

# FACTORS INFLUENCING EFFECTIVE CONSULTATION OF ADVANCED MIDWIVES BY GENERAL MIDWIVES IN NELSON MANDELA BAY OBSTETRIC UNITS

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## ABSTRACT

South Africa has a growing number of perinatal and maternal deaths and, despite this challenge, advanced midwives are still not always adequately consulted by the general midwives on duty. As a result, pregnant and labouring women remain at risk. The aim of this study was to describe factors influencing effective consultation



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of advanced midwives by general midwives practising in the obstetric units in the Nelson Mandela Bay. A quantitative research approach founded on a descriptive design was used. The data collection tool was a self-administered questionnaire. Data was collected between July and September 2013 from practising midwives in Nelson Mandela Bay obstetric units. To ensure reliability of the questionnaire responses, Cronbach's alpha was used. The study found that the advanced midwives are not being consulted by general midwives because they are perceived as lacking the advanced skills of specialist midwives. Based on the findings, recommendations were made to assist practising midwives to use the skills of the advanced midwives and limit the delays in referrals and decision-making in the management of high-risk pregnant women in confinement.

**Keywords:** advanced midwife, consult, midwife, midwifery obstetric unit, perceptions, consultation

## INTRODUCTION AND BACKGROUND INFORMATION

Compared with other middle-income countries, South Africa should have a very low mother and child mortality rate. One of the reasons for this is that South Africa has comprehensive basic and post-basic midwifery training programmes, and as stated in R425 of February 1985, as amended by the South African Nursing Council (SANC, 2005:3), the programmes provide a definite direction for the role of midwives in this country.

In the past, South African student nurses trained for three years to qualify as registered nurses, after which they could continue for an additional period of one-year post-basic training to qualify as a midwife. This was generally seen as an advantage in terms of skills, as the year of post-basic training was entirely dedicated to midwifery training. However, in 1986 the training of nurse-midwives was extended to a full four-year continuous training by the addition of Community Nursing Science and Psychiatric Nursing Science (R425 of 22 February 1985 as amended (SANC, 1988)). This permitted the graduate from this programme to practise as a registered nurse, now designated as a professional nurse (SANC, 2005:3). Such a change allowed the trainee to practise as a general nurse, or a general nurse and a community nurse, or a general nurse and a psychiatric nurse, or a general nurse and a midwife. Such a variety of options may have led to the emergence of some practice problems in midwifery.

Problems may arise when a nurse, who is registered as a general nurse and midwife, is allocated to work in a Midwifery Obstetric Unit (MOU), where he/she has to take full responsibility and provide independent midwifery care (DoH, 2007:4). Such a situation could be problematic to the newly qualified registered nurse and midwife who may not yet have the necessary experience. Also, the necessary advanced support to the midwife working in an MOU is not readily available (Fraser et al., 2010:10). The midwives in an MOU work on their own and only consult with the doctor when they encounter or are

about to deal with a complication (Chapman, 2012:425). Often they do not know when to refer and, in such situations, the skills of the advanced trained midwife (ADM) could be useful.

According to the national midwifery guidelines (DoH, 2007:5), each MOU is supposed to be led by an ADM who advises and assists with obstetrical emergencies. The shortage of ADMs in some of these units makes it advisable for general midwives to consult with an ADM at another MOU, or working in an institution at the next level of care.

The South African government has provided substantial support to midwives in practice by means of bursaries, study leave and time-off for staff to be trained (Pattinson, 2012:6). However, despite these efforts, the maternal mortality rates are increasing annually in the country. In addition, the South African National Committee of Confidential Enquiries into Maternal Deaths (NCCEMD) reveals that maternal deaths are often due to avoidable health worker-related factors (DoH, 2010:viii). This brings into question the effectiveness of midwives when maternal mortalities due to avoidable factors continue to occur.

The focus of this study was to establish how the general midwives perceive consulting and using the skills of ADMs. An ADM in South Africa is registered with SANC, and has a post-basic qualification in the specialised field of midwifery and neonatology (Section 2 9(b) (i) SANC R212:5). Therefore, the ADM has greater skills than a general midwife to assist in emergency cases. Delays in decision-making, especially intra-partum, result in complications, because the waiting period is usually the critical interval. If consulted, ADMs could help to reduce the maternal mortality numbers, because their advanced skills enable them to manage obstetric emergencies more effectively than general midwives. However, there is limited published research on general midwives consulting ADMs in South Africa. Within the context of psychiatry, Temane, Poggenpoel and Myburgh (2014: 2) are of the impression that consultation, open communication and leadership comprise both the basic and post-basic training of psychiatric nurses and advanced psychiatric nurse practitioners, a practice that may benefit the practising midwives.

