

Factors Related to Behavior in Implementing Patient Safety in Nurses

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ABSTRACT

Patient safety is an important component in care and measures to improve the quality of service quality. The strategy of implementing patient safety has been carried out with various efforts in the hospital environment. The highest number of patient safety data by province in Banten is 125 reports, and Jakarta is 105 reports. This study aimed to determine factor-factors related to the behavior of the application of patient safety to the nurse in the Emergency Room Installation of RSUD dr. Dradjat Prawiranegara in 2018. The study design was cross sectional in which the samples were taken by total sampling method. The study population was nurses in the emergency room of RSUD dr. Dradjat Prawiranegara Serang numbered 37 people. Data collection using a questionnaire. Univariate research results showed that of 37 respondents 30 respondents (81.1%) had a good level of knowledge, 21 respondents (56.8%) had positive attitudes, 30 respondents (81.1%) had years of service ≥ 5 years, and 20 respondents (54.1%) have good behavior. Bivariate analysis results show that there is a significant relationship between knowledge (P value = 0.002), attitude (P value = 0.003) and work period ≥ 5 years (P value = 0.027) with the application of patient safety behavior to nurses. Researchers expect that the hospital able to refresh the application of patient safety to all nurses on a regular basis every six months.

Keywords: Patient Safety, Knowledge, Attitude, Years of Service, and Behavior in The Application of Patient Safety

Cite this as: Supriatin E, Lindayani L. Factors Related to Behavior in Implementing Patient Safety in Nurses. Dunia Keperawatan: Jurnal Keperawatan dan Kesehatan. 2021;9(1):55-63.

BACKGROUND

The hospital has the main task of providing health services by providing protection to all parties, especially protection to patients. Every patient in a particular hospital needs a guarantee of safety, especially in handling his health. For this reason, standard handling is needed so that actions do not occur outside the standard of patient care, which in turn endanger the lives and safety of patients (1).

The hospital is one of the health facilities that provide health services to the community has a very strategic role in accelerating the improvement of the degree of public health, especially in the application of patient safety (Patient Safety). Improving the level of health that provides quality services from hospitals must be in accordance with established standards and can reach a layer of society (Rinami, 2015). Patient safety is a very serious global health problem. In recent years, countries have realized the importance of patient safety. In 2016, WHO member countries agreed on a World Health Assembly resolution on patient safety. Many countries in the world are trying to develop to improve the

quality and safety of services. Governments in various countries also recognize the importance of educating health professionals by providing an understanding of the principles and concepts of patient safety (2).

Patient safety is an important component in care as well as steps to improve the quality of service quality (Findyartini et al, 2015). Hospital quality assessments are obtained through an accreditation system, one of which is the goal of patient safety because it has become a priority for health services throughout the world (3). One step to improve the quality of service through the application of patient safety in hospitals. The strategy of implementing patient safety has been carried out with various efforts in the hospital environment. The Hospital Accreditation Commission explains that the application of patient safety must meet the accuracy of patient identification, increase effective communication, increase drug safety that needs to be watched out, certainty of right location, right procedure, right patient operation, reduction of the risk of infections related to health services and reduction of the risk of falling patients (4). While Join

Commission International and WHO have also issued "Nine Life-Saving Patient Safety Solutions". In fact, there are still many patient safety issues despite being accredited in all countries in the world (3,4).

Based on several studies in the measurement of Patient safety reporting in several hospitals in the world that have been JCI accredited. Pham JC et al's study was conducted in 11 hospitals from 5 countries, there were 52 patient safety incidents, namely Hong Kong 31%, Australia 25%, India 23%, America 12% and Canada 10% (5). While in Brazil the incidence of adverse events in hospitals is estimated at 7.6% (6). From some of the results of this study that patient safety incidents are still commonly found in various countries, including in Indonesia. Data reporting in Indonesia about patient safety incidents has not been done by hospitals in Indonesia. Data owned by KKP-RS from September 2012-2017 based on the type of incident; Unexpected Events (KTD) totaling 249 reports, KNC totaling 283 reports. Based on the unit of cause; 207 nursing reports, 80 pharmaceutical reports, 41 laboratory reports, 33 doctor reports and 25 infrastructure reports. Data by province is 125 reports in Banten, Jakarta 105 reports and the lowest in Riau 5 reports, while in Jambi 1-6 patient safety incidents occurred in one year (7). Based on hospital ownership; Government 108, private 290 reports, TNI / Polri 9 reports (8).

