

THE UTILISATION OF ADVANCED MIDWIVES IN THE FREE STATE PROVINCE OF SOUTH AFRICA

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ABSTRACT

Advanced midwives, thus midwives holding Master's degrees or post basic diplomas in advanced midwifery, might not be optimally utilised. As independent practitioners, they are readily available, cost-effective professionals that can provide midwifery services, especially if doctors are not easily accessible. The aim of this article is to report on the placement and utilisation of advanced midwifery practitioners. A non-experimental, descriptive design was used. After a thorough literature analysis as well as a focus group discussion, a questionnaire for data collection was compiled. Data collection was done after approval from the relevant authorities and the germane Ethics Committee had been received.

The population comprised all practising advanced midwives who had trained at the University of the Free State (UFS) from 1995 to 2007 (inclusive). No sampling was done as 178 questionnaires were distributed during 2010. The findings indicated that the minority of participants were placed and utilised where their skills and competencies could be utilised optimally. The majority were neither placed nor utilised in areas where their advanced midwifery skills could be utilised. Those respondents whose advanced midwifery knowledge and skills had not been utilised, expressed a loss of self-confidence, lack of support, lack of recognition and an inability to demonstrate their expertise.

The results confirmed that advanced midwifery practitioners were under-utilised, despite the global nursing shortage and healthcare crisis in South Africa. Ultimately these advanced midwives' skills and competencies could deteriorate due to a lack of clinical practice. To ensure that advanced midwives are retained in South Africa, they need to practise in the field of their speciality.

KEYWORDS: advanced midwifery practice, correct placement and utilisation of midwives, maternal mortality in South Africa, specialised midwifery competencies

INTRODUCTION AND BACKGROUND INFORMATION

As 57 countries are reportedly facing critical nursing shortages (Bryant, 2009), it is important that nurses, especially advanced nursing practitioners, should practise to the full extent of their education, training and capacity (Alberti, 2010) as well as harness their expertise to improve the health of a nation (Gilliss, 2011). This is especially important for the health of pregnant women. Most pregnant women in South Africa use the public healthcare system which is often run by under-resourced and under-staffed midwives and advanced midwives (South Africa, 2011).

An advanced midwife, thus a registered midwife, with a Master's degree or an advanced post-basic diploma in the specialised field of midwifery and neonatology, has the competencies and skills to help reduce maternal and neonatal mortalities, as specified by the health Millennium Development Goals 4 and 5 by 2015 (National Department of Health [NDOH], 2010). According to South Africa's NDOH (2013), there were 1 646 maternal deaths in 2012, a maternal mortality rate (MMR) of 300/100 000 live births. Advanced midwives could help to reduce these numbers, as their advanced midwifery knowledge and skills should enable them to manage obstetric emergencies more effectively than nurses and midwives without such advanced training. However, this can only be accomplished if these advanced midwives are placed in midwifery units.

When advanced midwives are not utilised in midwifery units, they might lose interest in practising locally, and decide to emigrate to other countries, where their knowledge and skills will be recognised and utilised (Pillinger, 2011). They will then contribute to the enhancement of nursing and midwifery services in other countries, whilst the South African healthcare services face critical shortages of nurses and midwives (NDOH, 2012).

Full-time study leave and bursaries for tuition fees and accommodation are available to all South African midwives interested in pursuing advanced midwifery programmes. The focus is on promoting and strengthening maternal and child health services rendered in midwifery settings. In these settings it is then important for advanced midwives to practise according to their competencies and the training they received (Alberti, 2010). This is essential, as in these settings, advanced midwives are expected to practise independently and to act as consultants for other midwives and professional nurses.

Although the South African government is advocating the introduction of National Health Insurance (NHI) for all healthcare consumers, it will not serve any purpose if resources (like competent midwives) are missing from the NHI team (NDOH, 2009). Advanced midwives, because of their advanced knowledge and skills acquired during their post-basic training, are the most readily available, suitable and cost-effective health professionals to fulfill the need for quality maternity care in primary healthcare (PHC) settings (Yadav et al., 2009:1-4). The full midwifery capacity should be effectively

harnessed towards improving the health of the nation (Gilliss, 2011), especially the health of pregnant women and their newborn babies.

