



## Midwifery Education in Practice

## New nurses and community maternal care education: A qualitative study

Nur Fadilah<sup>a</sup>, Lisa McKenna<sup>b,\*</sup><sup>a</sup> School of Nursing, Hasanuddin University, Makassar, Indonesia<sup>b</sup> School of Nursing and Midwifery, La Trobe University, Bundoora Victoria, 3083, Australia

## ARTICLE INFO

## Keywords:

Community healthcare  
Education  
Maternal health  
Nursing

## ABSTRACT

There is ongoing focus in Indonesia to lower the maternal mortality rate. One strategy has been increasing numbers of health care practitioners, including nurses, in the community. While much is known about transition experiences of new registered nurses, little is known about the adequacy of educational preparation of new nurses in Indonesia to provide maternal care in community settings. This qualitative descriptive study explored new diploma prepared nurses' perceptions of their educational preparation for providing community maternal care. Semi-structured interviews were conducted with five new nurses working in community health care centres in Gowa District, South Sulawesi, Indonesia. Thematic analysis was used to analyse data. Three key themes emerged: Practice context, Professional role delineation, and Education programs. Nurses reported encountering a range of aspects of maternal care, and community expectations of their skills and knowledge. These were particularly necessary in rural areas. Educational preparation was found to be insufficient for the activities that graduates were engaged in. There is a need for more research into maternal care content in undergraduate nursing programs in Indonesia to ensure optimal maternal care in community settings.

## 1. Introduction

Nursing education in Indonesia falls into three main categories: vocational, academic and professional (Indonesian Nursing Act, 2014). Vocational education is delivered in the form of a diploma program; academic education is the form of bachelor, masters, and doctoral programs; and professional education is in the form of nurse specialists (Indonesian Nursing Act, 2014). Despite nursing education in Indonesia being considered new, as the first undergraduate program was first established in 1985 (Universitas Indonesia, 2015a), there has been much development in the nursing education system.

In the nursing curriculum, maternal content can be found in the three-year diploma nursing level, bachelor level and masters level together with specialisation. At the diploma nursing, maternity curriculum covers concepts of maternal nursing, and maternal health nursing skills (Kementrian Kesehatan Badan Pengembangan dan Pemberdayaan SDM Kesehatan, 2017). At undergraduate level, this maternity curriculum covers concepts and theory of maternal health and care, and a variety of women's health problems together with the related skills (Asosiasi Institusi Pendidikan Ners Indonesia, 2015). In masters with specialisation, maternal curriculum covers more specifically the advanced and more complex areas of maternity health (Universitas Indonesia, 2015b).

## 2. Literature review

Internationally, extensive work has focused on reducing maternal and infant mortality and this has made substantial progress. On a global level, presence of skilled attendance during childbirth has increased (World Health Organization, UNICEF, & UNFPA, 2018). Maternal mortality remains an ongoing issue in Indonesia, a middle-income country consisting of more than 13,000 islands, despite a range of efforts by government and non-government organisations to reduce it. In Indonesia, many women prefer to birth at home with traditional birth attendants (dukun), particularly in rural areas due to cost and physical distance from hospitals (Titaley et al., 2010a,b). These attendants are usually older, not formally trained, but live in the village and often known to the woman (Agus et al., 2018; World Health Organization, 2004) and provide a more holistic and culturally safe approach to care (Bennett, 2017). In recent years, the Indonesian government has been working to provide some training to these individuals to assist in reducing maternal mortality (Agus et al., 2018).

The Gowa district is a dispersed rural area located on the island of Sulawesi in Indonesia's east. It has the reported highest maternal mortality rate in South Sulawesi. In 2011, there were 12 reported maternal deaths, representing a maternal mortality rate of 92.7 in 100,000 births (Ikhtiar et al., 2014). In the South Sulawesi region,

\* Corresponding author. School of Nursing and Midwifery, La Trobe University, Kingsbury Drive, Bundoora Victoria, 3083, Australia.  
E-mail address: [l.mckenna@latrobe.edu.au](mailto:l.mckenna@latrobe.edu.au) (L. McKenna).

pregnancy complications mostly occur during childbirth, and maternal deaths reportedly, mainly occur due to lack of midwives or other skilled health professional with competency in managing the birth process. However, what constitutes an acceptable level of competence is unclear. There has been a focus in the district on maximising antenatal care for pregnant women and emphasising preventive actions delivered by health professionals such as from obstetricians/gynaecologists, general doctors, midwives, and nurses (Public Relation Gowa District, 2013).

