



Analysis of nurses' knowledge, attitudes, and behavior toward Hepatitis prevention and transmission in Jabodetabek Regional Hospitals

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Abstract

Hepatitis is an infectious disease with a fairly high incidence rate in society. This problem can be reduced by increasing health education activities that all parties, including nurses, can carry out. Nurses are expected to be able to provide information about hepatitis through health education to patients in hospitals to suppress transmission of the disease. This research aims to analyze nurses' knowledge, attitudes, and behavior in providing health education to Hepatitis patients regarding the prevention and transmission of Hepatitis at the Jabodetabek Regional Hospital. This research uses a descriptive-analytical design with a cross-sectional approach with quantitative methods. This study showed that 52.3% of respondents had poor knowledge, and 47.7% had good knowledge about providing education on the prevention and transmission of Hepatitis to patients at Jabodetabek regional hospitals. There is a significant relationship between experience and nurses' knowledge about Hepatitis health education with a P value of 0.000 ($P < 0.05$), and there is no significant relationship between education and knowledge, education and nurses' attitudes, education and nurses' behavior, experience and nurses' attitudes and Experience with nurses' behavior regarding preventive health education and transmission of Hepatitis in patients at Jabodetabek regional hospitals. Providing health education to patients is one of the roles of nurses that must be carried out to increase patient satisfaction with the nursing care provided. Adequate compliance and knowledge of nurses can improve implementation in providing health education for Hepatitis patients regarding the prevention and transmission of the disease.

Keywords: Nurses, health education, Hepatitis patients

Introduction

Law of the Republic of Indonesia Number 36 of 2014 concerning health workers is every person who dedicates themselves to the health sector and has knowledge and/or skills through education in the health sector, which, for certain types, requires the authority to carry out health efforts. Promotive, preventive, curative, and rehabilitative activities are part of health efforts that nurses can carry out to support and improve the health status of patients in the healthy and sick range^[1].

Promotive activities through health education provide patients with information about their disease, such as treatment, how to prevent and transmit it, complications, and disease development. Prevention can be carried out through health promotion actions and education for the patient and the patient's family. Health education is an activity or effort to convey health messages to individuals, groups, or communities, where these activities consist of input, process, and output^[2]. Behavior to maintain and improve health is the expected result of health education in the community^[3].

In improving the level of health in Indonesia, the government has made several efforts to deal with infectious diseases such as infectious diseases which, if not treated immediately, can cause death, for example, Hepatitis. This viral hepatitis has the potential to cause disease and mortality impacts, which can reduce the quality of life, productivity, and life expectancy, so further treatment is needed to reduce the number of hepatitis sufferers.

Some complications resulting from Hepatitis are liver cancer, liver cirrhosis, and death. The World Health Organization (WHO) estimates that 1 in 3 people in the world have been infected with Hepatitis B or Hepatitis C, and 1.3 million people died from this disease in 2015^[4].

The prevalence of Hepatitis B is highest in the West Pacific and African regions, namely 6.2% and 6.1% of the total adult population. Meanwhile, in the Eastern Mediterranean, Southeast Asia, Europe, and America, respectively, it is 3.3%, 2%, 1.6%, and 0.7% of all populations^[5].

Nationally, the prevalence of Hepatitis cases is increasing in all regions of Indonesia. The prevalence of hepatitis in Indonesia is 0.4%, an increase from 0.2% in 2013. Papua Province is in first place with the most Hepatitis cases, namely 0.7%. The Special Capital Region of Jakarta also experienced an increase in Hepatitis cases, 0.5% in 2018 and 0.3% in 2013.

Three main things that need to be emphasized in hepatitis are the pattern of transmission, the risk of becoming chronic, and the carrier nature of the type of virus that causes it. Providing health education to patients with hepatitis is a preventive measure to prevent transmission. Efforts to prevent transmission of hepatitis play a major role in the management of these three types of hepatitis viruses. Therefore, it is hoped that patients and families know how to transmit hepatitis and can prevent hepatitis.

