

Patient Safety Analysis on Personal Nurse in Bogor District

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ABSTRACT

Background: World Health Organization (WHO) reported millions of patients around the world who suffering of threatening of injure even death due to the practical misleading in health. This circumstance might lead to undesirable event in practical midwife service including uncomforted, disability and death. This circumstance required the analysis of knowledge, attitude, motivation and behavior of midwife regarding patient Safety.

Aim: To investigate the effort in preventing undesirable condition by improving knowledge, attitude, motivation and behavior for patient Safety.

Study design: Cross sectional (Pre-Post Test) with partial least square assessment and cohort perspective without control (Pre-Post Test). Qualitative approach using *Rapid Assessment Procedure* (RAP).

Result: Patient Safety target was directly and indirectly effected toward patient Safety attitude following value 27.56%, knowledge 18,05%, behavior 14.16% and motivation for 12.15%.

Conclusion: Patient Safety attitude in personal midwife practice was formed by interaction between knowledge, attitude, motivation. Evaluation of Safety patient behavior shown it has been implemented in personal practice.

Keywords: Knowledge, Attitude, Behavior, and Patient Safety

INTRODUCTION

According to World Health Organization report, there were millions of patient threated by injury and inevitable death because of malpractice. There are five important issues related to safety in hospital namely: patient safety, medical personnel safety, building construction safety and medical instrument. It is in line with WHO (2004) about the obligatory of services dealing with patient service and safety which should be done by medical personnel¹. this target is motivated by the high number of Adverse Event (AE) in hospital either globally or regionally². In 2007 Hospital patient safety commission (KKP-RS) reported there were 145 patient safety incidences which was classified from AE 46%, and 2.8% from which were reported in West Java.

Midwife is the primary health service which close to the society. According to the division of Indonesian Medical Personnel from Ministry of Health 2015, the number of nurse was 352,003 which dominantly working at personal midwife practice in district. This is obvious that there might be problem and imbalance of nurse role in maintaining the risk of undesirable condition. This circumstance may be associated to the incidence of undesirable condition such as discomfort, incurred, disability and inevitably death.

MATERIAL AND METHOD

This study was conducted in quantitative method using analytic survey. It was designed as cross sectional study with Partial Least Square and Cohort study perspective without control. The construction of patient safety in personal midwife practice was performed by qualitative approach through Rapid Assessment Procedure (RAP) in order digging the phenomenon of patient safety in personal nurse practice. Qualitative data using Focused Group Discussion (FGD), in-depth interview on homogeny informant (6-7 persons). Informants was selected by

purposive random sampling method from each group based of agreement.

The sample population was from personal midwife practice (580 person), 40% of which was from Bogor Regency. Sample of this study was midwife from Bogor Regency (90 persons) from 3 districts (Cibinong, Cileungsi, and Gunung Putri) were 37, 30, and 23 persons respectively and distributed promotionally.

RESULT

According to the in-depth interview with midwife, that can be stated the basically standard concept of patient safety in hospital can be implemented in personal midwife practice.

In my opinion, standard of patient safety in personal midwife practice with patient safety in hospital should be equal, although the service is much more simple (S1)

From six targeted patient safety in hospital, there was five of which could be adopted in personal midwife practice regarding the service in both as basically the same ranging from registration, checking, maternity service, immunization, Family Planning (KB) service and drug administration.

'Based on the patient safety target in hospital, patient in personal midwife practice model on patient identification, effective communication, drug security, risk of infection, patient drop-fall risk (S3)

Regarding the procedure, process, and surgical places after interview should be modified into procedure place-related target e.g., the place of procedure and midwife.

According to (S4), procedure accuracy is necessary which could lead to the mistake such as episiotomy. This might prompt to hemorrhagic and etc.

It can be drawn into conclusion that basic in patient care could be medical and midwife care. Descriptive analysis result in order to find out score average from respondent in every indicator, so that can identify depict

primarily on Bogor regency regarding every patient safety-forming model variable in Table 1.