One of the researchers noted that despite the presence of an ADM, the midwives in his MOU tended to consult with the doctor rather than the ADM. This occurred when there was a need for decisions concerning referrals from the MOU to the hospital, or with regard to the management of pregnant women in the MOU or hospital. Furthermore, the doctors insisted on being called by the midwives before any major decisions were taken on the care of the labouring women.

## PROBLEM STATEMENT

Midwives working in obstetric units of the NMB are reluctant to consult ADMs, even though the latter have greater skills in the management of high risk situations and the reduction of maternal and neonatal mortalities.

## AIM OF THE RESEARCH

The aim of this study was to describe factors influencing effective consultation of ADMs by midwives practising in the NMB.

## DEFINITIONS OF KEY TERMS

**Advanced midwives or midwife specialists** are midwives who are clinical specialists in midwifery. They have furthered their studies after gaining the basic qualification of general nurse and midwife, and are registered with SANC (*R368 on Nursing Act 33 of 2005*).

The Oxford Online Dictionary (Oxford University Press, 2013) defines **consult** as seeking information or advice from someone, especially an expert or professional.

A **midwife**, as defined by the South African *Nursing Act 50 of 2005* describes a midwife as ‘a person who, having been regularly admitted to midwifery education programmes, is legally licensed to give the necessary supervision, care and advice to women during pregnancy, labour and post-natal period’.

According to Cronje and Grobler (2009:679), **Midwifery Obstetric Unit [MOU]** is a primary perinatal facility where midwives independently render maternal care to low-risk pregnant women. These units are situated in and are part of the community, and are linked to a referral hospital.

**Perception** is the process through which we give meaning to the information we obtain from our senses (Louw & Edwards, 2009:150).

## RESEARCH DESIGN

A quantitative descriptive design was used in order to identify and discuss the factors influencing whether or not general midwives choose to consult with ADMs for clinical decision-making purposes in NMB obstetric units. The survey was conducted using a self-administered structured questionnaire.

## RESEARCH METHODS

The questionnaire was divided into five sections, and the participants responded to closed-ended, yes/no and multiple choice style questions. Section A consisted of a biographical profile while Section B included information regarding:

- Confidence in the ability to manage low risk delivery
- Understanding of accurate midwifery classification
- Knowledge of recognition and of the need to refer
- The need for advanced skill
- The need for immediate referral to Level Three Institutions

Section C sought to obtain information regarding the performance of advanced skills. Section D dealt with the referral to the ADM and Section E comprised information regarding the confidence in the performance of the advanced skills of the ADM. The questionnaire was developed using literature, existing instruments as well as the guidance of a statistician (Bowling, 2009:282).

The questionnaire was accompanied by a letter explaining the aim and purpose of the study and how to complete the questionnaire. A self-addressed, self-sealing envelope for the return of the questionnaire was provided, as well as an informed consent form. Participants could choose to complete the questionnaire on their own, or in the presence of the researcher.

### Validity and reliability

A pilot study was conducted with 10 participants to ensure that the questionnaire accurately investigated the perceptions of NMB obstetric unit midwives regarding consultations with ADMs. To ascertain reliability, a statistician guided the whole process of questionnaire development and assisted with the analysis of the descriptive data collected to ensure objectivity. An in-depth literature review was included for the purposes of content validity. The questionnaire was then assessed by a health care professional experienced in quantitative research and midwifery clinical practice at the Department of Nursing Science at the Nelson Mandela Metropolitan University (NMMU). This was done to evaluate the questionnaire and respond to related recommendations before using it in the field. Internal consistency was maintained by using the same questionnaire for all respondents. To ensure reliability of the questionnaire responses, Cronbach's alpha was used. The main purpose of this was to assess the reliability of each scale, and the score ranged from  $\alpha=0.57$  to  $\alpha=0.92$ , indicating acceptable to good internal consistency and reliability (Botma et al., 2010:177).

## Reliability of responses

The reliability of the participants' responses to the questionnaire on each scale was tested using Cronbach's alpha. As indicated in Table 1.0 below, the alphas ranged from  $\alpha=0.57$  to  $\alpha= 0.92$ , presenting acceptable to good internal consistency and reliability (Botma et al., 2010: 177).