Based on several studies related to the application of patient safety in hospitals that have been accredited in 2017 version in Indonesia (9). Research in government hospitals in Semarang that 56.2% of mentoring in Patient safety is still not good, while in private hospitals Malang Waluya Sawahan by Bernadeta reported unexpected events (KTD) 9 incidents (41%), Nearly Injury Events (KNC) 6 incidents (27%), Potential Injury Events (KPC) 5 incidents (23%), Non-Injury Events (KTC) 2 incidents (9%). Patient safety incident data is still commonly found in both public and private hospitals even though they have passed accreditation, so that it can have a negative impact on health services (10)

Patient safety in hospitals is a form of health care for patients in hospitals that is safe and does not harm patients. All components of

hospital health services include doctors, nurses and other health workers (11). According to WHO patients taken to the emergency room are at risk of experiencing an unexpected event (KTD). Therefore, nurses have an important role in providing health services to patients, thereby ensuring patient safety and reducing unwanted events (KTD) in hospitals (12).

The impact caused by hospitals not implementing patient safety can result in a decrease in the quality of hospital services. Swift's research at a United States hospital found that patients who experienced an unexpected event (KTD) resulted in a cost of about \$ 500,000 or insured of \$ 1 million in trouble (13). Research by Gerven et al. (2016) that around 15% of health professionals consider leaving their profession due to mistakes made (14). These health professionals are more likely to be experienced by nurse services, so health services require nurses to change nurses' behavior in providing care and nursing actions.

Nurse behavior in implementing Patient safety is influenced by various factors that contribute to patient safety incidents. This was also expressed by Anderson & Kodate (2015) which stated the factors that influence patient safety involve predisposing factors, namely the knowledge of nurses, nurses' attitudes and length of work of nurses in a hospital. The role of nurses in providing care and nursing action is expected to be able to overcome the problems that arise as a result of errors in the process of patient identification. Nurse compliance in complying with patient identification procedures influences patient safety. Patient safety explains that the identification process aims to double check that is to identify patients as individuals who will receive services or treatment and adjustments between services or treatments provided to the individual (15). In carrying out their role, nurses may make mistakes.

According to Lombagia the behavior of nurses with the ability of nurses is very important in the implementation of patient safety. Unsafe behavior, forgetfulness, lack of attention / motivation, carelessness, inaccuracy and abilities that do not care about and maintain patient safety are at risk for errors and will result in injury to patients, in

Nurse Knowledge Level

Table 1. Frequency Distribution of Nurses' Knowledge Level in the Implementation of Patient Safety in IGD RSUD dr. Dradjat Prawiranegara 2019

Knowledge	amount	Percentage
Good	30	81.1%
Less	7	18.9%
Total	37	100%

Responden who have a good level of knowledge are 30 respondents (81.1%). While the other 18.9% have less knowledge. This means that almost all respondents have a good level of knowledge.

the form of Near Miss (KNC) or Adverse Event (Unexpected Events / KTD) further error reduction can be achieved by modifying the behavior (17). Nurses must involve cognitive, affective and actions that prioritize patient safety.

Based on preliminary studies conducted by observation of 10 nurses in the emergency department of RSUD dr. Dradjat Prawiranegara Serang, obtained data that from 10 nurses, 3 of them were able to implement patient safety-centered actions, such as identifying patients, applying therapeutic communication when taking action, administering drugs according to principle 7 correctly, doing 5 moments of hand washing, and attaching bed boards to patients at risk of falls (18). However, during the next observation there were 7 other nurses who still did not apply patient safety when performing nursing actions, such as 3 nurses did not put a yellow clip on the patient's identity bracelet indicating the patient was a risk of falling, then there were 2 nurses who did not put a red clip on the patient's identity bracelet indicating that the patient was a patient who was detected a drug allergy, then

the results of subsequent observations were 2 nurses who did not wash their hands 5 moments in performing nursing actions to patients at risk of causing infections in patient. The purpose of this study is to Identify factors related to the behavior of the application of patient safety to the nurse in the Emergency Room Installation of RSUD dr. Dradjat Prawiranegara Serang Regency 2018.

METHOD

This type of research used in this research is descriptive analytic with cross sectional approach. This research has been carried out in the emergency room of RSUD dr. Dradjat Prawiranegara Serang in December 2018 until January 2019. The population in this study were all nurses in the emergency room of RSUD dr. Dradjat Prawiranegara. Sampling using total sampling so that the samples in this study were all nurses in the emergency room of RSUD dr. Dradjat Prawiranegara with 37 respondents. Research data obtained through filling out questionnaires that have been developed by researchers. The research data were analyzed univariately and bivariately using the Chi-Square method.

