

Mother's Perception of Responsiveness of Labour and Delivery Services in First Referral Facilities in Ghana

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ABSTRACT

Background: To determine the perception of responsiveness of maternal health services in selected institutions in Ghana.

Methods: Cross-sectional study. Three purposively selected district hospitals with level 1 referral status in the Greater Accra, Region of Ghana namely Achimota Hospital, Mamprobi Polyclinic and the Ga South District Hospital. The study population was mothers who used the health facilities for antenatal, delivery and postnatal care services. A systematic random sampling technique was used to select the participants who reported for their last postnatal visit at approximately six (6) weeks after delivery. A verbal consent was sought from the respondents. The outcome measures of the study were the seven (7) elements of responsiveness of labour and delivery services which are being treated with dignity, assurance of autonomy, privacy and confidentiality, prompt attention, conducive physical environment, continuity of care and social support.

Results: The study showed a mean perception standard score of 43.3% (Likert mean score of 3.89 on a five-point scale) which is low. Three domains, 'privacy and confidentiality', 'dignity' and 'autonomy' has satisfactory performance of 58.3%, 57% and 53.7% respectively. Dignity, prompt attention and continuity of care were ranked as the top three (3) most important domains. Socio-economic factors significantly influenced the rankings with respondents with favourable socio-economic status preferring to be treated with "dignity" foremost whilst those with unfavourable socioeconomic status prefer "prompt attention" foremost.

Conclusions: As developing countries make effort to improve access to maternal health services it is important to address issues of

responsiveness as a means of promoting positive experience of care.

Key words: pregnant women, quality, responsiveness, maternal health services, labour, delivery services.

BACKGROUND

Access to quality maternal health services is regarded as one of the key factors that could help reduce maternal and neonatal mortalities. It is estimated that 391,000 maternal mortalities worldwide might be averted if coverage rates of the key maternal health interventions were increased from current levels to 99 percent. (A W, M C) The extent to which a population gains access to health care depends on affordability (financial accessibility), physical or geographic accessibility, and acceptability of services and not merely availability of the services. (D.H P) Acceptability is the most poorly conceptualized dimension of access and also the most neglected. A health service may be available in adequate supply and be geographically and financially accessible and yet may be poorly utilized if it is perceived by its population to be unacceptable. For example, in Bangladesh, negative perceptions about the quality of services, including poor attention, poor provider behavior, poor cooperation and inadequate privacy" were widely considered to explain the underutilization of rural public health facilities. (K A, S FR) Studies in Burkina Faso (WV DS, CF L have found that providing more health facilities since

the 1990s has not increased service utilization due to poor service quality. There is now growing evidence that client perceptions of maternal health services, particularly provider attitudes and behaviors, have a greater influence on the utilization of skilled maternity care services than the more widely recognized factors such as geographic access or cost. (Groenewegen PP)

An acceptable Health Service is defined as “the match between how responsive the health service or its providers are to the social and cultural expectations of individual users.” (D.H P) It is the one that operates from the position of cultural sensitivity and respect and is devoid of discriminations among its target populations. ‘A Responsive Service’ in a broader context of any health system was defined by WHO (Silva Ad) as the service outcome which is achieved when institutions and institutional relationships are designed in such a way that they are cognisant and respond appropriately to the universally legitimate expectations of individuals. The Population’s legitimate expectations are defined in terms of international human right norms and professional ethics. Legitimate expectations for anybody wanting to utilize institutional health services include but not limited to two broad themes with various sub-themes: respect for persons (being treated with dignity, assurance of autonomy, privacy and confidentiality) and client orientation (prompt attention, care in a conducive physical environment/amenity, continuity of care/choice of a health provider and access to social supports during care). (Silva Ad) These expectations are universal and according to WHO constitute the critical elements of responsiveness. The extent to which these expectations are met in a health institution determines how responsive the services are to their clients. Greater responsiveness is perceived as a means of making services more acceptable and attractive to consumers.