**Table 1: Factor scores' Cronbach's alphas**

Factor	N	Alpha
Factor B1	94	0.80
Factor B2	85	0.73
Factor C	93	0.81
Factor D	92	0.90
Factor E	90	0.92
Factor T	92	0.57

## Population and sample

The target population for this survey comprised all SANC registered midwives and professional nurses with a midwifery qualification working in the five obstetric units in the NMB. The participants were expected to have been employed as a midwife for at least six months, and permanently employed in the obstetric units in question. Therefore, the study population consisted of 157 midwives working in obstetric units in the NMB between July and September 2013, at the time of data collection.

The participants were selected using simple random sampling with a non-replacement approach. Their names were obtained from the Operational Managers at the different obstetric units and a total of 130 questionnaires were hand-delivered to midwives meeting the inclusion criteria. Out of 130, 94 questionnaires were completed and returned to the researcher.

## Data analysis

The data was analysed with the help of a statistician using the software package, Statistica Version 11, to ensure efficacy of the results. Descriptive statistics were calculated to obtain measures of central tendency, for instance, the mean and median, the standard deviation and frequency distribution.

## Ethical considerations

Informed voluntary consent was ensured and the participants knew that participation was voluntary and there was no risk of forfeiting their status as a colleague or team member. No names were attached to the questionnaires and only the researcher, supervisor and the statistician had access to the collected data. A written guarantee was given to the participants that the data collected remained confidential, and that only the researcher and the statistician would have access to it. Institutional consent was obtained from the NMMU Department of Nursing Science and the Faculty Research, Technology and Innovation Committee of NMMU. The application documents were also forwarded to the relevant persons at the Department of Health (DOH) for the purpose of obtaining permission to gain entry to the obstetric units in the NMB area. Thereafter, the researcher approached the various gatekeepers, namely, the Chief Executive Officers and the Operational Managers of the different MOUs for permission to commence data collection.

## FINDINGS

The results from each question are presented in the order that they appeared in the questionnaire. All the participants were working in the obstetric units as either registered nurses and midwives (professional nurses, see R425), registered and enrolled midwives.

### Demographic information

The demographic information was congruent with national statistics of registered midwives in terms of the age distribution (SANC). Fifteen participants (16%; n=15) were between 25 and 30 years old, while forty-four (47%; n=44) of the participants were in the age group of 41 years and older, and 31% of registered nurses were in the 50–59 years age group and only 4% were under 30 years.

The sample consisted of three (3%; n=3) males and ninety-one (97%; n=91) females. Midwifery is predominately a female profession in South Africa, and therefore the sample reflected the national gender distribution. However, the gender of the respondents in relation to their consultation with advanced midwives was not shown to be statistically significant.

Thirty respondents (32%; n=30) had worked for 21 years or more, twenty (21%; n=20) had 0 to 5 years of work experience, twenty-five respondents (27%; n=25) had 6–10 years work experience and eight (9%; n=8) had 11–15 years work experience. The majority of the respondents (74%; n=68) were professional nurses, while a minority (2%; n=2) were professional nurses with a one-year midwifery qualification. Most of the respondents (59%; n=55) held diplomas in nursing, with thirty-two respondents (34%; n=32) in possession of a BCur nursing degree.

Such statistics indicate the extent of experience and education among midwives in the NMB, and which may influence how often general midwives consult with advanced midwives. Fisher and Webb (2008:39) assert that increased years of experience improved midwives' confidence and experienced midwives are better at supporting younger midwives. Younger midwives are expected to bring new scientific knowledge and skills to the workplace. However, the experience of older midwives should not be ignored, especially in their role as mentors to newly qualified midwives.

## Measurement of responses

Responses were made on a 5 point Likert-type scale, and all factors were adapted from scales. The discussion following this section refers to tables 2 and 3. Table 2 lists the factors that were derived from the questionnaire and are for discussion in this study.