Nurse's Attitude

Table 2. Frequency Distribution of Nurses' Attitudes in the Implementation of Patient Safety in IGD RSUD dr. Dradjat Prawiranegara 2019

Attitude	amount	Percentage
Positive	21	56.8%
Negative	16	43.2%
Total	37	100.0 %

Respondents who have a positive attitude are 21 respondents (56.8%). While 16 other respondents (43.2%) had negative attitudes. This means that most of the respondents have a positive attitude.

Period of Nurse Work

Table 3. Frequency Distribution of Nurses' Length of Service in the Implementation of Patient Safety in IGD RSUD dr. Dradjat Prawiranegara 2019

Years of service	amount	Percentage
<5 years	7	18.9%
≥ 5 years	30	81.1%
Total	37	100.0 %

Respondents who have a long work period (≥ 5 years) are 30 respondents (81.1%). Whereas 7 other respondents (18.9%) had a new tenure (<5 years). This means that almost all respondents have a long work period (≥ 5 years).

RESULTS AND DISCUSSION**Overview of Nurses Knowledge Distribution about the application of patient safety in IGD RSUD dr. Dradjat Prawiranegara.**

Based on the results of research that respondents who have a good level of knowledge are 30 respondents (81.1%). While the other 18.9% have less knowledge. This means that almost all respondents have a good level of knowledge. From the research results obtained, nurses already know many things about patient safety because all nurses in the emergency room of RSUD dr. Dradjat Prawiranegara has followed a patient safety-themed morning refreshment, but in its implementation there are still nurses who do not know what elements are in the patient safety goals, what are the steps taken in implementing patient safety, what are the indicators contained in safety patient (patient safety).

Good nurse knowledge is caused by the level of education and experience possessed by nurses. The level of education and experience

is one of the factors that influence nurses' knowledge. Nurse education level in the emergency room of RSUD dr. Dradjat Prawiranegara. In their daily education, a person is related to social life and behavior in providing nursing actions. The higher one's education, the better one's behavior will be. Therefore, nurses who have a high level of education tend to have a good level of knowledge (19).

The results of research conducted by Yulianto about the level of knowledge of nurses about falling risk assessment showed the results of the study 81.5% of respondents had a good level of knowledge while the remaining 18.5% of respondents had a sufficient level of knowledge (20). Knowledge is an important factor in someone making a decision. A person's knowledge can prevent himself from events that he does not want, for example nurses who have a good level of knowledge can carry out patient safety well because all the actions that will be carried out at risk can be anticipated in advance with the knowledge they have.

Nurse Behavior

Table 4. Frequency Distribution of Nurse Behavior in the Implementation of Patient Safety in IGD RSUD dr. Dradjat Prawiranegara 2019

Behavior	amount	Percentage
Good	20	54.1%
Less	17	45.9%
Total	37	100.0%

Respondents who have good behavior are 20 respondents (54.1%). While 17 other respondents (45.9%) had poor behavior. This means that most of the respondents have a positive attitude.

Relationship between level of knowledge and nurses' behavior in the application of patient safety.

Table 5. The Relationship between Nurses' Knowledge Level and the behavior of the application of patient safety in IGD RSUD dr. Dradjat Prawiranegara Serang

Knowledge level	Nurse Behavior				Total		OR	<i>p value</i>
	Less		Good					
	n	%	n	%	n	%		
Less	15	65.2%	8	34.8%	23	100%	5,011	0.002
Good	3	21.4%	11	78.6%	14	100%		
Total	18	48.6%	19	51.4%	37	100%		

In this study, knowledge related to the behavior of the application of patient safety in nurses has a meaningful relationship.

Good nurse knowledge will affect the level of nurse compliance thereby reducing the risk of falling on the patient. A fall risk assessment can be done since registering, using the Morse scale. experience, knowledge and sources of information are things that affect the nurse foresight in assessing the risk of falling. information sources here are obtained in trainings, seminars or workshops on the risk of falling patients. in training nurses equipped with knowledge, skills and experience related to patient safety (21). In this study related knowledge with the behavior of the application of patient safety in nurses have a meaningful relationship. There is a significant relationship between the level of knowledge with the behavior of the application of patient safety in nurses in the emergency room of RSUD dr. Dradjat Prawiranegara Serang.