To enhance the quality of midwifery services, the Department of Health in the Free State Province of South Africa, and the School of Nursing at the University of the Free State (UFS) implemented an advanced midwifery programme (Fichardt, 1996:6). The main aim of this programme was to ensure that midwifery care is rendered by competent skilled attendants (UNFPA, 2011). It would not be cost effective if advanced midwives were placed in areas where their expertise could not be utilised or where they could not practise according to their clinical scope and expertise.

This article reports on the results of a study that was conducted during 2010. Data were gathered from practising advanced midwives with Master's degrees or advanced diplomas, trained at the University of Free State, between 1995 and 2007. The findings could be useful for making recommendations for the more effective utilisation of advanced midwives in South Africa.

Evidence has indicated that advanced midwives' practice improved patient outcomes and enhanced the quality of healthcare services provided (Callaghan, 2008). If these advanced midwives could be utilised correctly, they could contribute to the reduction of maternal and neonatal mortalities as expected by 2015 in the Millennium Development Goals (MDGs), numbers 4 and 5 (NDOH, 2010).

DEFINITION OF KEY CONCEPTS

An **advanced midwife** is a person who promotes wellness, offers healthcare interventions and advocates healthy lifestyle choices for clients and their families, in a wide variety of settings, in collaboration with other healthcare professionals, according to an agreed scope of guidelines (National Council for the Professional Development of Nursing and Midwifery, 2008). In this article the advanced midwife refers to a nurse or midwife registered by the South African Nursing Council (SANC) who has completed either a clinical Master's degree or an advanced diploma in the specialised field of midwifery and neonatology. Advanced midwives provide an advanced level of nursing practice through the integration of in-depth knowledge and skills as a clinician, educator, researcher, consultant and leader (Bryant-Lukosius et al. 2010).

A **doula** is a woman who provides non-medical support throughout the perinatal period (WOMBS, 2012).

Correct placement refers to clinical areas where advanced midwives should be placed to utilise their knowledge, clinical skills acquired and positive attitude for working independently (Searle, 2002:124).

Incorrect placement refers to instances where advanced midwives have been assigned to workplaces where their advanced midwifery knowledge and skills could not be utilised.

Maternity units are workplaces situated in hospitals or primary healthcare centres where women give birth to babies and where these women and their newborn babies receive care. Advanced midwives are needed in these units as their advanced knowledge and skills should enable them to provide appropriate care during obstetric emergencies and/or complications.

Searle (2002:124) refers to **utilisation** as the use of knowledge, skills and experiences acquired. In this article correct utilisation will be measured by the way in which advanced midwives reportedly demonstrated their competence in order to improve maternal and neonatal health outcomes.

LITERATURE REVIEW

The advanced midwife has a variety of knowledge, skills and roles that can be used to benefit a primary healthcare (PHC) setting. In this review, various attributes, knowledge, skills, and roles of the advanced midwife are discussed.

ATTRIBUTES OF AN ADVANCED MIDWIFE

The advanced midwife is recognised as a responsible and accountable healthcare provider who promotes wellness, offers healthcare interventions and advocates healthy lifestyle choices for clients and their families. This practitioner operates in a wide variety of settings in collaboration with other healthcare professionals (National Council for the Professional Development on Nursing and Midwifery in Dublin, 2009). In ensuring that advanced midwives deliver the most excellent care to women in childbearing, it is important for midwives to exhibit certain attributes, as suggested by the National Council for the Professional Development of Nursing and Midwifery (in Dublin, 2008). For instance, they need to be independent in their practice. According to Fraser et al. (2010:6) there are set principles which should be maintained for ensuring quality care in advanced midwifery practice.

Provision of women-centred care

It is important for advanced midwives to understand social, cultural and contextual differences so that they can respond to the needs of women and their families in a variety of care settings, by prioritising and managing their work properly (Fraser et al., 2010:7). Under stressful working conditions, such as being under-staffed, advanced

midwives should advocate for a doula, as she could supervise and help the woman during her labour process with non-pharmacological pain relief methods such as breathing exercises and massage (Fraser et al., 2010:494).