In Indonesia, primary health care is the first point for the community to seek health care, through community health centres (Pukesmas) and integrated health posts (Posyandu) (Kadar et al., 2014). Located at sub-district level, the Puskesmas is a primary care level organisation led by a doctor or public health officer (Titaley et al., 2010b). There is an expectation that the Puskesmas sits at the centre of health systems in the country and has three main functions. Firstly, the Puskesmas acts by actively engaging in maintaining wellness and disease prevention in the community. Secondly, it sits at the centre of community health empowerment by actively engaging the community to participate in health programs. Thirdly, it serves as initial entry into the health system by providing care to the individual and community as a whole (Ministry of Health Republic of Indonesia, 2004). Maternal and child health is a focus of health effort within the Puskesmas. To support maternal and child health, key community initiatives have been developed, the Posyandu (integrated health service posts) and Puskesmas (mobile public health centres) The Posyandu are located in villages and are operated by their communities. They function in providing women with care information about pregnancy issues, birth preparation, breast care, infant nutrition, and childcare (Nazri et al., 2016; Soedarmono, 2017). Each involves a variety of health care professionals.

Despite being mentioned in a WHO (2005) report that health professionals including doctors, nurses and midwives play important roles in the provision of maternal, newborn and child health services, it is still the main role of midwives in Indonesia to provide maternal care (World Bank, 2010). In 1989, the village midwife program was set up to provide one midwife for each village, often as part of the Puskesmas, as insufficient beds and costs meant many women would birth at home in their villages (Joint Commission on Reducing maternal and Neonatal Mortality in Indonesia, 2014). However, due to lack of health professionals in many areas (Rokx et al., 2009), some overlapping of roles occurs between the different health professionals, including between nurses and midwives in maternal care provision. In the Puskesmas, midwives are employed to be responsible for the care of mothers and children. However, in circumstances where the midwife is not readily available, these roles can be managed by other health professionals. In particular, nurses are expected to perform various roles such as educator, care provider, manager, researcher and task implementer, in both clinical and community settings, and undertake their roles independently or collaboratively with other health professionals (Indonesian Nursing Act, 2014). In other situations, such as during life-threatening situations, nurses are permitted to provide necessary care in line with their competencies, when other health professionals such as doctors or pharmacists are not available (Indonesian Nursing Act, 2014).

Many new nurses are allocated to work in community areas in Indonesia. Yet, there has been no research into their education preparation to provide aspects of care, such as maternal care, in the community context. Therefore, this research aimed to explore new nurses' perceptions of their educational preparation for providing maternal care in the community in Gowa District, South Sulawesi, Indonesia. It was envisaged that the findings could inform education and health policy makers on establishing minimum nursing knowledge and skills for practice in those areas for safe community care.

### 3. Study aim

This qualitative study sought to explore new diploma prepared nurses' perceptions of their educational preparation for providing care for childbearing women and new mothers in the community. In doing so, there were three main research questions:

- What are new diploma prepared registered nurses' perceptions of providing maternal care in community health centres?
- What are new nurses' perceptions about their educational preparation for providing maternal care in the community?
- What do new registered nurses recommend around maternal health education for nursing students?

### 4. Methods

#### 4.1. Design

A descriptive qualitative design was chosen as the most appropriate means to explore the phenomenon under investigation as a general overview was being sought. Such an approach has the potential to generate diverse and rich data from a relatively small sample size (Whitehead, 2013). As a theoretical framework, a descriptive qualitative approach is considered useful to develop an initial perspective about a phenomenon before progressing deeper into a topic of enquiry (Neergaard et al., 2009; Thorne et al., 1997).

#### 4.2. Sample and setting

The study was conducted in Gowa District in South Sulawesi Province in Indonesia, a district comprising subdistricts, urban villages and rural areas. Convenience sampling was used to recruit participants. Inclusion criteria were:

- New diploma prepared registered nurses working either part time or full time in public health centres who had experience dealing with mothers or delivering maternal care.
- New diploma prepared registered nurses with less than two years of work experience.