Overview of Nurses' attitudes about the application of patient safety in IGD RSUD dr. Dradjat Prawiranegara.

Based on the results of research that respondents who have a positive attitude are 21 respondents (56.8%). While 16 other respondents (43.2%) had negative attitudes. This means that most of the respondents have a positive attitude. From the research results obtained, nurses have adopted a positive attitude, but in the implementation there are still nurses who do not apply patient safety-centered actions, something that is often apparent at the time of the study is that there are still many nurses who forget to wash their hands both before and after doing Act on the grounds that you have used Handscoon. Another thing that is also seen is the lack of effective communication used by nurses in taking action.

Relationship between attitude and nurses' behavior in the application of patient safety

Table 6. The relationship of nurses' attitudes with the behavior of the application of patient safety in IGD RSUD dr. Dradjat Prawiranegara Serang

Attitude	Nurse Behavior				Total		OR	<i>p value</i>
	Less		Good					
	n	%	n	%	n	%		
Negative	1 1	61.1%	7	38.9%	18	100%	4019	0.003
Positive	4	21.1%	1 5	78.9%	19	100%		
Total	1 5	40.5%	2 2	59.5%	37	100%		

In this study the behavior of nurses related to the behavior of the application of patient safety in nurses has a meaningful relationship.

Relationship of work period with nurse behavior in the application of patient safety

Table 7. The relationship between nurses' working period and the behavior of the application of patient safety in IGD RSUD Dr. Dradjat Prawiranegara Serang

Years of service	Nurse Behavior				Total		OR	<i>P value</i>
	Less		Good		n	%		
	n	%	n	%				
<5 years	13	92.9%	1	7.1%	14	100%	10,000	0.027
≥ 5 years	10	43.5%	13	56.5%	23	100%		
Total	23	62.2%	14	37.8%	37	100%		

In this study related to the working period with the behavior of the application of patient safety in nurses have a meaningful relationship.

According to Newcomb in Notoatmodjo stated attitude is the readiness or willingness to act, and not the implementation of certain motives. Attitude is not an action or activity, but it is a predisposition to an action. That attitude is still a closed reaction, not an open reaction or open behavior (22).

The attitude of nurses to realize that the importance of implementing patient safety in the scope of emergency nursing is important to improve health status, and service in hospitals. In this case a positive attitude adopted by nurses can lead to good behavior in the application of patient safety to nurses. But the attitude that has been formed in a person will not change just like that, because the formation of a very complex attitude that is closely related to factors from within and from outside the individual (23).

The attitude of nurses to realize that the application of patient safety is important to improve health services in hospitals, because a positive attitude can lead to good behavior in nurses in implementing patient safety. But the attitude that has been formed in the nurse will not change just like that, because the formation of a very complex attitude that is closely related to factors from within and from outside the individual. The formation of a positive attitude from nurses in implementing patient safety does not guarantee that nurses to behave well in the application of patient safety. The formation of a positive attitude from nurses towards health services does not guarantee a person is able to behave well in the application of patient safety. Based on the bivariate test results showed that there was a significant relationship between attitude and behavior of the application of patient safety in nurses in the emergency room of RSUD dr. Dradjat

Prawiranegara Serang. This shows that the more positive attitude set by the nurse, the better the nurse's behavior in implementing patient safety.

Distribution of Nurses' tenure about the implementation of patient safety in the IGD RSUD dr. Dradjat Prawiranegara.

Based on the results of research that respondents who have a long service life (≥5 years) are 30 respondents (81.1%). Whereas 7 other respondents (18.9%) had a new tenure (<5 years). This means that almost all respondents have a long work period (≥5 years). Working period is the period of time people have worked for an organization, institution and so on. The length of service of a person in the organization needs to be known because work tenure is one indicator of the tendency of workers to carry out their work activities. For example in order to work productivity, the longer a person works, the higher his productivity is because he is more experienced and has good skills in completing the tasks entrusted to him (24).

Long working period will tend to make someone feel at home in an organization because it has adapted to the environment long enough so that it will feel comfortable and have gained a lot of experience in conducting risk assessment of falls on patients so as to avoid unwanted events in the future.

Description of Nurse Behavior Distribution about the application of patient safety in the IGD RSUD dr. Dradjat Prawiranegara.

