematic review, perceived negative health provider attitudes,

unhygienic conditions, and lack of knowledge have been shown to be important factors influencing client satisfaction and service utilization (Kiwauka et al, 2008)⁽⁵⁾, (Chi et al, 2015)⁽⁶⁾.

Patient perception regarding quality of health care service delivery has been identified as a major component that determines provision of patient-centred care (Hampson et al, 2002)⁽⁷⁾, which leads to better patient outcomes and continued use of care (Harriott, 2005)⁽⁸⁾, (Bleich et al, 2009)⁽⁹⁾, while failure to meet clients' desires lead to non-utilization of services (Tateke, 2012)⁽¹⁰⁾.

Efforts to address client satisfaction for maternity services have been applied towards improvement in health system and/or address consumer barriers (Srivastava et al, 2015)⁽¹¹⁾. Involving communities in health service delivery process has been shown as crucial in improving client satisfaction and uptake (Rifkin's et al, 2010)⁽¹²⁾. Participation of community in health programs design ensures that communities' needs are addressed and increase public accountability for health which is a desirable end in itself (WHO 2011)⁽¹³⁾, Jorchelovitch 2000⁽¹⁴⁾, (Murcott, 1998)⁽¹⁵⁾, (Zakus et al, 1998)⁽¹⁶⁾, (Rosato et al., 2008)⁽¹⁷⁾. Community participation has also been shown to promote demand for rights to health and high quality health services (Manandhar et al, 2004)⁽¹⁸⁾.

Generally, health system interventions have continued to attract much focus with fewer efforts to address the consumer driven factors. Consequently, outcome from interventions have been slower than expected by MDG targets for Kenya on skilled care delivery (KDHS, 2008/09)⁽¹⁾. In 2006, a community Health Strategy was launched by MOH in Kenya as an approach to institutionalize community participation (MOH, 2005)⁽¹⁹⁾. The strategy embeds interactions between the formal health sector and the community through formation of structures that facilitate health problem analysis, identification, alternative appraisal and joint actions planning for improvement (Kaseje et al, 2010)⁽²⁰⁾ at community level (MOH, 2005)⁽¹⁹⁾. Following a period of implementation of the strategy in the country, assessments show improvement in uptake and utilization of health services due to community health strategy (UNICEF, 2010)⁽²¹⁾, Olayo et al 2014)⁽²²⁾.

After the national launch in 2006, Kakamega County rolled out community health strategy in the 12 sub counties in varying coverage ranging from 100% to 10%. By 2014, Butere Sub County had 100% coverage. However, there has not been information regarding effect of community health strategy on client satisfaction for maternity delivery services. This study sought to assess the effect of community health strategy policy on perceived client satisfaction for maternity delivery services among women in Kakamega County.

2. Methodology

This study employed an analytical comparative design utilizing quantitative data from a cross sectional survey. Data

was collected from four purposively selected administrative units (comprising two administrative units selected from Butere already implementing community health strategy policy since 2009 and two administrative units as control sites from Khwisero. Both sub counties are situated in Kakamega County with fairly similar demographic, climatic and socio-economic characteristics. Purposive selection was used to achieve comparable characteristics of both implementing and non-implementing site for community health strategy policy (CHS). The population of 638 constituted total coverage of women with under-fives who had utilized maternity delivery services were interviewed (279 and 359 from Butere and Khwisero respectively) during five years preceding the year of this study – March, 2014

Quantitative data was collected using a survey instrument adopted from the Donabedian quality assessment framework. Client satisfaction was measured on a four Likert scale and responses graded with different values ranging from 1-4 (1=Poor 2= Fair 3=Good 4=Excellent). Responses from the Likert's scale questions were graded as "poor" if none of the indicators was positive, fair if only one of the indicators was positive, good if two to three of the indicators were positive and excellent if all the four indicators were positive. The scores of each respondent were pooled in analysis and summarized; those rated excellent and good were regarded as "Good" while those rated as poor and fair were regarded as "poor".

To test statistical differences in perceived client satisfaction for maternity delivery services between sub groups a *P – Value* of < 0.05 was used. Chi square was used to test the association between maternal characteristics and perceived client satisfaction and odds ratio used to test the strength of the association.

Ethical Considerations clearance for this study was obtained from Great Lakes University of Kisumu ethical review board and further permission and clearance was obtained from the Kenya Ministry of Health (then MOPHS) through the sub county health management teams within the study sub counties of Butere and Khwisero. Informed Consent was sought from respondents before interviews were conducted. Data was collected by trained data collectors and supervised by principle researcher. Cleaned data forms were keyed into SPSS package for analysis.

Study Limitation

The results are to be interpreted in light of a cross-sectional study where cause and effect relationship might be weak due to the study design. This study only considered sub counties within Kakamega County and therefore its generalizability is limited to areas with similar health systems and cultural and socio-economic contexts.

The study used a comparative analysis to measure differentials between two sub counties having similar geographic, cultural, socio-economic and health system context. The differentiating factor being implementation or non-implementation of a community based health system policy.