At the outset, we were unable to ascertain the potential sample size for the study, as we had no data about the numbers of new nurses working in the relevant community settings. Research advertisements and invitations were sent to seven out of 25 Puskesmas in Gowa district, being the most accessible for the researcher. These outlined details of participating in the study, and invited new diploma prepared registered nurses to contact the researcher if they were interested. Snowballing was also employed to recruit additional participants, as well as invitations posted on a relevant Facebook page.

#### 4.3. Data collection

Data were collected using face-to-face semi-structured interviews guided by some key open-ended questions (Table 1). Interviews were conducted in Bahasa Indonesia and lasted between 30 and 45 min in duration. The interviewer was an Indonesian nurse academic. Interviews were transcribed verbatim, then translated into English and back translated into Bahasa Indonesia to ensure original meaning was not lost. Translations were checked by a speaker of both languages. Although only five interviews were conducted, there were no new concepts or ideas emerging, implying data saturation was achieved.

#### 4.4. Ethical considerations

Ethical approval was granted by the Monash University Human Research Ethics Committee, and permission to conduct the research was

**Table 1**  
Guiding questions.

Guiding questions:
1 How did your education prepare you to care for mothers in the community?
2 Tell me how prepared you feel to provide maternal care.
3 What are the challenges or barriers, if any, you feel working in the community to provide care?
4 What are the things that assist you to provide care?
5 What has influenced your ability to provide care?
6 Are there particular aspects of care that are difficult for you?
7 What recommendations do you have for the future educational preparation of nurses to provide maternal care?

granted from the Regional Investment Coordinating Board Government of South Sulawesi working on behalf of the Governor of South Sulawesi. In addition, approval was granted from the National and Political Unity Agency of Gowa District. Copies of approvals were sent to relevant subdistricts, village offices and Puskesmas prior to recruitment commencing for their information. Prior to interview, written consent was obtained from each participant. Finally, pseudonyms are used in reporting findings to protect participants.

#### 4.5. Data analysis

Transcripts were read, and audiorecordings listened to, multiple times. Analysis followed Braun and Clarke's (2006) six phases of thematic analysis: familiarising with the data, generating data using codes, developing the data into themes, reviewing the themes, defining and refining the themes, and linking and writing up findings by referring them to the research question. Due to distance constraints and participants' lack of access to email, member checking of transcripts was not possible. However, during the interviews the researcher continuously checked her understandings with participants to enhance rigor. Rigor was also achieved through back translation and checking of translations. To ensure trustworthiness of findings, two researchers individually reviewed the transcripts separately and identified themes. They then met to refine and validate these together to ensure they were accurate and reflected the data.

## 5. Results

Five new nurses comprising one male and four females who worked in three different Puskesmas participated in interviews. All commenced working in their relevant community health centre between 2014 and 2015 so had less than two years working in that environment at the time. All participants had completed a three-year Diploma of Nursing program. From the analysis, three key themes emerged: *Practice context*, *Professional role delineation*, and *Education programs*.

### 5.1. Practice context

The context for practice was seen to make working in community health different to that experienced in the hospital setting. Participants described the diverse nature of their community health work, involving a range of clinical skills and counselling, and why they considered educational preparation for maternal care was needed. Many reported having to work with mothers in outpatient settings:

*My involvement is to collaborate in doing the weighing, giving ... vitamins, measuring height, and ... giving counselling about ... the nutrition of the baby and the kids, and the treatment that is required. At the same time also with their mothers. In the field, we do the weight measurement and providing the counselling to the mothers. (Bina)*

Collaboration with other health care providers was key to participants' work in the community. In the Posyandu, nurses were required to

collaborate with nutritionists and health promoters in providing care for mothers and children:

*Sometimes in Posyandu, nurses' roles are measuring the weight and the height of the children. We collaborate with a nutritionist in providing the supplement or vitamins. And then, we as a nurse also work together with health promoters. We usually do the health education ... (Aidil)*

There was a sense of responsibility and accountability to the community in which participants worked, but also lived, being qualified health professionals. They highlighted that working in the community required being ready to meet the health needs of community members. Community members required them to be the first point of care so they needed to have the necessary skills and knowledge to do this:

*People in the community only know that we work in the health sector and therefore we should have known everything ... (Aidil)*

At times, this responsibility meant that they were required to meet arising needs in their community. Such requirements could include needing to be able to manage birthing women, even though this was the domain of midwives, when the village midwife was not immediately available.