Based on the results of research that respondents who have good behavior are 20 respondents (54.1%). While 17 other respondents (45.9%) had poor behavior. This means that most of the respondents have a positive attitude. From

the research results obtained, nurses have implemented good behavior, but in the implementation there are still nurses who behave unfavorably in implementing measures that are centered on patient safety, which is often apparent at the time of research namely on reducing the risk of infections related to health services for example there are nurses who do not wash their hands properly in accordance with the five moments, then other things that are often seen in terms of improving effective communication such as nurses still have not made effective communication in implementing patient safety.

Individual behavior does not arise by itself, but as a result of stimulation (stimulus) both from within himself (internal) and from outside the individual (external). In essence, individual behavior includes overt behavior and inert behavior or covert behavior (26).

Behavior of nurses to realize that the importance of applying patient safety determined by the knowledge, attitude, length of work of nurses as well. In addition, the availability of facilities and behavior of health workers will also support and strengthen the formation of behavior. A nurse who does not want to apply patient safety is because the person does not yet know the benefits of the patient safety program for herself and others. The better the behavior that is implemented by nurses, the better the application of patient safety in the hospital environment so that things that are associated with an unwanted event will not occur.

Based on the bivariate analysis, it was found that there was a significant relationship between the length of work with the behavior of the application of patient safety in nurses in the emergency room of RSUD dr. Dradjat Prawiranegara Serang. The longer a person works, the more skilled he is in carrying out the work (27). Someone who has long served in an organization has a high level of satisfaction. This was also stated by Harry (2014), that the longer a person works, the more cases he handles so the more his experience increases, conversely the shorter the person works, the fewer cases he handles. Much work experience gives awareness to a nurse to take an action in accordance with established procedures. This is consistent with

research conducted by Bawelle which states experience is one of the factors of compliance. Thus the longer a person works, the better his knowledge so that he will be more obedient in carrying out work.

LIMITATIONS

This study has limitations including cross sectional data collection methods with total sampling so is expected to improve research methods for multivariate related to the number of samples, further research carried out in other places with the implementation of interventions related to nurses' attitudes.

ETHICAL CONSIDERATION

The informed consent form described the purpose of the study, screening criteria of participants, inconvenience and solutions during the procedure, expected benefits, confidentiality, subsidy and damage compensation, withdrawal or suspension and rights of subjects. After the study, the filled questionnaires were kept safely and locked in a private room by the first author. Data will be destroyed 10-15 years after data retention. Research permit number 009 / TU 269/1/2018.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest

SOURCE OF FUNDING

The authors declare that this study received no funding.

ACKNOWLEDGMENT

Special thanks to Faletchan University for valuable support.

CONCLUSION

Based on the research it was found that there was a significant relationship between the level of knowledge, attitudes and years of service on the behavior of the application of patient safety to nurses in the emergency room of RSUD dr. Dradjat Prawiranegara Serang. So it can be concluded that knowledge, attitudes of nurses and years of service are factors that can influence the application of patient safety.

The hospital refreshes the application of patient safety to all nurses on a regular basis every six months. As well as making the

application of patient safety (patient safety) into a new employee orientation program, especially for new nurses so that nurses can always apply patient safety at work. Future studies can examine the factors that influence

nurses' compliance in the implementation of prevention of falling risk for patients such as work experience and examine a wider range of samples.