Ethical and legal obligations

The professional behaviour of advanced midwives in relation to confidentiality, respect and personal responsibility for ethical choices should be maintained. In cases of termination of pregnancy, confidentiality and respect should be observed. Counselling services should be provided for women facing ethical dilemmas such as disclosure of their HIV-positive status and other stressful situations as this will help the woman to make informed choices (American Psychological Association [APA] 2010).

Respect for individuals and communities

As women under the care of advanced midwives would be from different cultural, ethnic and religious backgrounds, non-discriminatory care should be provided as this will make the women feel special and respected (Canada, 2006–2013). In the case where a client speaks a language foreign to the midwives, an interpreter should be arranged (Henderson & Macdonald, 2004:1133). Sometimes a doula might be able to assist with interpretation.

Quality and excellence of service

For ensuring excellence in midwifery practice, maternity records should be audited and the improvement of all services should be emphasised (Pillitteri, 2010:20).

Evidence-based practice and learning

The advanced midwife should adapt to the changing nature and context of midwifery practice by being involved in research projects that pertain to evidence-based practice. Therefore, they will only perform procedures that are effective and beneficial to their clients, and avoid routine procedures (such as episiotomies, enemas, and shaving of the pubic area) that have no impact on patient outcomes (Fraser et al., 2010:8).

Life-long learning

Advanced midwives should adopt a life-long learning style which will help them to keep up to date with different ways of solving problems. Therefore, they will utilise the opportunity to learn from colleagues and other healthcare practitioners by observing

and discussing different ways of practising their skills, and by attending midwifery workshops and conferences (Fraser et al., 2010:8).

Knowledge and skills of an advanced midwife

Educational and research functions affect the knowledge and skills expected of an advanced midwife.

Educational function

In daily practice, advanced midwives should act as clinical preceptors, with an obligation to educate subordinates, colleagues and clients. As facilitators, they should be able to integrate theoretical as well as practical knowledge which will serve as guidelines and principles to demonstrate best practices in midwifery (Meyer et al., 2009:113). As clinical educators, they need to provide a favourable learning environment to contribute to the successful absorption of the subject matter to be learned. Advanced midwives should act as mentors for subordinates and colleagues to enhance their standard of midwifery practice (Hays & Swanson, 2012). To ensure the continuity of the educational function, they should advocate for in-service training and refresher courses for colleagues and subordinates. This could strengthen midwives' relationships with colleagues.

Advanced midwives should ensure that the advancement of clinical midwifery knowledge is grounded in activities that protect the rights of women. Based on this, no vaginal or rectal examination should be undertaken without the woman's consent and privacy being maintained, as a sign of respect. Neither an enema nor suppository should be given to a woman suffering from an antepartum or postpartum haemorrhage, as these procedures might exacerbate the bleeding, and could be a source of infection (South African Nursing Council [SANC], 1987). Instead, a speculum examination could be performed to avoid further bleeding (De Kock & Van Der Walt, 2004:21-6). Emergencies such as cord prolapse, placenta abruptio or threatening rupture of the uterus should be managed effectively and the patient should be transferred timeously to tertiary or more appropriate levels of care to prevent further complications (Fraser et al., 2010:628.)

The research function of an advanced midwife

Midwives should be encouraged to be aware of the importance of research in their daily practice, as this could align their midwifery practices with international best practices. Research is a systematic inquiry or investigation that validates and refines existing knowledge, and generates new knowledge (Burns & Grove, 2009:2). Advanced midwives should be knowledgeable about research, as it will empower them with the

judgment needed to be independent practitioners (Page & McCandlish, 2008:251). As research is relevant to the daily practice of midwifery, their involvement in research will improve the care rendered to women and their babies.

Research in midwifery is needed for the evaluation of community involvement as a strategy to reduce maternal and neonatal deaths. Research ensures that women can be provided with the best quality care, established through evidence-based practice (International Council of Midwives [ICM], 2010). Through research, skilled midwives could engage in promoting and participating in the design, implementation and evaluation of studies within their own areas of expertise (ICM, 2010). Moreover, by being involved in research, advanced midwives would be able to support and promote individual holistic care, as well as have the opportunity to evaluate the effective use of technological interventions during pregnancy and childbirth.