*... it [education for maternal care] is very important. Because for us, we sometimes work in the community. Maybe there are people who live near from us and who are about to give birth. Who else can help them if not us? With our experiences at least ... we can help. (Tiara)*

The area of managing childbirth was one that participants were particularly mindful of as it could happen at any time, and have negative outcomes if not managed appropriately. One participant described his experiences of having to manage a childbirth situation in the community, even in the presence of a traditional birth attendant:

*... there was a traditional birth attendant at that time. But, she was also afraid that time. She was really afraid. The traditional birth attendant also believed in me. (Aidil)*

Some participants were mindful of the fact that the nature of their practice context meant that they may be the most highly educated health professional working in their area and hence, need to assume greater autonomy and responsibility than in hospital settings. It was seen to be likely that they would be working in rural areas on graduation, and thus in areas where there were no midwives at all, and they would be required to provide care during and after childbirth:

*... after graduation, we do not know where we are going to work. Probably ... we are placed ... in rural areas. Perhaps, there are no midwives, or others. So we can replace them. (Sari)*

This level of realisation prompted participants to examine their preparation for the community practice context. Insufficient knowledge for these nurses in the area of childbearing was seen to be potentially problematic and had the potential to lead to problems in providing appropriate care:

*... nurses and all other professions even midwives and doctors are responsible to give holistic care ... maternal education is also important ... if we are working in rural areas, if there is no doctor and there is no midwife. If we are the only one who is there ... this is really important ... We may call the doctor, or call the midwives, but if we are the only one who is there, and you're the only one that can help, of course the community or people, if we do not learn all of that, we will face some kind of problems. (Aidil)*

### 5.2. Professional role delineation

The second theme to emerge was around the role delineation of health professionals working in the community setting, and expectations on graduates. Participants reinforced the need for collaboration

with health professionals in their work in community settings. They also acknowledged that sometimes they were required to work in areas outside of their skills and knowledge and provide care usually delivered by others, which is concerning where educational preparation is insufficient:

*... the nurses here not only work as a nurse. So they can also be a midwife, can replace the midwife and the pharmacist. (Tiara)*

In particular, participants identified that sometimes they would be required to carry out work that was in the scope of care provided by midwives, and not nurses further blurring professional role delineation, as one participant described:

*There was a patient who was going to give birth in here. Whether I wanted it or not, as I also know the theory, and also there were no midwives that time, want it or not, I needed to help that woman. I was alone at that time ... the only nurse who was there was me. That night, I was the only one who stayed there (in community health centre), all my friends had gone home. (Aidil)*

Other aspects of care that were normally in midwives' roles were sometimes assumed by these nurses. Participants highlighted that nurses could care for pregnant women with medical conditions, reinforcing the need for expertise in maternal care:

*... pregnant mothers with hyperemesis or with severe vomiting, they were moved from the midwives' room to here, and then we do the IV therapy. (Bina)*

However, participants also recognised that sometimes in the community practice context there was often overlapping of some professionals' roles:

*... nurses usually give education related to personal hygiene. Such as the hygiene of the baby, and also the growth of the baby. And also measuring the baby and demonstrating the way of infant or baby massage. But again, this is quite similar with midwives, because actually our aims are similar. (Aidil)*

Despite this, participants spoke of the importance of respecting the roles of health professionals in the team:

*... if something happens like if there are women who want to give birth, and there are no midwives, I will of course help here ... if there are still midwives, and their profession majorly deals with that, I will hand it to them. It is impossible to take their job, if that is their job. (Aidil)*

### 5.3. Education programs

Participants were asked about their sense of preparation for the work they were undertaking in the community. They highlighted particular inadequacies in their educational preparation for their community work involving the care of childbearing women. They indicated receiving some relevant content during their courses, however such education was not considered to have been sufficient, and constrained because of time in the curriculum for many areas of content:

*There was one nursing program which we learnt for one year, like emergency nursing. It was different ... Maternal [education] is constrained because of limited time. (Bina)*

Hence, participants argued that their knowledge of maternal care was only superficial, and did not provide them with opportunities for deeper learning and experience in the area. Content largely covered assisting other health professionals, not managing maternal care.