**Table 2:** Clarification of factors

Factors	Items in Questionnaire
FB1	Section B Items: B1 – Confidence in the ability to manage low risk delivery B2 – Understanding of accurate midwifery classification B5 – Knowledge of recognition of need to refer
FB2	B6 – Need for advanced skill B8 – Immediate referral to Level 3 institutions
FC	Section C items: C1-C8 – Performance of advanced skills
FD	Section D items: D1-D8 Referral to the advanced midwife
FE	Section E items: E1-E8 – Confidence in performance of advanced skills by the advanced midwife
<b>Overall factor</b>	<b>Factors</b>
FT	FB1, FB2, FC, FD & FE

**Table 3:** Descriptive statistics Factor B1 to Factor T

	FB1	FB2	FC	FD	FE	FT
N	94	85	93	92	90	92
Mean	4.43	3.67	2.01	2.16	3.42	3.12
S.D.	0.61	1.11	0.54	0.86	1.03	0.50
Minimum	1.00	1.00	1.00	1.00	1.00	1.85



Quartile 1	4.00	3.00	1.63	1.38	3.00	2.85
Median	4.50	4.00	1.88	2.13	3.50	3.18
Quartile 3	5.00	4.50	2.38	2.66	4.13	3.41
Maximum	5.00	5.00	3.50	4.00	5.00	4.35

### Participants' confidence in their own ability to manage low-risk situations

The confidence of the midwives to manage low-risk situations was measured using a 5 point Likert scale. This scale consisted of seven items, which either positively or negatively related to the midwives' confidence in managing low-risk situations. The participants indicated their agreement or disagreement with each of the statements on the 5 point scale, ranging from 'strongly disagree' to 'strongly agree'. The Cronbach inter-item for this scale was  $\alpha = 0.80$ . The mean of confidence in the ability to manage low-risk delivery ( $M=4.43$ ,  $SD= 0.61$ ) was very high, as was the mean of understanding accurate midwifery classification ( $M=3.67$ ,  $SD=1.11$ ). Items B3, B4, B7 of section B of the questionnaire were left out of the study to maintain internal consistency, as they had poor Cronbach alphas.

### Performance of advanced skills

The performance of advanced skills by the midwives was measured by testing whether or not they were knowledgeable in performing skills that ought to be performed by an ADM. A total of eight items were used to measure their agreement or disagreement with each of the statements on the 5 point Likert-type scale, again ranging from 'strongly disagree' to 'strongly agree'. The Cronbach inter-item for this scale was  $\alpha = 0.81$  and the mean of *performance of advanced skills* ( $M= 2.01$ ,  $SD= 0.54$ ) was low.

### Referral to the advanced midwife

A 5-point Likert-type scale with 8 items was used to measure the extent to which the participants referred to the ADM when necessary. The scale reliability was  $\alpha = 0.90$  and the mean for referral to the ADMs was low ( $M=2.16$ ,  $SD 0.86$ ).

### Confidence in performance of advanced skills by the advanced midwife

A 5-point Likert-type scale with 8 items was used to measure the level of participants' confidence in the performance of advanced skills by the ADM. The Cronbach inter-item for this scale was  $\alpha = 0.92$  and the mean of the confidence in performance of advanced skill by the ADMs was low ( $M= 3.42$ ,  $SD 1.03$ ).

## DISCUSSION OF RESEARCH RESULTS

The study revealed a reluctance on the part of midwives to consult with ADMs. The results provided a very positive indicator of the confidence of the midwives to manage low-risk situations, and of their understanding of accurate midwifery classification. The midwives perceived themselves to be confident in many, but not necessarily all, low-risk midwifery skills. Furthermore, this situation does not appear to concern the midwives. According to Mulondo, Khoza and Risenga (2013:1), midwifery practice requires a midwife who is confident and competent in providing antenatal care services, labour and puerperium care on her own. Consulting with ADMs did not matter in this instance as the midwives did not have confidence in the skills of the ADMs.

The Guidelines of Maternity Care in South Africa (2007) were developed to give guidance to midwives in providing midwifery care services in the clinics, health centres and district hospitals where specialist obstetricians are not normally available. From this study's findings, it appears that the midwives seem to rely on the guidelines as the support they need during low-risk care, but still do not request the assistance of ADMs, because they do not have confidence in the ADMs' skill and performance.

The findings also revealed a positive indicator in the midwives' recognition of the need to refer in high-risk cases, and a negative indicator in midwives' willingness to refer to the ADM. According to Mthetwa (2006:79), various factors influence use or non-use of referral pathways and inappropriate or appropriate use of maternity care services. In this study, the midwives were not referring to the ADM because of a lack of confidence in the ADM's clinical performance. In South Africa, factors influencing the referral pathways in midwifery are patient-related factors, health system-related factors and health professional-related factors (DoH, 2010:viii). Professional-related factors were identified in this study to be a barrier to effective referral. The finding is congruent with a study by Majoko, Nylstrom, Munjanja and Lindmark (2005:8) where poor understanding of the referral system and a lack of confidence in the ability of midwives to manage complications were shown to contribute to midwives by-passing referral to the ADMs.