Roles of advanced midwives

Advanced midwives have various roles, including those of manager, professional leader, educator and change agent in the field of midwifery.

Manager

Advanced midwives should form part of the nursing management team in all areas providing maternity services. They should be engaged in the planning of policies and protocols suitable for the clinical areas where they execute their care independently (Wiley & Sons, 2000-2011). They should ensure that their staff and equipment are adequate to facilitate quality care (Bryant-Lukosius et al., 2010). They should act as role models who organise staff development workshops or in-service training, which could form the platform for tackling daily midwifery challenges (Sullivan & Garland, 2010:22). They should see to it that quality midwifery care is rendered holistically and in cultural congruent ways, as foreseen by section 27 of the South African National Health Act (2003).

Professional leader

As professional leaders, advanced midwives should guide and coordinate colleagues and subordinates to render the best quality midwifery care in their day-to-day activities (Wiley & Sons, 2000-2011).

They must be:

- value-led leaders

- situational leaders
- autocratic leaders when necessary, for example in emergency or disaster situations
- democratic leaders when appropriate (Muller et al., 2006:293).

As value-led leaders and managers, advanced midwives should secure the safety of mothers and babies, and should prevent healthcare-associated infections to both staff and patients (Sullivan & Garland, 2010:27). Professional leadership can be demonstrated by showing respect to and interest in both patients and staff, and through avoiding arrogant, rude or judgmental attitudes.

Change agent

As change agents, advanced midwives should advocate for ways to improve service delivery in maternity units during the antenatal, intra partum and postpartum periods. They should empower women with information that will help them to take charge of their own health. This could be managed by identifying responsible members in the community to be consistent sources of support. The contact numbers of such community members should be available and easy to find when needed (Saskatchewan College of Midwives, 2013).

RESEARCH METHODOLOGY

A quantitative research design was used and data were collected by means of self-completion questionnaires. After a thorough literature review, an appropriate questionnaire was designed. A focus group interview with role players was conducted, which contributed to the content validity and reliability of the questionnaire items. A biostatistician was involved in the compilation of the questionnaire, as well as during the data analyses. The questionnaire format was chosen because it could be mailed to a very large sample of the population (De Vos et al., 2011:186).

Population

Due to the limited number of 179 targeted respondents, no sampling was done. During 2010, all practising advanced midwives, who were trained and obtained a qualification in advanced midwifery and neonatology between 1995 and 2007 from the UFS, were asked to voluntarily participate in the study. Only 70 out of 179 questionnaires were returned despite reminders being sent out. This represented a 39.1% response rate. One questionnaire did not meet the criteria for participating, as the respondent was not practising midwifery at that stage and therefore it was not considered during data

analysis. In total, 69 questionnaires were finally used for data analysis, amounting to 38.5% of the posted questionnaires.

Data collection

Data were collected during 2010 by means of posted questionnaires comprising open-ended and closed-ended items covering various aspects of maternity care. The information that was collected included the advanced midwives' biographical data and their experiences relating to their clinical placements and utilisation.

Data analysis

Descriptive statistics, in the form of frequencies and percentages for categorical data, and means and standard deviations or medians and percentages for continuous data, were calculated. The analysis was undertaken by the Department of Biostatistics at the UFS.

ETHICAL PRINCIPLES

After ethical approval had been obtained from the Research and Ethics Committee of the Faculty of Health Sciences at the UFS, the list of students who had completed the advanced midwifery programme between 1995 and 2007 was obtained. Information about the study was mailed to all possible respondents. Respondents were assured that anonymity and confidentiality would be maintained. No personal details or identifiable data of respondents appeared on the questionnaire. All these students were requested to complete questionnaires. Returning the completed questionnaires was accepted as consent to participate.

FINDINGS

Out of the 69 respondents, 19% (n=13) were male and 81% (n=56) were female with a median age of 45 years. Only 17% (n=12) of the respondents had more than ten years' experience as advanced midwives, while 32% (n=22) had between six and ten years and 51% (n=35) had up to five years' experience.