Table 1. Overall level of perceived satisfaction between CHS implementing and non-implementing sites

Butere (implementing)				Khwisero (non-implementing)				
Not satisfied		Satisfied		Not satisfied	Satisfied		P-value	
n	%	n	%	n	%	n	%	
45	16.37	234	83.87	189	47.35	170	52.65	0.001

Policy Implication

Results of this study imply that a policy to scale up CHS implementation to total coverage for counties will go a long way in improving client satisfaction for maternity delivery services which is a necessary factor for increasing and sustaining skilled care delivery among pregnant mothers.

Increased efforts and investment towards strengthening implementation of community health strategy is an effective and efficient approach to strengthening the health system for provision of patient-centred care. Therefore, program designs by health managers and partners need to mainstream this aspect.

3. Results

On controlling for age, education level, group belonging and main source of income, results show no significant difference within sub groups comparison due to women characteristics for either site. On one hand, all sub groups within the community health strategy implementing sites consistently showed “good” perception of client satisfaction, while on the other hand; all sub groups within the non-implementing sites showed “poor” perception of client satisfaction for maternity delivery services.

Findings from this study indicated good perception of client satisfaction for maternity services among women in CHS implementing site (Butere) at 83.9% as compared to their counter parts in the non-implementing site (Khwisero) at 52.6%. See table 1.

Under age categorization of women, of ages 20-39 had a higher association compared to older whose strength of association was moderate while younger women below age 20 showed low association as shown in table 2

Table 2. Association between maternal age and perceived client satisfaction by site

Maternal age	OR	95% CL	Strength of association
15-19	0.1233	(-0.1;0.4)	Low
20-24	0.3156	(0.1;0.5)	High
25-29	0.4023	(0.2;0.6)	High
30-34	0.3872	(0.3;0.6)	High
35-39	0.4423	(0.2;0.7)	High
40-44	0.4145	(0.0;0.8)	moderate
45-49	0.5143	(0.2;1.3)	Moderate

Under maternal education level, women with secondary

education had a moderate association compared to women with no education, primary and tertiary education levels whose strength of association was higher as shown in table 3.

Table 3. Association between maternal educational level and perceived client satisfaction by site

Education level	OR	95% CL	Strength of association
None	0.5047	(0.1;0.9)	High
Primary	0.3595	(0.3;0.5)	High
Secondary	0.3267	(0.0;0.6)	moderate
Tertiary	0.5812	(0.1;0.9)	High

Under group belonging, women with no group affiliation and those belonging to a women/men group had a higher strength of association compared to women who were affiliated to other group whose strength was moderate as shown in table 4.

Table 4. Association between group belonging and perceived client satisfaction by site

Group belonging	OR	95% CL	Strength of association
None	0.3666	(0.2;0.5)	High
Women/Men	0.3743	(0.2;0.5)	High
Youth	-		
Club	-		
Other Specified	0.3535	(-0.3;0.9)	moderate

Women from households whose main source of income is farming and self-employed had a higher strength of association with satisfaction compared to households whose source of income was salary as shown in table 5.

Table 5. Association between main source of income and perceived client satisfaction by site

Main source of income	OR	95% CL	Strength of association
None	0.3272	(0.1;0.5)	High
Farming	0.3764	(0.2;0.5)	High
Self employed	0.4769	(0.3;0.7)	High
Salaried	0.2778	(-0.1;0.6)	Moderate
Others	0.2619	(-0.0;0.7)	Low

4. Discussion

Level of Perceived Client Satisfaction by Type of Community Support System

The study showed that there was difference in levels of perceived client satisfaction and maternal delivery services between sites implementing community health strategy (CHS) and non-implementing sites. On one hand, the perception was favourably high among women in the CHS sites while majority of the women in the non CHS sites recorded unfavourable on perceived client satisfaction for maternity delivery services.

This illustrates a point raised in the literature by Campell and Cornish that institutionalized community health based interventions may build 'community voice' thus community's capacity to articulate and assert its needs and persuade people in power and formal health system to respond to community demands (Campbell & Cornish, 2012)(23). The institutionalized community structures might provide opportunities for the community to dialogue over positive staff attitude and hygiene of the delivery room towards woman client an important aspect of care because women and communities value how they are handled at health facilities (WHO, 2009)⁽²⁴⁾.

The favourable perceived client satisfaction among the users of service under CHS is informed by interventions which included increased interactions between the community and formal health system. For instance, the study of (Kaseje et al, 2010)⁽²⁰⁾ found that through joint problem identification, dialogue and joint planning led to increased uptake of maternal health services due to improved quality and responsiveness to the needs of the clients.

Difference in Perceived Client Satisfaction for Maternity Delivery Service between CHS and Control Sites

On comparison between the sites implementing CHS with control sites shows significant differences in client satisfaction for maternity delivery services among women using those services. All the variables tested (maternal age, education, group belonging and main source of income) showed significant differences of perception between the two sites. In all cases women in Butere (CHS sites) were significantly more likely to have a better perception for maternity services as compared to their counterparts in Khwisero (control site).