Health education is important for all staff, especially nurses with direct contact with patients 24 hours a day. Within the hospital environment (Hospital Health Promotion), which is aimed at patient families and visitors, one of which is health education about hepatitis. Because hepatitis is at risk of becoming a source of infection to other people, nurses are expected to carry out health education activities related to how to prevent and transmit hepatitis to patients and families.

Nurses have a role as educators or health education providers for patients or families to increase patient knowledge to improve health^[6]. Through the role of nurses, it is hoped that the level of knowledge and behavior of

patients and families can increase, demonstrate adaptive behavior, and maintain a healthy environment so that the highest level of health for Indonesian society can be realized.

In the researcher's unstructured interview with the head of the room in the medical-surgical ward of a private hospital in Jakarta, information was obtained that nurses had not optimally provided health education to patients and families about the transmission and prevention of hepatitis. Based on the above phenomenon, the author wants to know the factors related to nurses' behavior in providing health education to hepatitis patients in Jakarta.

The high incidence of Hepatitis in the community can be reduced by increasing health education activities that can be carried out by all parties, including nurses. Nurses should provide information about hepatitis through health education, but in reality, when patients are treated, not all hepatitis patients receive information from nurses about the hepatitis experienced by the patient. Based on the problems above, this research problem is formulated as follows: what is the knowledge and behavior of nurses in providing health education to Hepatitis patients regarding the prevention and transmission of Hepatitis at the Jabodetabek Regional Hospital? To analyze the knowledge and behavior of nurses in providing health education to Hepatitis patients regarding the prevention and transmission of Hepatitis at the Jabodetabek Regional Hospital.

Literature Review

A nurse has graduated from higher education in nursing at home and abroad, which is recognized by the government by statutory provisions ^[7]. Nursing is a form of professional service that is an integral part of health services based on nursing knowledge and tips aimed at individuals, families, and communities, both sick and healthy ^[8]. Behavior is the result of experience and the process of interaction with the environment, manifested in knowledge, attitudes, and actions. Human behavior is all activities or activities of humans themselves, both those that can be directly observed and those that cannot be observed by outside parties ^[9]. Nurses providing health education is a behavior, namely carrying out activities/activities providing information to individuals, groups, or the community.

Health education is an effort to influence individuals, groups, families, or communities to realize healthy living behavior. Health education is a beneficial experience obtained by individuals, communities, and nations that influences knowledge, attitudes, and habits ^[10]. From the definition above, it can be concluded that health education is an activity or effort to influence individuals, groups, or communities to demonstrate healthy living behavior. Nurses in providing health education need to understand their strengths in carrying out health nursing practices that make patient teaching a form of nursing care. Health education activities are influenced by several factors, namely teachers, students, objectives, situations, and facilities.

The scope of health education based on health aspects ^[11] is promotive and preventive. In general, health education aims to change individual or community behavior in the health sector ^[12], which can be explained as follows: a) Health is made into something of value; b) Helping individuals or groups to independently carry out activities to achieve healthy living goals; and c) Increasing the availability of

facilities and infrastructure and appropriate use of existing health service facilities.

Based on the study results, it was found that there is no specific treatment to eliminate the Hepatitis virus. Prevention is one of the most effective efforts. Hepatitis prevention can be done by educating patients about the prevention and transmission of hepatitis. Health education is an effort that can help individuals form healthy living behaviors to prevent transmission of hepatitis.

In principle, there are two ways to prevent the Hepatitis A Virus by breaking the chain of transmission of this disease ^[13], namely: a) Making sure that feces containing the hepatitis A virus do not pollute the environment; b) Providing immunity to high-risk individuals or groups through vaccination (active immunity) or immunoglobulin G (passive immunity). There are three ways of transmitting hepatitis A ^[14], namely through: a) Direct contact with patients suffering from hepatitis A (person to person); b) Consuming food or drinks contaminated with the Hepatitis A Virus; c) Through blood products, for example, blood transfusions and sharing needles (this method of transmission is rare).