Correct placement and utilisation of advanced midwives

Out of 69 respondents, 81.2% (n=56) indicated that they were not correctly placed and utilised while only 18.8% (n=13) were reportedly correctly placed and utilised. All 13 respondents who were correctly utilised worked in rural and primary healthcare

(PHC) midwifery settings. Most of these 13 advanced midwives, namely 92.3% (n=12), worked in midwifery and neonatal departments while 7.7% (n=1) acted as a consultant and mentor for midwives, doctors and students.

Correctly placed and utilised advanced midwives indicated that they were competent in midwifery practice as 92.3% (n=12) indicated that they were able to do risk assessments, prioritise problems, assess the progress of labour, manage complications and refer clients for further interventions to other healthcare workers. They had opportunities to practise their skills and felt correctly placed and utilised. In providing quality care to patients, they prevented complications by referring clients in good time, and by preventing the need for some assisted births and intubations. One respondent (7.7%) included a statement indicating confidence about his/her theoretical knowledge and skills to practise as an advanced midwife.

Findings about the relationship between advanced midwives and their colleagues yielded contradictory information. Although most (79.7%; n=55) advanced midwives felt supported by their colleagues, only 62.3% (n=43) were reportedly recognised as advanced midwives. And, while 85.5% (n=59) experienced cooperation from other healthcare workers, 76.8% (n=53) indicated that their colleagues were judgmental and often criticised advanced midwives.

The advanced midwives also mentioned a lack of role models. Only a limited number of doctors and specialists work in the PHC centres in South Africa, and midwives act as role models for other healthcare professionals. None of those advanced midwives (n=13) who had been placed and utilised correctly, had the opportunity to act as a consultant or mentor to other midwives. These respondents also indicated that they had never initiated research, nor had they facilitated or coordinated any research. Research was not a formal requirement of the curriculum for the advanced university diploma programme, but it was a requirement for the Master's programme.

Specific competencies and responsibilities form part of advanced midwifery practice. Advanced midwives reported being competent in performing emergency procedures like vacuum and forceps deliveries. Out of the 13 correctly placed respondents, 61.5% (n=8) had been performing these procedures in cases of prolonged second stages of labour. Advanced midwives should be competent in performing emergency procedures which used to be done by doctors only (Fraser et al., 2010:603). The lack of opportunities to practise these skills and competencies might cause a lack of self-confidence in some practitioners, which could result in failure to apply these skills in emergencies.

Incorrect placement and utilisation of advanced midwives

Out of the 69 respondents, 81.1% (n=56) were not placed nor utilised correctly. All these 56 advanced midwives worked in urban healthcare settings, where doctors were readily available. The presence of doctors did not require the advanced midwives' utilisation of their knowledge and skills.

However, 69.7% (n=39) of those 56 midwives who claimed not to be placed or utilised incorrectly, reportedly performed most of the skills required from an advanced midwife, although 80.4% (n=45) indicated that they lacked opportunities to practice their advanced midwifery skills. They declared that they were competent to practise independently, and that their skills and knowledge acquired during advanced midwifery training equipped them to do so.

CONCLUSION

The results indicated that advanced midwives were not optimally placed and utilised in the field of their speciality. The government has invested in the training of advanced midwives and therefore it is vital that advanced midwives repay healthcare consumers by working in maternity units. Advanced midwives need to work independently, and therefore it is crucial to ensure that opportunities to strengthen their knowledge and experience are utilised. This might help to reduce the maternal and neonatal mortality rates in South Africa. However, if advanced midwives' skills and knowledge are not utilised, they cannot render such contributions.

RECOMMENDATIONS

The cost-effectiveness of the bursaries offered by the South African Department of Health could be questioned, if the trained advanced midwives are not placed or utilised correctly.

Nursing academics and advanced midwifery practitioners should publish research articles in health science journals, and present conference papers, to ensure that the competencies and scope of practice of advanced midwives are made known to all other health practitioners. This will ensure that advanced midwives are recognised by their colleagues and given the opportunity to practise in their field of expertise.

Advanced midwives should initiate, facilitate and coordinate midwifery research. Research, as the scholarship of discovery, together with the scholarship of integration, forms the backbone of evidence-based practice, contributing to quality patient care, and this should be encouraged.