Ghana has invested tremendous efforts at promoting maternal health service utilization by the implementation of a number of interventions: the introduction of delivery fee exemptions in the year 2003, (Ghana MoHM.) the passage of the national health insurance act in 2003 and its operationalization in 2004, (Authority NHI) implementation of the universally free antenatal and delivery care services in 2008 under the national health insurance scheme. (Juran J.) In addition, more Health centres have been built and the Community-based Health Planning Services (popularly referred to in Ghana as CHPS compounds) concept has been implemented as a way bridging the geographical accessibility gap. (Peltzer K) In spite of these interventions the utilization of labour and delivery services are still low with almost a third of all deliveries taking place outside the health system though about 95% pregnant women register for antenatal services. (Murray C, Frenk J) Even in some urban and peri-urban areas there is significant unsupervised home deliveries and patronage of TBAs. Several studies have revealed that one of the factors responsible for this state of affairs in Ghana is the low client perception of quality of care. Among all the quality variables poor interpersonal relationships has been identified as key in deterring potential users of institutional labour and delivery services. It has been documented that women feel reluctant to seek future care in health facilities when their experience with health professionals is negative. (Parasuraman A, Zeithaml V.)

This study is exploratory with the main objective of determining the extent to which maternal health services are responsive to clients in selected institutions in the Greater Accra Region of Ghana. The specific objectives were to address the following questions: what are the mother’s perceptions of responsiveness of labour and delivery services, which factors influence their perceptions, which elements of responsiveness are most important to them,

and what proportion of respondents' perceived discriminations.

METHODOLOGY

The study was a descriptive cross-sectional design. Respondents were selected from Achimota Hospital (AH), Mamprobi Polyclinic (MPC), and Ga South District Hospital (GSDH) all of which are district hospitals with level 1 referral status in Ghana. The study population was mothers who used the health facilities for antenatal, delivery and postnatal care services. Supervised post-natal care rate in the Greater Accra Region of 81.8% (GDHS 2008) (U W, Parasuraman A) was used to calculate the annualized target population as 6293 as shown in Table 1. AKrejcie and Morgan table (B.K P, D. R) was used to derive a minimum sample size which lies between 361 and 364. However, a sample size of 450 was decided upon and proportionate sample sizes for each institution were calculated as shown in Table 1.

A systematic random sampling technique was used to select the respondents who reported for their last postnatal visit at approximately six (6) weeks after delivery. There is evidence that subjective elements such as feeling, satisfaction and perception of childbirth experience change over time (U W, Peters T) and therefore a fixed time interval after delivery was chosen for all respondents. A verbal consent was sought from the respondents before interviews.

A structured questionnaire covering the various elements of responsiveness was used for primary data collection. The respondents were asked to rate their perception of specific elements of the care received. Under 'being treated with dignity' they were asked to rate their perceptions of: being greeted respectfully by staff; being talked to respectfully by staff; being treated with respect during physical examination; clarity of explanations given by the healthcare providers; and the availability of time to ask questions. Under 'Assurance of Autonomy' they were asked to rate their

perception of the possibility of obtaining information on their delivery care, their participation in decision-making on their delivery care, their right to be consulted about their care; and their right to informed consent during their care. Under 'Privacy and Confidentiality' they were asked to rate their perception of their freedom to speak privately with the health professionals, their right for their personal information being kept confidential, and their right to care in an environment that protects their privacy. Under 'Prompt Attention' they were asked to rate their perception of waiting time before being attended to. Under 'Conducive physical environment' they were asked to rate the overall physical appearance of the environment, adequacy of space of the care environment, cleanliness of the care environment, cleanliness of washroom amenities, adequacy of furniture, comfort of furniture and sufficiency of ventilation. Under 'Access to social support' during care the respondents were asked to rate the ease of receiving visits by family members, the ease of contact with those outside, availability of family support during labour and adequacy of support from the staff during labour. Under 'Continuity of care' the respondents were asked to rate the chance of being looked after by the same care provider during subsequent antenatal visits and the chance of being looked after by a particular midwife throughout a shift during care. The response options were rated on a 5-point Likert scale.

