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Original article

Service quality influences delivery decisions: A qualitative study on maternity care in rural Tanzania

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ABSTRACT

Background: The relationship between utilization of quality health services and positive health outcomes is well documented, however in low resource settings there is both a shortage of quality services and low utilization of existing services. We assessed women and men's understanding of quality in health facilities and their application of this understanding in selecting place of delivery.
Methods: Ten focus group discussions (FGD) were held between May and December 2011 (five with women and five with men). The groups had 6–11 respondents. FGDs were conducted, recorded, and transcribed in Swahili then translated into English. Transcripts were analyzed using NVivo 9 software. Conceptual framework confirmatory analysis was conducted to compare results from FGDs with pre-existing frameworks for understanding health center quality in low resource settings.
Results: High education and positive attitude of delivery staff, close proximity to the health facility, availability of providers, and modern equipment were cited as reasons for facility delivery. Expectations of complications and better care led to seeking care at higher-level institutions. The one aspect of quality that men focused on more than women was disrespectful care and health worker attitude. The choice to deliver in a hospital versus a primary care clinic or at home was not always the woman's – it was greatly influenced by providers, the husband and the mother-in-law.
Conclusions: These results suggest that quality improvement efforts should focus on both technical and nontechnical aspects of care and target not just women, but those who influence their choice of delivery location.
Trial registration: ISRCTN17107760.

1. Background

Despite policies and efforts toward the strengthening of maternal and newborn health services, Tanzania still has a high maternal mortality ratio of 390 deaths per 100,000 live births.[1] One of the main challenges in achieving Millennium Development Goal 5 of a global reduction of maternal death by 75% by 2015 is the low proportion of women who deliver in facilities.[2,3] Deliveries in health facilities are more likely to be performed by skilled personnel and link women to a referral system in the case of complications as compared to home deliveries.[4] Experience in countries with low maternal mortality reveals that access to high quality obstetric care is vital for reducing maternal mortality.[5,6]

Even though an estimated 90% of the population lives within 10 km of a health facility[7,8] nationally, in 2010 only 52% of Tanzanian women delivered in health facilities.[8] Although the Tanzanian national policy states that primary care clinics should provide basic emergency care for delivery complications,[9] facilities have poor infrastructure, lack basic equipment, supplies and are understaffed, particularly in rural areas.[10] These primary care clinics see a lower volume of patients than urban hospitals and this low volume has been associated with poorer quality of care across five countries in sub-Saharan Africa, including Tanzania.[11]

A deeper understanding of how women make decisions regarding obstetric care utilization and on which aspects of quality of care they focus may help improve the provision of

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responsive, patient-centered care. While several definitions and frameworks have been developed to understand quality of care, defining quality of care in maternal and neonatal health remains a challenge, because it is a multi-faceted issue that includes both technical and non-technical aspects of care. Hutchinson and colleagues have highlighted the fact that in the context of maternal health and child birth, effective (safe) care, timely access and reproductive health rights are all important components of the quality of care provided.[12]

Another significant contribution to understanding the definition of quality, particularly in terms of family planning services, comes from Bruce.[13] Her broad definition includes the ways in which individual users are treated by the system. Bruce has identified a framework, which encompasses six fundamental elements crucial to the quality of family planning services. These elements include technical competence, provider-client information flow, choice of methods, interpersonal relations, follow-up and continuity mechanisms, and the appropriate constellation of services.[13]

Donabedian made the explicit link between provision of health services and the need for standards of care. According to his model, information about quality of care can be drawn from three categories: structure, process, and outcome.[14] He further delineated quality into seven attributes, which included acceptability to the patient and conformation to patient preferences.[15] In 2011 Hutchinson and colleagues expanded Donabedian's model and created a framework for measuring levels of client satisfaction for public and private family planning providers.[16]

The above three illustrative studies on quality of care view reproductive health service delivery within a continuum of services. This study builds upon the most advanced model developed by Hutchinson, in order to learn about women's experiences with childbirth and ideas about how to improve the quality of health care in the region. The study further explores how that evaluation of quality is used in selecting a place of birth.

2. Methods

2.1. Study design

This qualitative study used focus group discussions (FGD) with both men and women to understand the relationship between quality evaluation and selecting place of delivery. Mothers who recently delivered were asked to describe their personal experiences and perceptions of the care they received from ANC through delivery. Husbands of women who recently delivered were asked about their perception of the services that their wives received, the process and preference for future care. The FGDs were conducted in Swahili using a structured guide. During the discussions, the facilitator asked follow-up questions using probes whenever an explanation was unclear. All FGDs were audio recorded, transcribed verbatim and translated into English.

2.2. Study setting and population

This survey was done in conjunction with a cluster-randomized controlled study testing models for improving quality of maternal health care in four districts of Pwani Region, Tanzania: Bagamoyo, Kisarawe, Kibaha Rural, and Mkuranga (ISRCTN 17107760). Pwani Region is in Eastern Tanzania, northeast of the largest city, Dar es Salaam. According to the 2012 census, Pwani Region has a total population of 1,098,668.[17] The region is administratively divided into seven districts and this study focuses on four districts with the total population of 834,956.[6] The region is primarily rural and most of the population is employed in agriculture or unskilled manual labor. Pwani region has more than 98% of women reporting to have had at least one ANC visit during their last pregnancy. 73.1% of women in Pwani Region during the 2010 national Demographic Health Survey (DHS) reported delivering their most recent child in a health facility.[8]

2.3. Sampling strategy

Purposive sampling is a non-probability sampling method that facilitated the identification and selection of individuals in groups purposely based on their knowledge and experience with a phenomenon of our interest.[18] Purposive sampling strategies were used to select FGD participants who represent the population of new parents. These individuals were selected in order to gain insight into recent experiences with childbirth. We sought individuals who had delivered in facilities and individuals with recent home births in order to gain insight into these two options. The study eligibility criterion included: mothers and fathers who had at least one child under the age of five, were at least 15 years old, and spoke Swahili (the main language in the region.) The identification and recruitment of the study participants was done through the help of village executive officers, who were contacted by the research team and briefed on the study objectives in advance of data collection. We initially conducted two focus group discussions for each district in the study, one for men and one for women. An additional focus group discussion was added for both men and women in order to reach saturation (no new or relevant information emerged). At this point no additional data need to be collected.[19] Ten focus group discussions were conducted in the entire study. Discussions were held at a venue suggested by and convenient to the participants; the most common areas were at primary school buildings or under a tree. Two of the FGDs (one for men and one for women) were conducted within the health facility compound, but were held away from the health facility building to ensure confidentiality from facility staff. The health facilities are primary care clinics that provide maternity services (antenatal, labor, delivery and postnatal care).

2.4. Data analysis

First, the translated transcripts were entered into QSR NVivo9 where we conducted framework analysis. We conducted the analysis for male and female FGDs separately. Second, we developed a codebook based on the major themes of the study. Third, major themes were transformed in tree nodes and free nodes. Conceptual framework confirmatory analysis was conducted to compare results from FGDs with pre-existing frameworks for understanding health center quality in low resource settings. The emerging themes and sub-themes were identified and written out in the results. We used quotes from respondents to support the emerging patterns of concepts from the data.

Approval for the study was granted by the ethical review boards at Columbia University, Harvard University, Ifakara Health Institute, and the Tanzanian National Institute for Medical Research. Informed consent was obtained from all participants.

3. Results

3.1. Demographic data

Ten focus group discussions were conducted with a total of 43 men and 35 women.

Table 1 summarizes the demographic characteristics of study participants. The majority of participants were married and had 1–2 children under 5 years old at data collection.