A module on professional practice should be developed and incorporated into advanced midwifery university programmes. It is proposed that research methodology should become part of all postgraduate diploma programmes. This might have a positive effect on advanced midwives' research skills as well as on their attitudes to research. In turn, advanced midwives will then be involved in the scholarship of discovery, and could use these skills to enhance their clinical practice and teach and implement the findings to their nursing colleagues.

A national study that includes all advanced midwives as well as healthcare service managers could contribute to knowledge about the current standing of advanced midwifery. A study where the Department of Health in South Africa is included will be beneficial to determine whether the training of advanced midwives contributes to improved healthcare to mothers and babies.

LIMITATIONS

The study was only conducted among advanced midwives trained at the UFS, therefore the findings cannot be generalised. No observations were made to evaluate advanced midwives' practices in their working environments and no qualitative interviews were conducted. The healthcare service managers were not included and their opinions were not considered.

ACKNOWLEDGEMENTS

The authors thank the School of Nursing, University of the Free State for financial and logistic support as well as the advanced midwives who participated in this study.

REFERENCES

- Alberti, M. 2010. *Remapping debate: nurses to the rescue?* Available at: <http://www.remappingdebate.org/print?content=node%2F444> (accessed 05 May 2013).
- American Psychological Association (APA). 2010. *FAQ: ethical principles of psychologists and code of conduct*. Available at: www.apa.org/ethics/code.html (accessed 23 May 2013).
- APA – see American Psychological Association
- Bryant, R. 2009. *Spotlight Interview with Rosemary Bryant*. Available at: <http://www.icn.ch/pillarsprograms/spotlight-interview-with-rosemary-bryant/> (accessed 23 May 2013).
- Bryant-Lukosius, D., Carter, N., Kilpatrick, K., Martin-Misener, R., Donald, F., Kaasalainen, S., Harbman, P., Bourgeault, I. & DiCenso, A. 2010. *The clinical nurse specialist role in Canada*. Available at <http://www.longwoods.com> (accessed 5 September 2013).
- Burns, N. & Grove, S.K. 2009. *The practice of nursing research: appraisal, synthesis, and generation of evidence*. 6th Edition. Philadelphia: Saunders Elsevier.

- Callaghan, P. 2008. *Advanced nursing practice: an idea whose time has come*. Available at: <http://www.researchgate.net/publication/6402469-advanced-nursing-practice-an-id> (accessed 29 May 2013).
- Canada. Department of Health. 2006–2013. *Canadian model of midwifery practice*. Available at: <http://www.saskmidwives.ac/aboutmidwifery/model-of-practice> (accessed 24 May 2013).
- De Kock, J. & Van der Walt, C. 2004. *Maternal and newborn care: a complete guide for midwives and other health professionals*. Landsdowne: Juta.
- De Vos, A.S., Strydom, H., Fouche, C.B & Delport, C.S.L. 2011. *Research at grass roots for the social sciences and human service professions*. 4th Edition. Pretoria: Van Schaik.
- Dublin. Department of Health. 2008. National Council for the Professional Development of Nursing and Midwifery. Available at: <http://www.ncnm.ie/default.asp?V-DOC-ID=981> (accessed 29 May 2013).
- Dublin. Department of Health. 2009. National Council for the Professional Development of Nursing and Midwifery. Available at: <http://www.ncnm.ie/default.asp?V-DOC-ID=981> (accessed 29 May 2013).
- Fichardt, A.E. 1996. *A problem-based education programme for registered nurses in advanced midwifery and neonatology*. Index to South African Theses and Dissertations. Bloemfontein: University of the Free State.
- Fraser, D.M., Cooper, M.A. & Nolte, A.G.W. 2010. *Myles Textbook for Midwives: African Edition*. Second Edition. Philadelphia: Churchill Livingstone Elsevier.
- Gilliss, C.L. 2011. Duke School of Nursing. Available at: <http://nursing.duke.edu/directories/faculty/catherine.gilliss> (accessed 23 May 2013).
- Hays, B.A. & Swanson, D.J. 2012. *Public relations' use of reverse mentoring in the development of powerful professional relationships*. Available at: <http://works.bepress.com/dswanson/61/> (accessed 24 May 2013).
- Henderson, C. & Macdonald, S. 2004. *Mayers' midwifery: a textbook for midwives*. 13th Edition. Edinburgh: Bailliere Tindall.
- ICM – see International Council of Midwives
- International Council of Midwives. 2010. *Essential competencies for basic midwifery practice*. Available at <http://internationalmidwives.org> (accessed 5 September 2013).
- Meyer, S., Naude, M., Shangase, N. & Van Niekerk, S.E. 2009. *The nursing unit manager: a comprehensive guide*. Midrand: Heinemann.
- Muller, M., Bezuidenhout, M. & Jooste, K. 2006. *Health care service management*. Cape Town: Juta.
- National Council for the Professional Development of Nursing. 2008. *Professional development of nursing and midwifery*. Available at http://ec.europa.eu/health/archive/ph_systems/docs/midwifery_en.pdf (accessed 6 September 2013).
- National Department of Health (of South Africa). 2009. *National Health Insurance*. Available at: http://www.doh.gov.za/list.pho?type=National%20Health%Insurance_ (accessed 23 May 2013).
- National Department of Health. 2010. *Millennium Development Goals Report*. Available at: http://www.info.gov.za/view/DownloadFileAction?id=132022_ (accessed 24 May 2013).
- National Department of Health. 2012. *South Africa's healthcare crisis in the Eastern Cape Pulitzer Center*. Available at: <http://pulitzercenter.org/projects/south-africa-health-care-injustice-economy-sexual-iv> (accessed 24 April 2013).
- National Department of Health. 2013. *Saving mothers 2008–2010. Fifth report on the confidential enquiries into maternal deaths in South Africa – short report*. Available at: <http://www.doh.gov.za> (accessed 5 September 2013).