The risk factors for contracting Hepatitis B are related to habits and lifestyle, such as sexual activity, a promiscuous lifestyle, and work that allows contact with the patient's blood and material. Prevention of transmission of the Hepatitis B Virus can be done by improving hygiene and sanitation, carrying out virucidal sterilization for medical equipment used in parenteral procedures, and HBsAg screening for pre-transfusion blood and also for other blood products such as albumin ^[15]. There are two ways of transmitting hepatitis B ^[16]: horizontal and vertical.

The most efficient way of transmitting Hepatitis is through injections contaminated with blood, for example, when using injectable drugs. Sharing tools, such as needles, razors, toothbrushes, and nail clippers, can be a potential place to spread the Hepatitis C virus. When doing manicures, tattoos, and body piercing, ensure the tools used are sterile ^[17]. According to Noto Atmodjo and Soekidjo, ^[18] human behavior is influenced by three factors, namely: a) Predisposing / supporting factors (Predisposing Factors), b) Enabling Factors, which include the availability of facilities and infrastructure, and c) Reinforcing Factors which include laws, regulations, policies and the existence of behavioral examples (references) from officers.

Benjamin Bloom ^[19] states that human behavior is formed from knowledge, attitudes, and skills. According to Bloom, knowledge results from learning through the senses of sight, hearing, smell, and taste. Knowledge will reinforce individuals in every decision they make and in their behavior ^[20]. According to Rogers ^[21], individuals will make changes in behavior by adopting behavior in stages, including Individuals beginning to become aware of the stimulus (Awareness), individuals begin to be interested in the stimulus (Interest), individuals begin to think and consider (Evaluation), individuals begin to try new behavior (Trial), individuals use new behavior (Adaptation). New behavior adopted by an individual will last long and lasting if the individual accepts this behavior with full awareness, based on clear knowledge and belief.

Nurses can provide health education to hepatitis patients if they have adequate knowledge about hepatitis. Nurses obtain this knowledge through the learning process and the presence of stimuli originating from outside the nurse,

which involves the five senses. The results of this sensing form knowledge that can give rise to behavior. This behavior is a nurse's action in providing health education to hepatitis patients. According to Wirawan, ^[22] Higher education enables a person to do the best things and will determine that person's position. The higher a person's education, the greater his ability to utilize his abilities and skills, so he will feel dissatisfied if his knowledge is not utilized optimally ^[23]. According to Kuncoro Ningrat ^[24], the higher a person's education, the easier it is to receive information, so the more knowledge they have. Conversely, less education will hinder the development of a person's attitude towards newly introduced values. The level of education nurses possess varies, which can influence nurses' competence in providing health education to hepatitis patients. The higher a nurse's education, the more knowledge they can receive, thus enabling them to decide to act, namely providing health education to hepatitis patients. According to Wirawan ^[25], the factors found in humans are traits or characteristics (knowledge, education, skills, competence), physical and psychological conditions of humans, and experience. According to Hosland, *et al* ^[26] said that the formation of behavior can occur due to the maturity process and from the interaction with the environment through the learning process. According to Robins Stephen ^[27], people who have been in a job for a long time will be more productive and satisfied with their work than those with lower seniority. So the longer a person works in a particular workplace, the more they will feel at one with their duties, and in the end, this will give rise to a desire to excel compared to other people, which is because the worker masters their work in achieving the desired job satisfaction. The ability of nurses to provide health education, apart from knowledge and education factors, is also influenced by the nurse's experience. The longer the nurse is on duty providing nursing care to hepatitis patients, the more the learning process the nurse will master her work. Nurses' mastery of this work will ultimately give nurses their satisfaction, which can create a desire to excel, such as providing health education to hepatitis patients. The results of Yuli Yuliah's research are titled "Factors related to nurses' behavior in providing health education to clients at Medistra Jakarta Hospital in 2006." This research used quantitative methods with chi-square analysis with 96 nurses as respondents, showing no significant relationship between age, education, length of work, role models, habits, supervision, and nurses' behavior in providing health education to clients at Medistra Jakarta Hospital. This research obtained a significant relationship between nurses'