REFERENCES

1. Departemen Kesehatan RI Sekretariat Jenderal. Pedoman Teknis Sarana dan Prasarana Rumah Sakit Kelas C. Jakarta. 2017.
2. Departemen Kesehatan RI KKP RS. Panduan Nasional Keselamatan Pasien Rumah Sakit (Patient Safety) Edisi 2. 2017.
3. Duarte, Euzebia, dan Santos. 2017. Hubungan Pengetahuan dan Motivasi Terhadap Kinerja Perawat dalam Penerapan Program Patient Safety di Ruang Perawatan Inap RSUD Andi Makassar Kota Parepare. Universitas Hasanudin: Makasar.
4. Kemenkes RI. Standar Akreditasi Rumah Sakit Edisi 1. Jakarta. 2011.
5. World Health Organization. Patient Safety Curriculum Guide Multi Professional Edition. WHO. 2017.
6. Joint Comission International. Hospital Patient Safety Goals. 4th Edition. Oarkbrook Terrace-Illinois: Department of Publication Joint Comission Resources. 2017.
7. Bawelle, S. C. Hubungan Pengetahuan Dan Sikap Perawat Dengan Pelaksanaan Keselamatan Pasien (Patient Safety) Di Ruang Rawat Inap RSUD Liun Kendage Tahuna. Universitas Sam Ratulangi : Manado. 2013.
8. Lombagia, Angelita. Hubungan Perilaku dengan Kemampuan Perawat dalam Melaksanakan Keselamatan Pasien (Patient Safety) di Ruang Akut Instalasi Gawat Darurat RSUP Prof. Dr. R. D. Kandou Manado. Skripsi. Universitas Sam Ratulangi Manado: Manado. 2016.
9. Notoatmodjo, S., Kesehatan Masyarakat Ilmu dan Seni, Jakarta: Rineka Cipta, 109-112. 2010.
10. Notoatmodjo, S. Metodologi penelitian kesehatan. Jakarta: Rineka Cipta. 2012.
11. Nurmalia dan Nivalinda. Pengaruh Pengetahuan dan Sikap Perawat terhadap Penerapan Standar Keselamatan Pasien di Instalasi Perawatan Intensif RSUD Dr. Moewardi. Tesis Universitas Sebelas Maret: Surakarta. 2017.
12. Rinami. Evaluasi Penerapan Patient Safety Risiko Jatuh Unit Gawat Darurat Di Rumah Sakit Panti Rini Kalasan Sleman. Skripsi. Yogyakarta: STIKES Aisyi'ah Yogyakarta. 2015.
13. Setiowati, Dwi. Hubungan Kepemimpinan Efektif Head Nurse dengan Penerapan Budaya Keselamatan Pasien oleh Perawat Pelaksana di RSUPN DR. Cipto Mangkusumo Jakarta. Tesis. Universitas Indonesia: Jakarta. 2010.
14. Sunaryo. Psikologi Untuk Keperawatan. Jakarta: EGC. 2014.
15. Susanti, R. Hubungan Pengetahuan Dengan Kepatuhan perawat Melaksanakan Standar Prosedur Operasional Menurunkan Risiko Cidera akibat Jatuh di Ruang Perawatan Dewasa RSUD DR Moewardi. Surakarta. 2015. Di akses tanggal 28 Desember 2018 dari <http://digilib.stikeskusumahusada.ac.id/files/disk1/22/01-gdl-rantisusan-1093-1-skripsi-f.pdf>
16. Wawan, A & Dewi, M. Teori & Pengukuran Pengetahuan, Sikap, dan Perilaku Manusia: Dilengkapi Contoh Kuesioner. Yogyakarta: Nuha Medika. 2011.
17. Delamater, A.M. Improving patient adherence. Clinical diabetes, 24 , 71-77. <http://www.clinical.diabetesjournal.org> 2018.
18. Dimkovic, N., & Oreopoulos, D.G. Chronic peritoneal dialysis in the elderly:

- A review. *Peritoneal Dialysis International*, 20. 2014.
19. Guthrie, D.W., & Guthrie, R.A. Nursing management of diabetes mellitus: Guide to 2015.
 20. Pardamean, E., & Dharmady, A. Depression and negative effect of psychosocial stressor between controllable and uncontrollable diabetic mellitus at Cipto Mangunkusumo National General Hospital. *Majalah Kedokteran Atma Jaya*, vol 2, (1): 61-66. 2013.
 21. Pardamean, E., & Dharmady, A. Depression and negative effect of psychosocial stressor between controllable and uncontrollable diabetic mellitus at Cipto Mangunkusumo National General Hospital. *Majalah Kedokteran Atma Jaya*, vol 2, (1): 61-66. 2016.
 22. Sarafino, E.P. *Health psychology: Biopsychosocial interaction* (2nd ed.), New York: John Willey & Sons Inc. 2017.
 23. Skarbek, E.A. Psychosocial predictors of self care behaviors in type 2 diabetes mellitus patients: Analysis of social support, self-efficacy, and depression. 2016. <http://web.ebscohost.com>
 24. Taylor, S.E. *Health psychology* (6th.Ed.), Singapore: Mc. Graw Hill Book Company. 2016.
 25. Williams, K.E., & Bond, M.J. The roles of self-efficacy, outcome expectancies and social support in the self-care behaviors of diabetes. *Psychology, Health & Medicine*, 7(2), 127-141. 2015.
 26. Wu Shu Fang. Effectiveness of self management for person with type 2 diabetes following the implementation of a self-efficacy enhancing intervention program in Taiwan. Queensland: Queensland university of Technology. 2017.