Table 1 shows that every target on patient safety has average of 6. This number of average represents and in line with respondent priority level.

Patient Safety in Personal Nurse Practice: The evaluation of significant inner model is set based on Smart PLS by evaluating the reflection of indicator *T* statistics toward variable is listed in Table 2.

The Effect of Direct and Indirect Variable: The evaluation of knowledge, attitude, motivation toward behavior is listed in Table 3.

Table 3 stated the target of patient safety affects directly and indirectly to behavior. Coefficient of analysis between patient safety target is directly affected (27.56%). Additionally, nurse knowledge and behavior also has direct effect 18.05%. attitude and behavior has direct effect (14.16). Motivation and behavior of patient safety shows direct effect about 12.15%.

Table 1: Indicator of description in patient safety on personal midwife practice.

Indicator	Average	Median	Sd	Minimum	Maximum
Patient Safety Target					
Patient identification	5,72	5	1,49	3	9
Effective communication	6,00	6	1,51	4	9
Drug security	6,10	6	1,69	3	9
Procedure and Treatment accuracy	6,10	6	1,69	3	9
Infection risk	5,99	5,5	1,59	3	9
Patient fall risk	5,96	6	1,40	4	9
Motivation					
Having target	7,46	8	1,80	4	10
Having Planning	5,50	5	1,62	3	9
Realization	5,46	5	1,42	3	8
Attitude					
Accepting	5,63	6	1,28	3	9
Responding	6,66	7	2,06	3	11
Respecting	7,24	7,5	1,78	4	11
Responsible	6,32	6	1,69	4	10
Knowledge					
	6,22	6	1,53	4	10
Behavior					
	6,93	8	1,63	4	9

Table 2. Evaluation of *t* Statistic value reflection to indicator from every variable

Significance analysis	Indicator	T-statistik	Reflection > 1.96
<i>T</i> Statistik	Patient Safety Target		
	Patient identification	31,68947	Significant
	Effective communication	32,66633	Significant
	Drug Security	24,64147	Significant
	Procedure and Treatment accuracy	18,74205	Significant
	Infection Risk	11,33158	Significant
	Patient Fall Risk	20,79953	Significant
	Attitude		
	Accepting	15,58897	Significant
	Responding	22,38854	Significant
	Respecting	16,40378	Significant
	Responsible	8,239998	Significant
	Motivasi		
	Having target	40,89387	Significant
	Having Planning	11,87469	Significant

Table 3. Percentage of effect between Variable and Variable of patient safety behavior

Variable	LV Correlation	Direct Path	Indirect Path	Total	Direct	Indirect	Total
Safety target	0,736260	0,374312	0,361948	0,7363	27,56%	2,28%	29,84%
Knowledge	0,567285	0,318154	0,0533	0,3715	18,05%	0,26%	18,31%
Attitude	0,672471	0,210515	0,0541	0,2646	14,16%	0,001%	14,16%
motivation	0,687609	0,176729	-	0,1767	12,15%	0,00%	12,15%
Total					71,9%	2,54%	74,5%

DISCUSSION

This study suggested that training on patient safety in personal midwife practice can increase their understanding in patient safety. This is in line with evaluation on training study for patient and student in Scotland³. General knowledge on patient safety and its concept may significantly affect combining with formal knowledge in higher education⁴. The realization of training on patient safety is utterly important in order to improve knowledge and eventually apply it in real.

The change of post-training in patient safety is still crude and unclear. Study on training duration successfully convinced that long duration showing significant improvement. The knowledge on patient safety is ranging from concept, basic right, philosophy, and target.

Patient safety implementation on nurse attitude: Training on relevant topic on patient safety completely significant in improving nurse attitude. This is also supported by study in Iran which shown 44% attitude after training for nurse⁵. The costume on patient safety, also known as Patient safety climate, is all of both individual and organization behavior based on the value to reduce the dangerous risk on patient⁶. Theoretically, this can be established by forming leadership, tim work, dedication, communication, and focus⁷. Nevertheless, some study also suggested this depend on profession, work unit, hospital and country^{8,9}. The costume on patient safety on midwife has strong attachment compare to doctor¹⁰. This is correlate on intensity and control¹¹.