However, effective referrals are not only caused by poor knowledge and understanding of nurses, but other less explicit factors as well. For instance, Pasquier, Rabilloud and Janody (2005:155) found that appropriate referrals are dependent on the willingness of health professionals to conform to the referral system. The availability of resources at the receiving facilities was also cited by these authors as a barrier to effective referral. In the current study, the reluctance of midwives to refer was specifically related to the clinical performance and knowledge of the ADMs.

An analysis of the responses to questions relating to the midwives' performance of advanced skills, which are beyond their scope of practice (see SANC regulation R2488), provided a negative indicator. These findings reveal that the participants perceived themselves as not competent in performing advanced skills, but that they would rather consult a doctor than the ADM. Similarly, in a study of 130 midwives, Mulondo et al.

(2013:5) found that 57% of the midwives did not perceive themselves to be competent in delivering a breech presentation, which is one of the skills expected to be conducted by an ADM. Therefore, the finding is consistent with the level of care expected of a midwife, but inconsistent with the reluctance to consult an ADM who might be at hand.

An analysis of responses to questions relating to the confidence of the general midwives in the ADM's performance of advanced skills provided a negative indicator. An ADM, as a result of his or her additional competence, acts as a consultant, educator and clinical specialist in the field of midwifery and neonatal nursing science (Lesia & Roets, 2013:51). It may be that general midwives who have undergone additional training may be more confident in their ability and thus more critical of ADMs. While competence is a prerequisite for a midwife, confidence is necessary for the individual to develop skills within the workplace environment. Bedwell et al. (2012:134) argue that confidence in ability ensures that the individual will continue to use these skills.

The data indicates that there are a number of older midwives with many years of clinical experience. Age may be an added advantage to the care of women as the young and old could complement each other with the latest information and the experience in dealing with midwifery-related emergencies, respectively. However, that advantage was not obvious in the study. The difference in gender was as expected, but it did not have an influence on the non-consultation of ADMs by the midwives working in the obstetrics units.

## CONCLUSIONS

The most important finding of this study was that the general midwives were not consulting the ADMs in their areas of speciality. In view of the high peri-natal and maternal mortality and morbidity rates in South Africa, it is essential to have properly trained advanced midwifery practitioners who are able to provide quality midwifery and neonatal nursing care in the obstetric units of this country. However, if ADMs are not consulted, they cannot render such contributions. The ADM is situated between the midwife on the one hand, and the doctor or specialist on the other, and can be drawn upon both as a specialist in his/her own right, and as a mediator between the midwife and the doctor or specialist. Thus, there is a need for consultation with the ADM for the prevention of maternal deaths. However, the ADMs should also make an effort to demonstrate their skills so as to encourage the general midwives to consult them.

## RECOMMENDATIONS

Based on the above-mentioned findings, as a second objective of the study, the researchers were able to make recommendations that would assist to enhance the use of the ADM's skills. These were divided into three aspects and are reported below:

### For clinical midwifery practice

The midwifery managers should consider developing an intervention to address the challenges facing them, especially regarding the referral and consultation of ADMs at the obstetric unit of the referral institution. The ADMs should avail themselves should there be a need for consultation in midwifery practice and mentor newly qualified midwives and those who need assistance. Lastly, programmes should be developed by ADMs to support midwives.

### For midwifery education

Regular workshops should be held for midwives, including midwifery educators, to develop strategies to rebuild the future of the ADMs and to maintain and sustain their competency levels. Regular trial runs with midwives on the importance of high-risk situation identification, assessment and management should be encouraged.

In addition, ADMs should attend workshops specifically for improving their skills. The nursing or midwifery curriculum should include the practical training of midwives and doctors together. Such a curriculum should help build the confidence and skills of the ADMs, making them reliable sources of knowledge and skills.

### For midwifery research

A similar research study should be conducted in a variety of geographical areas with many different maternal health facilities. A study that includes doctors and ADMS should be carried out and be expanded to other provinces.

## LIMITATIONS OF THE STUDY

The researcher had difficulty securing participants for the study due to staff shortages and absenteeism in the obstetric units. The study was conducted only in state services in one city. The doctors were not included in the study and yet they play an important role in the subject under investigation. Therefore, although this study may help others to identify similar shortcomings in other government MOUs in South Africa, the findings of this study cannot be generalised beyond the NMB.

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