To obtain rankings in the order of the most important elements of responsiveness, each respondent was asked to select an element she perceives as the most important. The most frequently selected elements were used to generate a ranked order of importance. To assess the presence of discrimination the respondents were asked whether they felt they had been treated differently by the healthcare providers compared to others for any of the following reasons: age, lack of money, social class, ethnic group, religion, and type of illness. An open-ended question also

explored the respondent's opinion as to what changes they would suggest to make the services more acceptable and attractive.

The analysis of primary data involved the calculation of mean scores on the Likert scale and z-score derived percentiles as the standard scores for the various elements of responsiveness, for each institution and also for the entire sample. Experts believe that the calculation of the standard scores (as the z score derived percentile) is the most reliable because it combines both the mean and the variability to a percentage. (Peltzer K, M S)

There is evidence that where the sample size is large (as in this study) parametric tests such as mean and standard deviation can be used and under such circumstances parametric tests are sufficiently robust to yield largely unbiased answers that are acceptably close to the truth when analyzing Likert scale responses. (B.K P, D. R., Peters T) Statistical analysis was done using SPSS version 16. An Analysis of Variance (ANOVA) and post-hoc analysis was used to determine the factors that influence the scores. Significance level was set at 0.05. Content analysis was used to process the responses to the open-ended questions.

RESULTS

The majority of respondents of 384 (85.3%) were in the age range of 20-35 years, 33 (7.3%) were teenagers and the remaining (7.4%) were more than 35 years old. The educational status of the respondents was generally low with up to 64% having either no formal education or educated only up to junior high school level. About 79% of the respondents were married whilst 21% were single. The highest percentages of respondents of 74.3% were in the low-income occupations, 14.2% were in middle-income occupations and only 2.1% were in high-income occupations. In all, 26% of the respondents had come for their first delivery (childbirth debutants). MPC had the highest percentage of the childbirth debutants (33.6%) and the GSDH

had the lowest of 17.4%. For those with previous deliveries 14.7% of them were non-institutional (Table 2).

The overall total mean standard perception score of responsiveness was 43.3% (3.89 on the Likert scale). 'Privacy and confidentiality,' 'Being treated with Dignity', and 'Assurance of Autonomy' were the highest scoring elements (58.3%, 57% and 53.7% respectively) whilst 'conducive physical environment/amenities' had the lowest standard score of 19.2%.

GSDH had the highest standard perception score of 58%, whilst MPC had 38.5% and AH had the lowest mean standard score of 38%. Even though there was tendency towards an inverse association between midwives' workload ratio of an institution and the mean standard perception score, a chi-square analysis did not show any significant relationship between the standard score of an institution and the workload ratio ($p=0.199$).

The effects of various categorical variables on the perception scores were analyzed using ANOVA followed by post-hoc analysis with independent sample t-test (Table 3). It was found that those who have previously delivered gave significantly higher scores than those who came for their first delivery [3.93 (45.6%) vrs 3.82 (37.7%), p -value =0.002] and those with higher-income occupations also gave significantly higher scores than those with lower-income occupations [4.0 (50%) vrs 3.88 (42%); $p=0.007$]. There was no significant difference in the perception scores whether the previous delivery was institutional or non-institutional.

The discriminatory scores were generally low with the mean prevalence of perception of discrimination being 2.5% though it varies from 1.5% in AH, 1.7% in GSDH and 3.8% in MPC.

Even though there are variations in the hierarchy obtained in the various institutions, taken together, 'Being treated with dignity', 'Prompt attention' and 'Continuity of Care' were ranked as the top three most important elements for the

respondents accounting for about 70% of the variation (Table 4). 'Access to social support' was the least important element for the respondents.

