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Conference Paper

The Effectiveness of the Maternity Public Health Nursing (MPHN) Module on Increasing the Nurse's Knowledge, Attitude & Skills on Maternity Nursing Care in the Community: A Study in District of Cianjur, West Java, Indonesia

Asti Melani Astari[1], Yeni Rustina[1], Tri Mariha[1], Hadi Pratomo[2], and Sabarinah[2]

[1]Faculty of Nursing, Universitas Indonesia, Depok, Indonesia
[2]Faculty of Public Health, Universitas Indonesia, Depok, Indonesia

Abstract

Prevention of a complication of pregnancy, childbirth, and postpartum requires early intervention started right from the beginning of pregnancy. This is indispensable to avoid maternal deaths. This study aimed to evaluate the effectiveness of Maternity Public Health Nursing (MPHN) training on the knowledge, attitudes, and skills of the selected Public Health Center nurses in providing maternity nursing care in the community in Cianjur District, West Java, Indonesia. The objective of this research was to assess the impact of the MPHN training module on the level of knowledge, attitudes, and skills of health center nurses. This study used a pre- and post-test with control group design, involving 20 nurses divided into ten nurses each in both the control group and in the intervention group. The intervention group received training using MPHN module for 12 weeks.

Meanwhile, the control group received general training. There were significant differences in scores of the knowledge, attitudes, and skills between the intervention and the control group. The MPHN training module was likely to improve learning, beliefs, and abilities of maternity caring among the nurses. A further study is suggested to evaluate the impact of MPHN training module on the utilization of health care facilities by high-risk pregnant women.

Keywords: MPHN training module; knowledge; attitude and skills on maternity nursing; nurses in Public Health Centers

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1. Introduction

Improving maternal health to reduce maternal mortality in Indonesia needs hard work from all parties. This need for improvement illustrated when Indonesia did not achieve the target to reduce maternal mortality in Millennium Development Goals (MDGs) in

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2015. The direct causes of maternal mortality in Indonesia still are dominated by the three leading causes of death: hemorrhage, hypertension in pregnancy and infection (Kemenkes RI 2013). The high maternal mortality rate in several areas in Indonesia was possibly related to the implementation of the policy gaps that health services have not reached all community, even when the public health center or *Puskesmas* has existed in every sub-district.

Amperaningsih (2013) identified the relationship between the level of knowledge and training of public health nurse (PHN) in the implementation of the PHN program. The most dominant factor related to the level of enforceability of PHN was the interaction between the competence and training of nurses (Tafwidhah 2010).

Cianjur is one of the contributors to the high maternal mortality rate in Indonesia. Narchi (2001) recommended integration of nursing and midwifery was needed to improve the quality of maternal health and to address the maternal health problems. Based on these studies, it is necessary to have PHN training that focuses on the health of pregnant women to improve the knowledge, attitudes, and skills of nurses in providing nursing care to high-risk pregnant women.

2. Methods

This study used pre- and post-test with control group design involving 20 respondent nurses from 10 health center, each of which was divided into ten respondents (5 health center) in the control group and ten respondents (5 health center) in the intervention group. The intervention group received training of MPHN module for 12 weeks, MPHN program included maternal health care, prevention of complications during pregnancy, childbirth and postpartum. The questionnaire was used to assess knowledge, attitudes, and skills of nurses.

3. Results

Characteristics of respondents in the intervention group and the control group did not differ significantly. The mean age in the intervention group was 38.4 years and in the control group was 40.1 years. The mean working experience was 12.9 years in the intervention group and 18.1 years in the control group. The majority of samples had a diploma in nursing as their educational background. MPHN module effectiveness measure with knowledge scoring system that included basic concepts of MPHN, MPHN activities, roles, and functions of nurses. Score attitude included: basic concepts of MPHN, nursing care, home visits, and visits in the priority groups in this regard to the integrated health

service unit or *integrated service pos*t. Score skills included traffic in providing nursing care, home visits, visits in the priority groups, and the implementation of MPHN. By using an independent t-test, we found significant differences score of knowledge, attitude, and skills of nurses between the control and intervention groups.