Under age categorization, except for women who were under 20 years and those above 44 years of age, the rest showed significant differences by sites. On categorization by main source of income, women from households drawing their main source of income from farming and self-employment sources showed significant difference between sites while women from households that indicated as drawing their main source of income from salary depicted no significant difference between the sites.

These results imply that the intervention within the CHS sites addressed barriers both in what happens at home, in families and in communities and at the health facility that impact negatively on the perception of maternity service users. These results show consistence with evidence elsewhere that interventions bringing on community

participation tackle barriers to client satisfaction. It is probable that the institutionalized community participation under the CHS sites encouraged communities themselves to identify problems understands their root causes and mobilised necessary resources to enhance improvement of action and quality health care services (Rosato et al, 2008)⁽¹⁷⁾. It is also likely that the formalized interaction between the community and health facilities facilitated effectiveness in the community's demands for their rights to health and high quality health services (Rifkin's et al, 2010)⁽¹²⁾.

Association between Maternal Characteristics and Perceived Client Satisfaction by Community Support System

The results of perceived client satisfaction for maternity delivery services within the CHS sites indicate that the interventions being undertaken have a positive effect on all women irrespective of their demographic and socio economic characteristics. These findings appear to suggest that the interventions within the community health strategy implementing system rectify differences due the characteristics of the services users and hence implying that those interventions were effective for every category of woman. Conversely, the effect on perceived client satisfaction due to individual women characteristics was still evident among users of the non- implementing system.

Consistent with the findings within the informal community based health care support system; it was observed that age had a positive association with perceived client satisfaction for maternity services (Naidu, 2009)⁽²⁵⁾. Regarding education levels, both sites indicated consistently favourable and unfavourable on client satisfaction for CHS and non CHS implementing sites, respectively.

The results of a study by Ibrahim (2008)⁽²⁶⁾ showed that client's education particularly those with secondary education were more likely to be satisfied with attitude of the provider and provider's communication

While results on income indicated that within the CHS implementing sites, all women irrespective of their source of income had shown consistently favourable perception on perceived client satisfaction, women from household that relied on farming among the services user in the non CHS implementing sites showed a more favourable perception on client satisfaction than the rest. Results of the non CHS implementing sites are consistent with the evidence of (Ambruoso et al, 2005)⁽²⁷⁾ who found that income influenced patient satisfaction. Results of this study show that the difference due to income was eliminated under the CHS implementing sites. However, comparative results showed that there was no significant difference in perception among women who relied on salaried income in both systems of care. In both cases, women who relied on salaried income showed favourable client satisfaction for delivery services. This implies that women from households that relied on salaried income have a way of accessing services either in facilities where they their perception is already good or that they are able to negotiate for quality services. This is

consistent with evidence elsewhere, where it has been shown that women who have high income/salaried are able to negotiate for better health care services and as a results they are not affected adversely by inadequacies in health care systems

The policy that reinforces community participation appear to improve perceived client satisfaction among users of maternal delivery services furthermore, this type of policies help to eliminate differences on perception on client satisfaction due to individual demographic and socio – economic characteristics. Therefore, adoption and scale up formal community based health care support system will go a long way in improving the perception in client satisfaction of women regarding maternal delivery services. This has been shown to have a positive effect on increasing uptake and utilization Kaseje et al, 2010)⁽²⁰⁾. For Kenya where the realization of millennium development goal 5 on improving maternal health that still below the target, will benefit immensely in accelerating the realization of the target of reducing maternal mortality by two third by 2015 if this type of policy are adopted and scaled up country wide.

5. Conclusions

This study set out to assess the perception on client satisfaction for maternity delivery health services between formal and informal community health care support system. The findings from this study brought out two messages. Firstly, that there was a difference in the levels of perception regarding perceived client satisfaction for health facility maternity delivery services between sites implementing CHS and non-implementing sites. Women in the CHS implementing sites were more likely to have better perception for hospital based delivery services as compared to their counterparts in non-implementing sites.

The study revealed that socio-demographic and economic characteristics of maternity service users did not differentiate between women within the same type of sites. Irrespective of the socio-demographic and economic characteristics difference between women within the CHS implementing sites, their level of perceived client satisfaction was similar (favorable). Likewise, among the women in the non-implementing sites, irrespective of their socio-demographic and economic characteristics, all had low perceived client satisfaction for maternity delivery services.

Therefore, the findings imply that formal community based health care support system has effect on improving perceived client satisfaction among women users of maternity delivery services. The findings suggests that efforts by ministry of health in Kenya to scale up and improve functionality of community based health care support service thorough the community health strategy policy is a major step towards realizing MDG 5 aspirations.

Recommendation

This study draws the recommendations for both health care management systems, researchers and policy makers in order to improve utilization and uptake of maternity delivery services as follows.

For health care management teams: there is need to fast track the scale up and strengthen implementation of community health strategy in all sub locations.

For researchers: there is need for qualitative investigation to explain how the structures and activities in CHS impacts on barriers which affect perceived client satisfaction.

For policy makers: there is need to formulate policies that facilitate allocation of adequate resources for scale up and implementation of CHS.

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