Further analysis using Pearson chi-square of independence showed that most socio-economic factors (the educational status, marital status, and the income status) significantly influenced their rankings. Most respondents with favourable socio-economic status (higher education, higher-income occupations and married) mostly chose 'dignity' as their most preferred element of responsive care whilst those with unfavourable socio-economic status (lower education, lower-income, and unmarried) mostly preferred 'prompt attention' as their most important element of responsive care.

Content analysis of suggestions for improving attractiveness of the institutions for prospective clients (Table 5) indicates that more than 50% of respondents suggested improving the physical environment and amenities. The top three (3) suggestions coming from 86% of respondents concerned improving the environment and amenities, improving inter-personal relationships of staff and providing prompt attention to clients.

DISCUSSION

This study measured responsiveness of maternal health services based on the perceptions of the mothers who used the services in three district level institutions in the Greater Accra Region of Ghana. The study showed a mean perception standard score of 43.3% (Likert mean score of 3.89 on a five-point scale) which is low. The top two highest performing domains of responsiveness in this study is confidentiality and dignity whilst in a similar study in Thailand which also focused on maternal and delivery services, the top two highest performing domains were prompt attention and dignity. (Valentine N, Darby C, Bonsel G) In a South African Study which measured general health system responsiveness rates, high responsiveness was recorded for

dignity, confidentiality, amenities, support, communication, waiting time and autonomy in that order. (A W, M C)

Even though the relationship between midwifery workload of an institution and the mean score of responsiveness was not statistically significant in this study, other studies Kutney-Lee et al, (U W) and O'Connor et al have shown clear relationship between nursing workload, quality of nursing work life and patient satisfaction. It is obvious that an overworked and stressed nurse or midwife cannot give responsive service. In O'Connor's work, an 8% increase in nurse's time allocated to direct patient care correlated with 30% improved scoring of caregiver responsiveness by patient.

Past experience generally shapes individual's predictions and desires about services and therefore shape their perceptions, (DV D, CW B, AH L, DB H) the finding in this study that past delivery experience positively influenced the perception scores supports the works of Duong et al (2004) which suggests that maternity status (previous delivery experience) has significant positive impact on the perception of quality by mothers. On the flip side, this also implies that women reporting for their first delivery have poorer quality perception. Even though not confirmed by this study, Duong's work also suggests that client with previous home delivery experience have a lower quality perception score when they now deliver in institutions. Such patients may have fears and preconceived ideas that may negatively influence the way they receive and perceive services rendered. The implication of these findings is that a client reporting for their first institutional delivery needs special attention, care and support throughout the prenatal, delivery and the postnatal period.

It is not immediately clear why respondents with higher-income occupations produced higher scores in this study but this may be indicative of the presence of systemic discriminatory practices in their favour. Socio-economic

factors have been found to influence all the domains of health system responsiveness. (O'Malley A, Forrest C) Studies by (Becker G et al, 2003) suggest that low income individuals are more commonly dissatisfied with health systems and are more likely to suspect or identify behavior they viewed as discriminatory or racist and women of lower socio-economic status had poorer primary care experiences than women who had higher-incomes (O'Malley et al, 2002). Also, in a study conducted in South Africa, Myburgh et al, (2005) found that both race and socio-economic status (SES) were significant predictors of levels of satisfaction with the services of health care providers. In that study, Whites and high socio-economic status respondents were about 1.5 times more likely to report excellent service compared with African Black and low SES respondents, respectively. In a study conducted in Canada, within a universal health insurance system in which physician reimbursement is unaffected by patients' SES, people presenting themselves as having high SES received preferential access to primary care over those presenting themselves as having low SES. (N V, C D, GJ B)

Discriminatory practices can occur against clients with low-economic status, low social status, minority ethnic groupings, minority race, minority religious members, clients with stigmatized illnesses, and also by age. In maternity practices in particular young teenagers are commonly scorned and discriminated against. The mean of perception of discrimination of 2.5% in this study is far lower than values obtained in the South African study (P OC, J R, S D, C C) where 15.9% and 13.3% of users of public institutions complained of discrimination because of lack of money and because of social class respectively.