Patient safety implementation on nurse motivation and behavior: midwife motivation on patient safety implementation promoted significantly after training due to the conscious in it (zero reporting for patient accident) which automatically be indicator of service. Motivation is primary in forming behavior¹¹. Motivation in Bogor regency is improving health service in order to persuade patient to visit personal midwife practice since this is one of probable profession for nurse.

After three-month observation post training model on patient safety the behavior on it was Improved (20%). This value is lower that observation in Oregon, Washington and California¹². Most respondents in this study were remain unsafe. The decision making is influenced by opinion paradigm. Confirmation bias, where individual experienced difficulty in adjusting opinion with fact or actual information¹³.

CONCLUSION

Behavior in patient safety in personal midwife practice is formed by interaction between knowledge, attitude and motivation. Training on relevant topic followed by

corresponding module can effectively promote behavior in patient safety and target. Evaluation on model showed that most midwife have implemented behavior in their practice. In regard to improve patient safety, nurse is recommended to arrange and stabilize the safety regulation.

Conflict of interest: The authors declare that there is no conflict of interest.

REFERENCES

1. World Health Organization. Management of drugs at health centre level: training manual. Brazaville, Republic of Congo: World Health Organization Regional Office for Africa 2004.
2. Shojania, K. G., & Thomas, E. J. Trends in adverse events over time: why are we not improving? *BMJ quality & safety*. 2013.22(4):273-277.
3. Halley, L. Evaluation of Patient Safety Training for Clinical Nurse Educators in NHS Scotland: enhancing knowledge and skills to improve care and safety for patients. Edinburg: NHS Education for Scotland 2010.
4. Brasaité, I. Health Care Professionals' Knowledge and Attitudes Regarding Patient Safety and Skills for Safe Patient Care 2016.
5. Azimi, L., Tabibi, S. J., Maleki, M. R., Nasiripour, A. A., & Mahmoodi, M. Influence of training on patient safety culture: a nurse attitude improvement perspective. *International Journal of Hospital Research*.2012.1(1):51-56.
6. Kohn, L., Corrigan, J., & Donaldson, M. To err is human: building a safer health system. National Academy of Science, Institute of Medicine 2002.
7. Sammer, C. E., Lykens, K., Singh, K. P., Mains, D. A., & Lackan, N. A. What is patient safety culture? A review of the literature. *Journal of Nursing Scholarship*, 2010.42(2), 156-165
8. Fujita, S., Seto, K., Ito, S., Wu, Y., Huang, C.-C., & Hasegawa, T. The characteristics of patient safety culture in Japan, Taiwan and the United States. *BMC health services research*. 2013,13(1).
9. Nie, Y., Mao, X., Cui, H., He, S., Li, J., & Zhang, M. (2013). Hospital survey on patient safety culture in China. *BMC health services research*. 2013. 13(1), doi:10.1186/1472-6963-13-228.
10. Bondevik, G.T., Hofoss, D., Hansen, E.H., Deilkas, E.C.T. Patient safety culture in Norwegian primary care: a study in out-of-hours casualty clinics and GP practices. *Scandinavian journal of primary health care*.2014.32(3):132-138.
11. Javadi, M., Kadkhodae, M., Yaghoubi, M., Maroufi, M., Shams, A. Applying Theory of Planned Behavior in Predicting of Patient Safety Behaviors of Nurses. *Materia Socio-Medica*,2013 25(1): 52-55.
12. Veltman, L.L. Disruptive behavior in obstetrics: a hidden threat to patient safety. *American Journal of Obstetrics and Gynecology*, 2007.196(6):587.
13. Weinstein, N. D., & Sandman, P. M. The precaution adoption process model and its application. *Emerging theories in health promotion practice and research*. Jossey-Bass, San Francisco. 2002.16-39.