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# CHALLENGES OF MONITORING REPRODUCTIVE HEALTH SERVICES: A CASE STUDY OF ANTENATAL CLINICS IN KINONDONI MUNICIPALITY, DAR ES SALAAM

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## ABSTRACT

**Introduction:** Antenatal Care (ANC) is one of the interventions that have the potential of significantly reducing the maternal mortality rate when properly conducted.

**Objectives:** The purpose of this research was to assess the challenges of monitoring and evaluation of reproductive health services using ANC clinics as a case study and identify strategies for addressing the challenges.

**Methods:** The study was descriptive cross sectional employing both qualitative and quantitative methods. The sample population included nurse-midwives who manage ANC clinics in Kinondoni Municipality.

**Results:** Of the 30 respondents, 24 respondents noted the need to improve monitoring of the ANC services. Challenges noted were low information use, inadequate human resource, and lack of feedback data from higher authorities.

**Conclusion:** There is need to improve information flow and use, have frequent supportive supervision visits, seminars and workshops to update nurse-midwife managers with knowledge and skills of monitoring and evaluation, and development of a culture of information.

**Keywords:** challenges, monitoring, reproductive health, antenatal care

## INTRODUCTION

Antenatal care is a right every pregnant woman has to get before she reaches her time of delivery. The period from conception to birth is very crucial to the health of both the expectant mother and her unborn baby, since problems during this period can have consequences throughout the life of the innocent unborn baby. Among the various pillars of safe motherhood, antenatal care remains one of the interventions that have the potential to significantly reduce maternal morbidity and mortality, when properly conducted [1] [2].

Proper antenatal monitoring is necessary to prevent fatal outcomes [3]. Focused Antenatal Care (FANC) is provided to pregnant women by skilled health workers and it emphasises on the woman's overall health, her preparation of childbirth, readiness for complications that may occur in pregnancy, labour, delivery and postpartum [4]. FANC gives priority to infection prevention and control, malaria, syphilis, anaemia and prevention of mother to child transmission of HIV and quality improvement [4].

Antenatal care has proved to be effective in improving maternal health in rural areas. Through increased utilisation of antenatal care services, it may lead to the utilization of other maternal health related services such as institutional delivery, delivery assisted by trained professionals, seeking advice for pregnancy complications, and seeking advice for post-delivery complications [5]. Monitoring of ANC is important in improving maternal health. However, the success of ANC services depends on supportive health systems, effective systems of referral, management, procurement, training, supervision, health information management, community action, partnership, male involvement and equity for all [4]. The study was based on nurse midwives because they are the pillars in the struggle for reduction of pregnancy related health problems and maternal mortality. To achieve this, they must function as administrators, researchers, clinicians, health educators, planners and counsellors [6].

Various efforts have been put in place by both the government and development partners to decrease maternal mortality rate. However, it has remained very high in Tanzania, that is, 454 maternal deaths per 100,000 live births [7]. Yet to date less emphasis has been put on monitoring antenatal care. Although hard evidence is lacking on the effectiveness of ANC in reducing maternal deaths, it is generally accepted that the ANC aims at reducing the risk of child birth complications. The slow progress in reducing maternal deaths makes the achievement of the targets that were set

for millennium development goals for maternal health remain uncertain.

Monitoring and evaluation of health services provided is essential for the success of any program and thus midwives should monitor and evaluate the services that they provide regularly. The monitoring and evaluation needs to be from both service provider and client perspectives [8]. Address and Ellen in their study of childbirth information needs for first time Malawian mothers who attended antenatal clinics, recommended that there is a need to train midwives on services they provide [9]. The authors went ahead to suggest that monitoring is crucial to see if the education program was influencing maternal care seeking behaviour of pregnant women in Malawi [9]. This extends to the need of monitoring all reproductive health services.

In a study conducted in South Africa concerning monitoring equity in access and health systems issues in antiretroviral therapy programmes, human resources were identified as one of the major barriers to service provision in the health sector [10]. The number of health workers in relation to the services they provide needs to be checked. Much as the quality of nurse-midwives produced by health institutions might be good, the quality of work can be impeded by the overwhelming number of patients. It was shown that developing an electronic data collection system for monitoring patients in obstetric units is feasible in the developing world and that the existing data collection systems using case-notes have poorly met our present day information needs [11]. The absence of quality data leads to poor decision making. Kaye pointed out that lack of technical support supervision leads to providing poor quality care for both antenatal and delivery care; and hence the need for an efficient monitoring system to identify problems early and tackle them appropriately [12].

