Case Reporting of Maternal Deaths in Nigeria: A Survey of Obstetricians

Vincent O. Otioide
Department of Obstetrics and Gynaecology, University of Benin Teaching Hospital, P.M.B 1111, Benin-City, Edo State, Nigeria.

Abstract

Context: Accurate data on maternal deaths is of public health concern. In Nigeria, a country with one of the highest rates of maternal mortality in the world, little is known of how such information is managed.

Objective: To determine case reporting of maternal deaths among Nigerian obstetricians and make policy recommendations on improving the reporting.

Study Design: A descriptive study was conducted among Nigerian obstetricians attending an annual national conference. A structured questionnaire was used in eliciting relevant information.

Main Outcome Measure: Rate of case reporting of maternal deaths.

Results: One hundred and five obstetricians were involved in the study. Nearly 42% affirmed case reporting of maternal deaths at their hospital of practice. More than 54% of respondents (49.5% of study population) did not routinely report cases. There was lack of uniformity in the processes and procedures for case reporting.

Conclusion: The majority of practicing obstetricians in Nigeria are not involved in routine case reporting of maternal deaths. Strategies for a uniform approach are suggested.

Key Words: Maternal Deaths, Case Reporting, Autopsy, Nigeria. [Trop J Obstet Gynaecol, 2002, 19: 00-00].

Introduction

Death in pregnancy and from pregnancy-related causes poses one of the greatest challenges to health care delivery in many developing countries. Nigeria, a developing country in sub-Saharan Africa with a population of over 100 million, is a typical case in point. Estimated maternal mortality currently exceeds 1,000 per 100,000 live births, with evidence of a rising trend over the last two decades. This worrying state has spurred several research and recommendations on interventions to reverse the trend.

A key variable at implementing and assessing any intervention is the collection and management of databases on maternal mortality and morbidity. Such information will be crucial in advocacy as well as long-term monitoring of strategies that may be put in place. It would also provide an objective basis for evolving policies, planning and devising further innovative strategies aimed at local needs. With the launch of the Safe Motherhood Initiative in 1987, Nigeria quickly embraced its tenets. Among the planned activities was a centralized data collection system. Health providers and obstetricians, through specified guidelines and protocols for case reporting of maternal deaths, formed the peripheral units for the collection of data.

To date, however, there has not been any published report on a national or regional scale data on maternal deaths in Nigeria. While this may arguably be the result of poor organization of services, there may be other contributing factors. Nevertheless, there is a need to understand how practicing obstetricians handle data on maternal deaths at peripheral units. This will undoubtedly provide the basis for a reorganization of existing structures and help in the design of more effective strategy for collecting data on maternal mortality on a national scale in Nigeria.

The aims of this present study are to determine case reporting of maternal deaths among Nigerian obstetricians and to make policy recommendations on improving the system of data collection on maternal death.

Materials and Methods

Obstetricians and Gynaecologists attending an annual national conference of the Society of Gynaecology and Obstetrics of Nigeria (SOGON), a body to which all practicing certified obstetricians in Nigeria are affiliated, were surveyed as to the handling of data related to maternal death in their respective hospitals of practice.

A structured questionnaire was used to elicit relevant information. The first part of the questionnaire elicited information relating to their demographic characteristics while the second part sought information related to data handling following a maternal death as well as postmortem examination at their respective health facilities.

Correspondence: Dr V.O. Otioide, Department of Obstetrics and Gynaecology, University of Benin Teaching Hospital, P.M.B.1111, Benin City, Edo State, Nigeria. Tel: 234 52 600892. e-mail: otioidev@hyperia.com
Only willing and consenting obstetricians completed the study questionnaire. All questionnaires were self-completed and only rarely were further explanation sort to the questions asked. Completed questionnaires were entered into a computer database (Epi-Info 6; Centre for Disease Control and Prevention Atlanta GA). Comparisons were made by the chi-square test or Fishers exact test with calculated odds ratio (OR) and 95% confidence intervals (CI) for non-continuous variables.

Results
A total of 105 obstetricians completed the study questionnaire. Table 1 presents the responses elicited from respondents on the reporting of cases of maternal death. The majority (54.2% of those who responded to that question, but 49.5% of all participants) did not report cases of maternal death. The data was further analysed to elicit the odds of public health providers against solely private health providers reporting cases of maternal death. The odds were greatly skewed towards public health providers, OR 11.00 (95% CI 3.43 - 39.13). A follow-up question to elicit where precisely maternal deaths are reported yielded a rather varied response. Eleven (25%) obstetricians could not specify the exact office for the collection of data. Almost half, 20 (45.5%), suggested either the head of department, hospital management or a related office. Three (6.8%) suggested the government while 2 (4.6%) gave the medical records department as the point of reporting. Only 2 (4.6%) suggested the Federal Ministry of Health.

Table 1
Obstetrician’s Response to the Reporting of Maternal Deaths

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are all cases of maternal death at your hospital reported to the public health establishment?</td>
<td>44(45.8)</td>
<td>52(54.2)</td>
</tr>
<tr>
<td>Is an autopsy routine at your hospital following a maternal death?</td>
<td>15(15.5)</td>
<td>82(84.5)</td>
</tr>
<tr>
<td>In the last case of maternal death (experienced by you) in your hospital, was there an autopsy done?</td>
<td>16(18.0)</td>
<td>73(82.0)</td>
</tr>
<tr>
<td>Was this case reported to the health establishment?</td>
<td>42(54.5)</td>
<td>35(45.5)</td>
</tr>
</tbody>
</table>

*Obstetricians not responding to specific items are not tabulated.

Table 1 further provides responses elicited with regards to the use of an autopsy following a maternal death. Precisely 15.5% of respondents reported an autopsy as routine at their hospitals. Similarly, only a minority (18%) reported that the last case of maternal death in their respective hospitals had an autopsy done. The major reasons sited for refusal or non-use of an autopsy at their hospital of practice were cultural constraints, lack of any established guidelines, family refusal, and religious beliefs.

Discussion
This report provides a rare insight into the handling of data related to maternal death in Nigeria at both public and private health care facilities. The findings of this study tend to suggest that only a minority of practicing obstetricians are involved in data collection and reporting following a maternal death and this tends to be limited to mainly public care facilities. It would also appear that though some form of reporting exists, there is no uniform guideline for reporting of data, hence the great disparity among obstetricians as to the exact handling of data following a maternal death. It would also appear that there was limited use of an autopsy examination following a maternal death. This greatly negates the need for proper diagnosis as a strategy to preventing recurrence.

The findings from this study allow us to make certain recommendations on the national data system on maternal mortality in Nigeria. Foremost is the need for established guidelines and clearly defined processes of reporting cases of maternal death in Nigeria. Secondly, there is need to consider a decentralized system of reporting with tertiary public centres of care serving as the apex of collection and analysis in designated areas. This is borne out of the observation that public health centres are more likely to be involved in case reporting and may thus play a pivotal role in mobilizing compliance within privately owned centres in their localities. Such a decentralized system will additionally ease information transmission among the units. There is a need to educate the public on the value of the autopsy examination following a maternal death. This will undoubtedly improve diagnostic value of reported cases.

References