*Regarding the content, maybe for us in nursing, for maternity nursing education, we only learn it in surface or outer part, maybe just how to help with the childbirth process, or ... I mean we have limited ..., we have not really got into deeper, just on the surface. [Sari]*

Participants recommended increasing curriculum content in the area of maternity care to meet the needs of nurses working in community settings:

*... maternity nursing education should not just cover the outer or surface part ... If it can, it needs to go deeper because ... if we are placed in the rural area and there are no doctors or midwives, while we only know about the outer part, and we rarely or never do the work, and absolutely we will be so clumsy there. We would not be able to move or do anything there. So, my advice and my hope is, if possible, maternity nursing education should have increased credits [credit points]. (Aidil)*

Furthermore, participants wanted more clinical preparation than they received in their course to ensure their skills were sufficiently developed. They reflected that the maternity placements in their diploma courses mainly involved observation and not hands-on skills development:

*... during clinical placement, it [maternal care] was very limited. What we did was just providing general nursing care like ... in emergency department such as injections. Regarding helping during the delivery we have a very short time. (Tiara)*

*In my clinical placement, I was given the opportunity to measure the cervix dilatation, but that's all. For the activity ... they asked us to just handle the activities like inserting the IV line, but for helping during childbirth, they did not. We just saw it, just like observed. (Sari)*

## 6. Discussion

This study was designed to explore perceptions of new diploma prepared registered nurses in relation to their educational preparation for providing maternal care in the community setting in Gowa District, South Sulawesi, Indonesia where many practice settings are located in rural areas. While maternal-focused care is an area where nurses predominantly undertake limited practice, the findings highlight that nurses working in rural Indonesian communities do encounter childbearing women and require relevant knowledge and skills to manage aspects of their care, including childbirth in settings where there are no midwives. Participants repeatedly identified rural area considerations in their work of providing community maternal care. This posed a challenge for the nurses, as they needed to work independently due to lack of other health professionals in more remote areas. [Titaley et al. \(2010a,b\)](#) highlighted that many women in West Java had limited access to midwives and accessing antenatal and postnatal care was impacted by factors such as poor road conditions. In West Sumatra, [Agus et al. \(2012\)](#) found that rurally located women heavily relied on traditional beliefs around antenatal care and preferred to use traditional birth attendants. In eastern Indonesia, [Belton et al. \(2014\)](#) reported that maternal deaths in rural settings were associated with three sets of delays: deciding to seek care, reaching adequate care, and receiving adequate care. Potentially, nurses in rural settings may find themselves managing childbirth and related complications where communities call on their professional expertise. However, participants in this study reported insufficient educational preparation for their maternal-related work in community settings. While the major activity in the Puskesmas was focused on health education and health assessment, the findings highlight that the community required nurses to have broad knowledge to meet their needs, even outside of their work time. This suggests a need for greater community awareness of the different health professionals in the Puskesmas. Furthermore, blurring of roles could mean that inadequately prepared health professionals are delivering care they may not effectively prepared to deliver. This has the potential to negatively impact on health outcomes and warrants some exploration.

It is important for graduating nurses to be prepared for different possibilities for their future work environments, and thus graduates should be prepared with broad educational content. [Ali et al. \(2011\)](#)

argued that new nurses working in community health settings in the UK had less pre-registration preparation compared to nurses working in acute care settings. Findings of this study suggest that nurses working in rural areas of Indonesia need to be prepared for providing maternal care, as they may likely have exposure and be expected to respond safely and appropriately. A review conducted by Van Iersel et al. (2016) examined nursing students' perceptions of community care, finding that students were more positive towards it if they had clinical placements there. However, many saw it as unattractive due to seeing a focus on chronic illness. Clearly, nurses working in community settings need broad education from basic through to advanced, as they face varied health problems, compared to those in hospital settings where specialists provide more focused, specialised care (Van Iersel et al., 2016).

In this study, the nurses shared examples of how they not only provided care and health assessment, but also health education for mothers and children. Keleher and Parker (2013) argued that if nurses intended working in community settings, it was essential to prepare them with adequate education for effective practice. This resonates with the context of maternal care in the Puskesmas through Posyandu and Puskesmas programs, where all health professionals, including new nurses, work together in the provision of not only education, but also care for mothers. It suggests need for new graduate nurses to have adequate and appropriate educational preparation. Bergh et al. (2012) demonstrated that in the community setting primary health care is central, and practice most commonly deals with health education, compared to that practiced in hospital settings. A study conducted in Ireland by Mulcahy and McCarthy (2008) found that experienced public health nurses who usually needed to provide health assessment and health education to mothers and children, were sometimes, in the point of view of the mothers, too quick in making decisions about health problems (Mulcahy and McCarthy, 2008). This highlights the focus on illness generated by nursing courses, as opposed to wellness that underpins the community context.