Simba noted that possession of health cards can have an influence on the monitoring and evaluation system of any country [13]. It was revealed that possession of Road to Health Cards was adequate to serve as a community database for monitoring health status and evaluating health interventions targeting children less than five years. One major limitation of this system is that there is a low retention rate of the cards [13].

Many countries are shifting from manual to electronic monitoring systems through the use of open source software District Health Information System, commonly known as DHIS. With the introduction of this new system, change has to be managed appropriately. One of the ways to improve on the present reproductive health profile for majority of pregnant women is to rigorously and regularly appraise the quality of ANC services in the primary health care service centres in order to identify specific problems and develop strategies for improvement [14]. Data that is generated from reproductive health clinics should be used for higher decision making, and hence those who collect it have to know its value so that they can maintain its quality to be high.

This study investigated challenges of monitoring reproductive health services and identified strategies for addressing the problems in Tanzania using ANC clinics of Kinondoni Municipality as a case study.

## METHODOLOGY

The design of this study was descriptive cross sectional employing both qualitative and quantitative measures. Kinondoni is one of the municipalities located in the city of Dar es Salaam in Tanzania. It was selected because it had more health facilities that offer ANC services than other municipalities of Dar es Salaam.

The study population included nurse-midwives who are in charge of ANC clinics in Kinondoni Municipality. In each clinic, one person was interviewed. In case the nurse-midwife in charge was not available, the assistant was interviewed. The researcher interviewed 30 respondents in total. The ANC clinics were selected conveniently. Oral informed consent was obtained before the interviews.

The data was collected using semi-structured questionnaires and informal interviews. The semi-structured questionnaires contained both open and closed ended questions. The data were analysed using content analysis method and Microsoft Excel. Data was analysed into codes which were further transformed into themes.

## RESULTS

Seventy percent of the midwives were females and 57 % were diploma holders. Majority (57%)

of the participating health facilities were private. Table1 shows the demographic characteristics of the respondents:

Among the respondents, only 2 (7%) had ever attended special training on monitoring and evaluation. Although 93% had never attended a course of monitoring and evaluation, they had heard of it from other sources. The sources from which the respondents had ever heard of monitoring and evaluation information were: college 13 (43%), radios 2 (7%), seminars 7 (23%), television 6 (20%), and the ministry of health 2 (7%).

This shows that at least some elements of monitoring and evaluation were discussed in some of the training courses' content that they had while they were in school. In addition, some of the seminars that they had ever attended contributed to their knowledge of the subject. Although the seminars were not specifically for monitoring and evaluation, the respondents agreed that they had gained some knowledge of monitoring and evaluation from them.

Twenty four (80%) of the respondents said that monitoring and evaluation helps in decision making while 2 (7%) said that it does not help, and four (13%) said that they did not know. Respondents were asked whether the different factors were important in evaluation and their views are as summarised in figure 1.
Reliable and valid indicators are necessary to measure progress towards the goal of any project. Respondents were asked about the factors to consider when designing indicators and their views are as summarised in figure 2.

Respondents were also asked whether they know about the dimensions of data quality and their views are as summarised in figure 3.

Data quality was cited as one of the challenges of monitoring and evaluation in the municipality. In addition, the respondents were asked if they provide information to higher authorities for decision making, whether they receive feedback from higher authorities and whether they use the information they receive and the results are shown in figure 4.

## DISCUSSION

The results show the need to strengthen knowledge of indicators and how to design them so as to encourage designing of local indicators and information use. The qualities of good targets have to get known so as to be able to set local targets in given health facilities in order to increase quality of service provision.

Knowledge of data quality is important for data collectors so that they can know how to spot irregularities. The dimensions of data quality used for assessment were in line with those of Lippeveld et al. [15]. Completeness and correctness were mostly known by the respondents to be the dimensions of data quality. They were also able to recognise that the monitoring system is not effective because the data is not accurate. The timeliness of data was known by 33% of the respondents. The consistency of the data was least known to be a dimension of data quality. These all can cause data to lose integrity and lead to poor decision making basing on poor quality data.