NDOH – see National Department of Health (of South Africa)

Page, L.N. & McCandlish, R. 2008. *The new midwifery science and sensitivity in practice*. 2nd edition. Philadelphia: Churchill Livingstone Elsevier.

Pillinger, J. 2011. *Public Service International: international migration and women's health and social care workers programme "Quality Healthcare and Workers on the Move"*. South African National Report. Available at: http://www.world-psi.org/sites/default/files/documents/research_southAfrica.pdf (accessed 21 May 2013).

Pillitteri, A. 2010. *Maternal and child health nursing: care of the childbearing and childbearing family*. 6th Edition. Philadelphia: Lippincott Williams & Wilkins.

Saskatchewan College of Midwives. 2013. *Model of practice*. Available at <http://saskmidwives.ca> (accessed 5 September 2013).

SANC – see South African Nursing Council

Searle, C. 2002. *Professional practice: a South African nursing perspective*. 4th Edition. Pietermaritzburg: Interpak.

South Africa. 2003. *National Health Act, no. 61, 2003*. Pretoria: Government Printer.

South Africa. 2011. *Health care in South Africa*. Available at <http://southafrica.info/about/health/health.htm> (accessed 6 September 2013).

South African Nursing Council. 1978. *Regulations Relating to the Scope of Practice of Persons who are Registered or Enrolled under the Nursing Act, 1978*. Government Notice No.R.2598.

Sullivan, E.J. & Garland, G. 2010. *Practical leadership and management in nursing*. Available at <http://amazon.com> (accessed 21 May 2013).

UNFPA see United Nations Family Planning Association

United Nations Family Planning Association. 2011. *Skilled attendance at birth*. Available at: <http://www.unfpa.org/public/mothers/pid/4383> (accessed 21 May 2013).

Wiley, J. & Sons. 2000-2011. *Principles of management: functions of managers*. Available at: <http://www.cliffsnotes.com> (accessed 23 May 2011).

WOMBS. 2012. *Women offering mothers birth support promotes better birth through informed choice and putting the family first*. Available at: www.wombs.org.za (accessed 5 September 2013)

Yadav, K., Jarhyan, P., Gupta, V. & Padav, C.S. 2009. Revitalizing rural healthcare delivery: can rural health practioners be the answer? *Indian Journal of Community Medicine*, 34(1):1-4.