Without educational preparation, nurses will find difficulty in providing adequate care. Molanari et al. (2011) suggest providing opportunities for new nurses to have continuous and intermittent education with the expectation of preparing them to be able to provide community-based care, despite not always engaging in provision of maternal care. Clearly, in settings such as Gowa district, educational preparation in the area of maternal care is needed, as graduates may need to be prepared with a range of skills to meet a variety of rural health needs which may include maternal care. This includes more hands-on clinical practice during the education programme and more clinical placements in community health settings. In the UK, Marshall and Shelton (2012) trialled a final year clinical placement in community nursing, finding that the experience enabled students to develop skills for working in the community, and confidence to practice in such settings following graduation.

In relation to provision of maternal care, new nurses may at times have to perform roles normally performed by midwives. Participants in this study discussed how at times, their roles overlapped with those of other health professionals. Both nurses and midwives have been found to provide antenatal care for mothers (Heywood and Choi, 2010). Moreover, the experience of one participant in the current study indicated that assisting birthing women was something he needed to be prepared for. This results in some tension, given that the nurses are seen as skilled health professionals who could step in when others, such as the midwife are away, but clearly have insufficient education to perform some roles expected of them. This poses a challenge for educators, researchers, health policy makers in Indonesia and elsewhere in the development and implementation of practice standards for nursing. Furthermore, it suggests a need for more midwives in the community. Since the study was conducted, degree level education has become standard for registered nurses so educational preparation may be different for these nurses.

There are limitations to the current study. Few new graduate nurses

were available to be interviewed due to potential participants being geographically dispersed in rural locations that were difficult to access and this limited overall participation. However, data saturation was still reached due to richness and depth of information provided by those who did participate, and numbers are considered less important in qualitative research. Moreover, the study was conducted in only one district in South Sulawesi Province in Indonesia. Hence, the findings may not be transferable to other districts, nationally and internationally but may resonate with similar contexts elsewhere. In addition, all participants were diploma qualified. Findings may be different for those who have bachelor level preparation where more content is covered. Finally, the chosen qualitative framework may have limited depth of analysis.

## 7. Conclusion

This study found that new nurses working in community settings undertook a range of roles, worked closely with a range of other health professionals, and that there were times when role boundaries were blurred, particularly in the area of maternal care when the midwife was not available. Findings suggest increasing new graduate nurses' educational preparation in maternal care provision in the community. Ideally, having more midwives available would mitigate this, however in a context where there are an enormous number of villages across the country, this would not likely be easy to achieve. Further research is needed to understand the nature of nursing practice in community and rural areas of Indonesia, and necessary educational preparation, broadly and for maternal care provision in contributing to reductions in maternal mortality, particularly in rural areas. More studies examining new registered nurses' engagement in working in community settings should be undertaken to further understand the nature of such work and necessary educational preparation.

## Author declaration

Study design: NF, LM.

Data collection and analysis: NF, LM.

Manuscript writing: NF, LM.

## Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

## Disclosure

No conflict of interest is declared by the authors.

## Ethical approval

Approval to conduct the study was provided by Monash University Human Research Ethics Committee (MUHREC) on 16 November 2015.

Approval Number: CF 15/3767–2015001638.

## Conflicts of interest

None.

## Acknowledgement

The authors acknowledge the contribution of Dr Kusri Kadar for her advice provided in the completion of this study.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://>

doi.org/10.1016/j.nepr.2018.11.011.