Forty percent of the nurse-midwives recognised that there is an effective monitoring system in the municipality. One of the reasons that they gave include monthly supervision. Monthly supervision visits do not necessarily contribute to an effective system of monitoring and evaluation. Other nurse-midwives working in the ANC clinics were not able to judge whether the present system is effective. This may be attributed to their little knowledge of monitoring and evaluation. However, they were able to notice that information collected by the present system is not accurate. This is also similar to various studies that showed data collected to be of poor quality like in Mozambique and Kenya [19], [20].

Over 87% of the respondents were aware that the information collected was provided to higher authorities for decision making. This shows that they are aware of their contribution but they were not certain whether the information was used. To the contrary, only 30% agreed that they receive feedback communication from their superiors. This shows that communication is sort of one way which demotivates staff. The proportion of nurse-midwives who agree that the feedback data is used is small at 27%. It has to be noted that limited knowledge on the usefulness of data was pointed out by other authors is a major contributing factor

to poor data quality and low information use [16-18].

Health staff are not only responsible for collecting data but also providing care to the patients. However due to the overwhelming number of patients, staff end up providing care and only filling in data at the end of the day.

Due to the fact that the many nurse-midwives (80%) saw the need to improve the effectiveness of the system, it means that they saw many pit holes within the current system. Among the suggestions that they gave include information use at facility level especially on feedback of data from higher authorities. Nurse-midwives expressed their concern that they collect too much data for higher authorities but do not receive feedback. In the long run, they see as if data is collected for other people and not for improving health services that they provide. If feedback is given to them in form of reports, it could show that at least data has been analysed and this could encourage an information culture within the municipality.

Frequent supportive supervision visits remind health workers of the quality of health services that is required from them to improve health outcomes in the long run. However, the manpower for service provision and supervision is not adequate. This leaves the nurse-midwife with the duo task of both service provision and handing issues of data quality. In cases of work overload, priority is given to the client and hence affecting the quality of data that is collected.

Change from a manual to an electronic format was also cited since by 23 (77%) nurse-midwife since it saves time, accommodates large amount of data and makes data management easier. Use of a computerised system was seen as a way of speeding up the data analysis process and encouraging timely feedback.

## CONCLUSION

It has been shown that nurse-midwives in charge of ANC clinics generally have little knowledge concerning monitoring and evaluation of reproductive health services. Yet these are the professionals who are responsible for handling data quality and monitoring services are present at the grass root level.

## RECOMMENDATIONS

Nurse-midwife managers should be equipped with the knowledge and skills on monitoring and evaluation of reproductive health services. This can be achieved through workshops and seminars of reproductive health. The training curricular should also emphasize on the aspects of monitoring such services.

Human resource has to be increased not only for supervision but also providing reproductive health services. This will in turn increase the time that nurse-midwife managers spend on improving data quality due to increased manpower for providing care.

There is still room for further research to explore barriers of information use in the reproductive and child health clinics. Information use at facility level is very important to monitor health services that are provided with the overall goal to improving health outcomes.

Table 1: Demographic Characteristics of the Respondents

| Variable | Category | Frequency (Percentage) |
|---|---|---|
| **Sex** | Male | 9 (30) |
| | Female | 21 (70) |
| **Age** | 26-30 | 4 (13) |
| | 31-35 | 10 (33) |
| | 36-40 | 4 (13) |
| | 41-45 | 5 (17) |
| | 46-50 | 3 (10) |
| | 51-55 | 4 (13) |
| **Education level** | Bachelor's Degree | 5 (17) |
| | Advanced Diploma | 4 (13) |
| | Diploma | 17 (57) |
| | Certificate | 4 (13) |
| **Facility type** | Public | 13 (43) |
| | Private | 17 (57) |