Anderson (2004) (Hsu C-C) carried out a qualitative study in Northern Ghana to understand the production and legitimization of differential treatment from the perspective of health workers. He concluded that to blame the "bad attitudes"

of health workers for differential treatment is not an adequate explanation. He argued that differential treatment can be understood as a form of agency, and is related to the conditions of hospital work and to the professional and social identities of health workers. Discriminatory practices or the non-perception of quality by individuals of low socio-economic status can become an important barrier to access to healthcare especially maternal healthcare services. Potential barriers can occur at three different levels: Patient level, Provider level and Health System level. With specific reference to maternal health services, healthcare providers and healthcare systems must be cognizant of these facts to ensure that services are organized and provided in such a way that the poor are not unduly disadvantaged.

Generally, the rankings in this study agree with the findings of other studies (Valentine, 2008, Cheng Hsu et al, 2006) which all ranked dignity and prompt attention as the two most important elements suggesting that there may be no significant differences in the rankings of elements of responsiveness in maternal health services compared to general health systems. Whilst dignity is regarded as the ultimate of ethical care, the importance of prompt attention lies both in its clinical value and also in its ability to satisfy patients. In the specific field of maternal healthcare, the clinical value of prompt attention lies in the fact that most of the major complications of childbirth run a rapid course and can lead to mortality or severe morbidity in the shortest period of time. Prompt attention during emergencies can therefore be lifesaving.

Socioeconomic factors such as educational status, occupational type and marital status were found to influence the rankings. The findings in this study is that respondents with favourable socio-economic status mostly chose 'dignity' as their most preferred element of responsive care whilst those with unfavourable socio-economic status mostly preferred 'prompt

attention' as their most important element of responsive care.

The overwhelming importance of dignity in ethical care for patients compared to autonomy was also illustrated, with 'dignity' selected by 28.3% (highest percentage) of respondents compared to 8.4% who selected autonomy as their most important need. This supported the outcome of logistic regression analysis performed by Joffe et al (2003) who concluded that confidence and trust in providers and treatment with respect and dignity are more closely associated with patients' overall evaluations of their hospitals than adequate involvement in decisions.

The importance of conducive physical environment and amenities was underscored in this study. On the perception scale, it had the least standard score of 19.2%. It was ranked as the fourth most important among the elements of responsiveness. However, improving the physical environment and amenities was mentioned by greater than 50% of the respondents as the change that can make the services more acceptable and attractive to prospective mothers. The impact of the physical surroundings and amenities in a service environment can be the determining factor in a provider's ability to provide a required task effectively. It contributes significantly to the first positive impressions of the client even before she begins to interact with the service providers. In service psychology, a strong first impression (whether negative or positive) is difficult to erase.

These results confirmed that maternal health services in the selected institutions are generally not very responsive to the needs of the clients. As developing countries make effort to improve access to maternal health services it is important to adopt 'service oriented approach' and address issues of responsiveness as a means of promoting attractiveness and acceptability of such services in addition to addressing issues of cost and geographic access. To improve service responsiveness in the situation of

limited resources, the study provides a framework for the selection of priority areas which include: treating the clients with dignity, giving them 'prompt attention' and ensuring 'continuity of care'. Re-organization of services and retraining of staff in customer service and interpersonal relationships will go a long way.

CONCLUSION

It is important to address issues of responsiveness as a means of promoting positive client experience among clients. Whilst staff numbers cannot be improved in the short term, re-distribution of staff according to workload and the introduction of appointment systems by time will help reduce congestions and perceptions of delays. Establishing service conducive physical environments by improving amenities is also critical for the clients.

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- How to cite this article: Srofenyoh EK, Otchi EH, Atinga R. Mother's perception of responsiveness of labour and delivery services in first referral facilities in Ghana. *Galore International Journal of Health Sciences & Research.* 2017; 2(3): 7-14.