## References

- Agus, Y., Horiuchi, S., Porter, S.E., 2012. Rural Indonesia women's traditional beliefs about antenatal care. *BMC Res. Notes* 5, 589.
- Agus, Y., Horiuchi, S., Iida, M., 2018. Women's choice of maternal healthcare in Parung, West Java, Indonesia: midwife versus traditional birth attendant. *Women Birth*. <https://doi.org/10.1016/j.wombi.2018.01.007>.
- Ali, P.A., Watson, R., Albutt, G., 2011. Are English novice nurses prepared to work in the primary care setting? *Nurse Educ. Pract.* 304–308.
- Asosiasi Intitansi Pendidikan Ners Indonesia, 2015. Kurikulum inti pendidikan ners Indonesia. <http://repository.umy.ac.id/bitstream/handle/123456789/14050/BUKU%20KURIKULUM%20NERS%202015.SIAP%20CETAK%20%2007102016.pdf?sequence=1>, Accessed date: 19 November 2018.
- Belton, S., Myers, B., Ngana, F.R., 2014. Maternal deaths in eastern Indonesia: 20 years and still walking: an ethnographic study. *BMC Pregnancy Childbirth* 14, 39.
- Bennett, L.R., 2017. Indigenous healing knowledge and infertility in Indonesia: learning about cultural safety from Sasak midwives. *Med. Anthropol.* 36, 111–124.
- Bergh, A.-L., Karlsson, J., Persson, E., Friberg, F., 2012. Registered nurses' perceptions of conditions for patient education - focusing on organisational, environmental and professional cooperation aspects. *J. Nurs. Manag.* 20 (6), 758–770.
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. *Qual. Res. Psychol.* 32, 77–101.
- Heywood, P., Choi, Y., 2010. Health system performance at the district level in Indonesia after decentralization. *BMC Int. Health Hum. Right* 10, 1–12.
- Ikhtiar, M., Hadju, V., Thaha, R., Syafar, M., 2014. Study on health social determinants as cause of maternal mortality in Gowa district South Sulawesi 2013. *Int. J. Sci. Res. Publ.* 4, 1–6.
- Indonesian Nursing Act., 2014. <http://www.observatorisdmdindonesia.org/wp-content/uploads/2015/01/3.-Indonesian-Nursing-Act-No.-38-year-2014.pdf> (accessed 27 March 2017).
- Joint Committee on Reducing Maternal and Neonatal Mortality in Indonesia, 2014. Reducing Maternal and Neonatal Mortality in Indonesia: Saving Lives, Saving the Future. National Academies Press, Washington.
- Kadar, K., McKenna, L., Francis, K., 2014. Scoping the context of programs and services for maintaining wellness of older people in rural areas of Indonesia. *Int. Nurs. Rev.* 61, 310–317.
- Keleher, H., Parker, R., 2013. Health promotion by primary care nurses in Australian general practice. *Collegian* 20, 215–221.
- Kementerian Kesehatan Badan Pengembangan dan Pemberdayaan SDM Kesehatan, 2017. Desain Pembelajaran pada Program Afiriasi dengan Pendekatan Rekognisi Pembelajaran Lampau (RPL). <http://bppsdkm.kemkes.go.id/pusdiksdm/wp-content/uploads/2017/11/Buku-B1-Desain-Pembelajaran-RPL-Keperawatan.pdf>, Accessed date: 19 November 2018.
- Marshall, P., Shelton, R., 2012. Preparing nursing students to be community health practitioners. *Br. J. Community Nurs.* 17, 622–629.
- Molanari, D.L., Jaiswal, A., Hollinger-Forrest, T., 2011. Rural nurses: lifestyle preferences and education perceptions. *Online J. Rural Nurs. Health Care* 11, 16–26.
- Mulcahy, H., McCarthy, G., 2008. Participatory nurse/client relationships: perceptions of public health nurses and mothers of vulnerable families. *Appl. Nurs. Res.* 21, 169–172.
- Nazri, C., Yamazaki, C., Kameo, S., Herawati, D.M.D., Sekarwana, N., Raksanagara, A., Koyama, H., 2016. Factors influencing mother's participation in *Posyandu* for improving nutritional status of children under-five in Aceh Utara district, Indonesia. *BMC Publ. Health* 16, 69.
- Neergaard, M., Olesen, F., Andersen, R., Sondergaard, J., 2009. Qualitative description: the poor cousin of health research? *BMC Med. Res. Methodol.* 9, 52–56.
- Public Relation Gowa District, 2013. Accountability of government performance reports Gowa District. <http://humasgowa.com/wp-content/uploads/2014/10/BAB-III.pdf>, Accessed date: 27 March 2017.