TABLE 1: Scores of Knowledge, Attitude, Skills and Activities MPHN on Intervention Group (Post Training) and controls (n = 20).

Variables	Group	Mean	95%CI		p value
			Lower	Upper	
Knowledge	Intervention Control	91.33	23.56	44.3044.57	0
		57.4	23.29		
Attitude	Intervention Control	84.71	18.68	24.5624.55	0
		63.09	18.67		
Skills	Intervention Control	85.33	24.24	51.7652.05	0
		47.33	23.95		

4. Discussion

This study showed that MPHN training significantly increased nurses' knowledge, attitude, and skills. This is aligned with the results of systematic reviews conducted by Van Lonkhuijzen et al. (2010) that the training of nurses had positive impacts on the improvement of knowledge, skills, and behavior. Various methods were used by researchers for the training of MPHN, including classroom training accompanied by observation and practice in the field to obtain optimal results.

Nurses that had adequate knowledge were expected to perform with optimal maternal health promotion. Strass and Billay (2008) concluded that activities of nurses in the community were often associated with family and focus on health promotion practice, thus, put PHN in a crucial position to screen and assess mothers for antenatal risk factors.

Walker et al. (2014) conducted training of obstetric and neonatal emergencies, followed by the inter-professional team using the simulation method. The result suggested that exercise could improve knowledge and self-efficacy of health professionals. The knowledge, attitudes should support the optimal health services, and skills of health professionals, so that various complications of pregnancy, childbirth, or postpartum could be prevented and ultimately death could also be avoided.

Pregnancy and childbirth is a normal cycle in the lives of women but sometimes the pregnancy may be at risk if they do not optimally prepare through various health promotion programs that are usually available for pregnant women in health care centers. Harris et al. (2012) identified that women who attended the collaborative program were

less likely to give birth by cesarean section, had shorter hospitalization time and were likely to exclusively breastfeed than women with standard treatment.

5. Conclusions

MPHN module training team was effective in improving knowledge, attitudes, and skills of nurses. As a follow-up, impact evaluation of nurses training on health facilities and the utilization by a high-risk pregnant woman are a need.

References

[1] Amperaningsih, Y. 2013. "Kinerja perawat dalam pelaksanaan perkesmas."*JurnalKesehatan*, 4 (1): 5-9.

[2] Harris, S. J., P.A. Janssen, L. Saxell, E.A. Carty, G.S. Macrae, &K.L. Petersen. 2012. "Effect of a collaborative interdisciplinary maternity care program on perinatal outcomes."*Canadian Medical Association Journal* 184(17): 1885-1892.

[3] Kementerian Kesehatan Republik Indonesia. 2013. Rencana aksi percepatan penurunan angka kematian ibu di Indonesia. Jakarta: Kemenkes RI.

[4] Narchi, N. 2001. The exercise of essential competencies for midwifery care by nurses in Sao Paulo, Brazil. *Midwifery Journal Homepage*; www.elsevier.com.

[5] Strass, Peggy, and Ellen Billy. 2008. "A public health nursing initiative to promote antenatal health." *Canadian Nurse* 104, no. 2.

[6] Tafwidhah, Y. 2010. Hubungan kompetensi perawat puskesmas dengan tingkat keterlaksanaan keperawatan kesehatan masyarakat di kota Pontianak. *Tesis. Depok:* FIK UI. tidak dipublikasikan.

[7] Van Lonkhuijzen, L. Dijkman, A., van Roosmalen, J., Zeeman, G., & Scherpbier, A. 2010. "A systematic review of the effectiveness of training in emergency obstetric care in low-resource environments."*BOJ: An International Journal of Obstetrics & Gynaecology* 117(7): 777-787.

[8] Walker, D., S. Cohen, J. Fritz, M. Olvera, et al. 2014. "Team training in obstetrics and neonatal emergencies using highly realistic simulation in Mexico: Impact on process indicators."*BMC: Pregnancy Childbirth* 14: 367 doi: 10.1186/s12884-014-0367-1