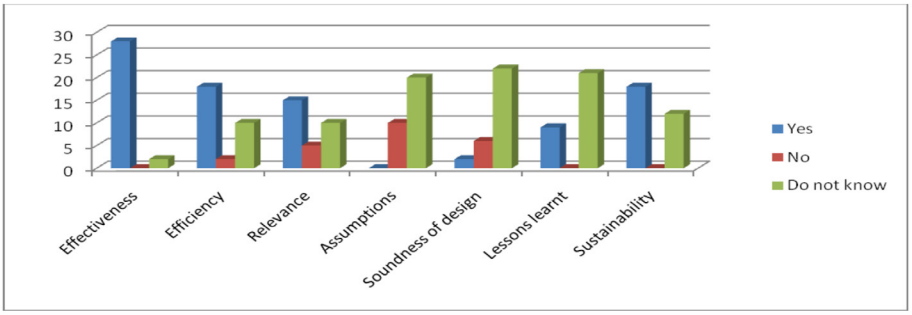


Figure 1: Knowledge on Components of Evaluation

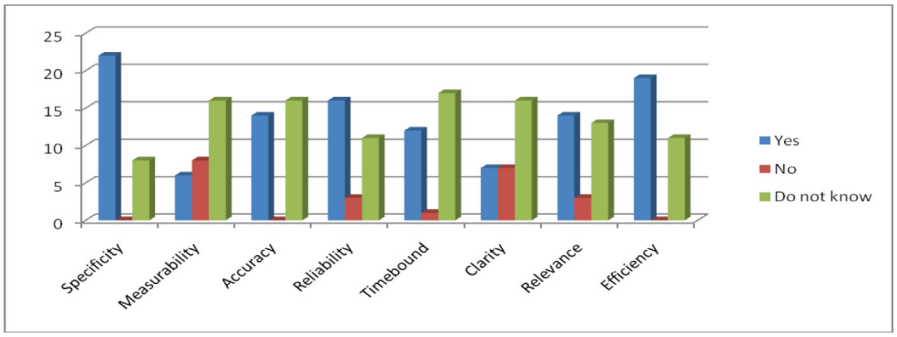


Figure 2: Knowledge on Qualities of Good Indicators

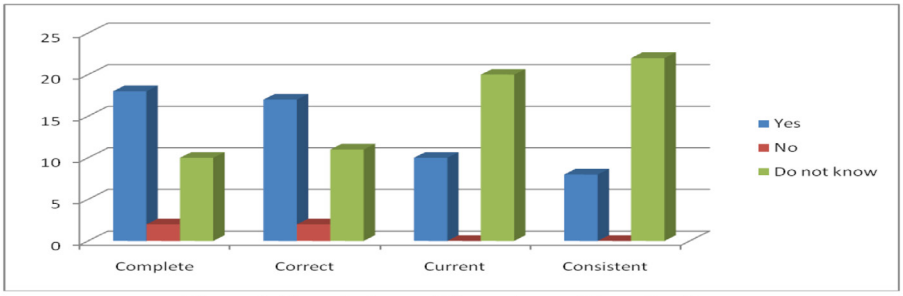


Figure 3: Knowledge on Dimensions of Data Quality

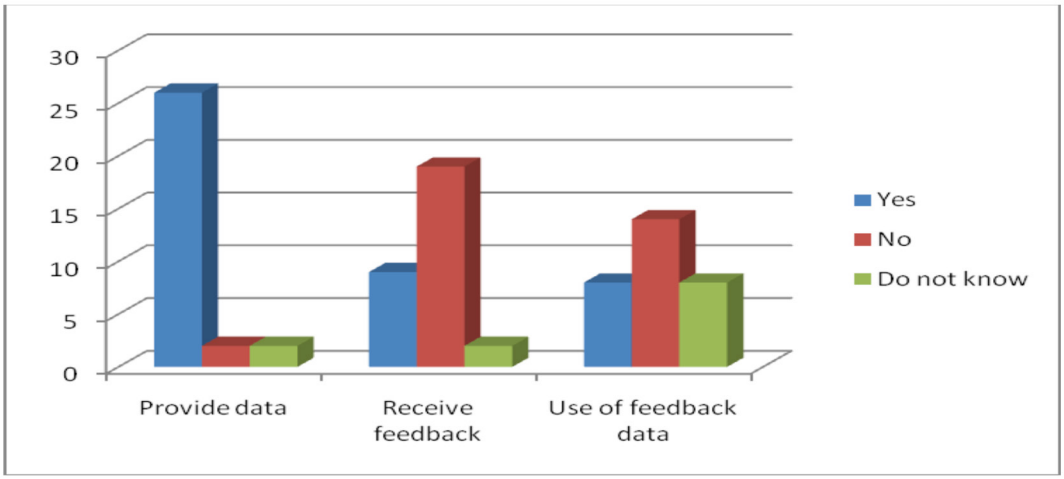


Figure 4: Information Flow and Data Use

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