- Rokx, C., Marzoeqi, P., Harimurti, P., Satriawan, E., 2009. Indonesia's doctors, midwives and nurses : current stock, increasing needs, future challenges and options. <http://documents.worldbank.org/curated/en/2009/01/10711385/indonesias-doctors-midwives-nurses-current-stock-increasing-needs-future-challenges-options>, Accessed date: 21 September 2018.
- Soedarmono, Y.S.M., 2017. The Indonesian approach to reduce maternal mortality. *International Society of Blood Transfusion, ISBT Science Series* 12, 272–280.
- The Ministry of Health Republic of Indonesia, 2004. Keputusan Menteri Kesehatan Republik Indonesia Nomor 128/MENKES/SK/II/2004 tentang kebijakan dasar pusat kesehatan masyarakat. Retrieved from [https://peraturan.bkpm.go.id/jdih/userfiles/batang/KEPMENKES\\_128\\_2004.pdf](https://peraturan.bkpm.go.id/jdih/userfiles/batang/KEPMENKES_128_2004.pdf), Accessed date: 19 November 2018.
- Thorne, S., Kirkham, S.R., MacDonald-Emes, J., 1997. Interpretive description: a non-categorical qualitative alternative for developing nursing knowledge. *Res. Nurs. Health* 20, 169–177.
- Titaley, C.R., Hunter, C.L., Dibley, M.J., Heywood, P., 2010a. Why do some women still prefer traditional birth attendants and home delivery? A qualitative study on delivery care services in West Java Province, Indonesia. *BMC Pregnancy Childbirth* 10, 43.
- Titaley, C.R., Hunter, C.L., Heywood, P., Dibley, M.J., 2010b. Why don't some women attend antenatal and postnatal care services? A qualitative study of community members' perspectives in Garut, Sukabumi and Ciamis districts of West Java Province, Indonesia. *BMC Pregnancy Childbirth* 10, 61.
- Universitas Indonesia, 2015a. Universitas Indonesia at a Glance. <http://nursing.ui.ac.id/en/universitas-indonesia-at-a-glance>, Accessed date: 19 November 2018.
- Universitas Indonesia, 2015b. Master (Master of Nursing) and Specialist Programs. <http://nursing.ui.ac.id/en/masters-master-of-nursing-and-specialist-programs/>, Accessed date: 19 November 2018.
- Van Iersel, M., Latour, C.H.M., de Vos, R., Kirschner, P.A., Scholte op Reiner, W.J.M., 2016. Nursing students' perceptions of community care and other areas of nursing practice – a review of the literature. *Int. J. Nurs. Stud.* 61, 1–19.
- Whitehead, D., 2013. Research appreciation and application. In: Schneider, Z., Whitehead, D., LoBiondo-Wood, G., Haber, J. (Eds.), *Nursing and Midwifery Research: Methods and Appraisal for Evidence-based Practice*, fourth ed. Elsevier, Sydney.
- World Bank, 2010. "...and then she died" Indonesia Maternal Health Assessment (53327). <http://documents.worldbank.org/curated/en/2010/02/12023273/died-indonesia-maternal-health-assessment>, Accessed date: 21 September 2018.
- World Health Organization, 2004. Making pregnancy safer: the critical role of the skilled attendant: a joint statement by WHO, ICM and FIGO. <http://apps.who.int/iris/bitstream/handle/10665/42955/9241591692.pdf>, Accessed date: 21 September 2018. <http://apps.who.int/iris/bitstream/handle/10665/42955/9241591692.pdf>, Accessed date: 21 September 2018. <http://apps.who.int/iris/bitstream/handle/10665/42955/9241591692.pdf>, Accessed date: 21 September 2018. <http://apps.who.int/iris/bitstream/handle/10665/42955/9241591692.pdf>, Accessed date: 21 September 2018.
- World Health Organization, 2005. Improving maternal, newborn, and child health in the South-East Asia Region (SEA-MCH-228). [http://apps.searo.who.int/PDS\\_DOCS/B0263.pdf](http://apps.searo.who.int/PDS_DOCS/B0263.pdf), Accessed date: 21 September 2018.
- World Health Organization, UNICEF and UNFPA, 2018. Quality, Equity, Dignity the network to improve quality of care for maternal, newborn and child health – strategic objectives. <http://apps.who.int/iris/bitstream/handle/10665/272612/9789241513951-eng.pdf?ua=1>, Accessed date: 21 September 2018.