motivation and attitudes and nurses' behavior in providing health education to clients at Medistra Hospital, Jakarta. Another research was conducted by Taryana Asep titled "Factors related to nurses' behavior in implementing pre-surgical client health education at Hasan Sadikin Hospital Bandung in 2002". This research used quantitative methods with chi-square analysis with 99 nurses as respondents, showing the results that there was a significant relationship between nurses' knowledge and education and nurses' behavior in implementing pre-surgical client health education at Hasan Sadikin Hospital, Bandung.

Research Method

This research uses a descriptive-analytical design with a cross-sectional approach with quantitative methods. Researchers used a survey to collect data in the form of a questionnaire to analyze the knowledge and behavior of nurses in providing health education to Hepatitis patients. This research was conducted to determine whether or not there is a relationship between the independent and dependent variables. Researchers can determine how much influence the independent variable has on the dependent variable. The population that will be used in this research is nurses working in Jakarta's hospital treatment rooms. The number of samples was calculated based on the Krecjie-Morgan Table, where the number of pollutants was 80 respondents, and the sample size was 80. This research will be conducted in a hospital treatment room in Jakarta in April 2022.

Research ethics are the moral principles applied in research ^[28]. This research was carried out by paying attention to and upholding research ethics. Ethical principles in research ^[29] are carried out through anonymity, nonmaleficence, justice, confidentiality, and autonomy. Researchers used data collection tools in the form of questionnaire instruments to obtain data. Researchers used a questionnaire with a Likert scale with four score options: Strongly Agree (SA), Agree (A), Disagree (DA), and strongly Disagree (SDA), accompanied by information on each item to get a response about the respondent's level of agreement on one issue. Validity tests are carried out to determine the accuracy of a measuring instrument in measuring data. The data that has been collected is processed through stages: data editing, data coding, data entry, and data cleaning. Meanwhile, tools for analyzing data can be used for univariate and bivariate analysis.

Result and Discussion

The description of the characteristics of respondents based on education is as follows:

Table 1: Distribution of respondents based on education

Individual Characteristics		Frequency (n = 107)	Percentage (%)
Education	1. Associate degree	72	67,3
	2. Ners	32	29,9
	3. Master Degree	3	2,8

Based on the table above, it can be seen that 67.3% of respondents had an associate degree in Nursing.

Table 2: Distribution of respondents based on experience

Individual Characteristics		Frequency (n = 107)	Percentage (%)
Experience	1. ≤ 1 year	3	2,8
	2. >1-5 years	43	40,2
	3. >5-10 years	25	23,4
	4. > 10 years	36	33,6

Based on the table above, it can be seen that 40.2% of respondents have work experience of 1-5 years, and 33.6% have work experience of >10 years.

Table 3: Distribution of respondents based on Knowledge

Individual Characteristics		Frequency (n = 107)	Percentage (%)
Knowledge	1. Good knowledge	51	47,7
	2. Lack of knowledge	56	52,3

Based on the table above, it can be seen that 52.3% of respondents had poor knowledge, and 47.7% had good knowledge.

Table 4: Distribution of Respondents based on Attitudes

Individual Characteristics		Frequency (n = 107)	Percentage (%)
Attitude	1. Agree	66	61,7
	2. Disagree	41	38,3

Based on the table above, it can be seen that 61.7% of respondents agree with providing education about Hepatitis, and 38.3% disagree with providing education about Hepatitis.

Table 5: Distribution of respondents based on Behavior

Individual Characteristics		Frequency (n = 107)	Percentage (%)
Behavior	1. Doing	59	55,1
	2. Not doing	48	44,9

Based on the table above, it can be seen that 55.1% of respondents provided education about Hepatitis, and 44.9% did not provide education about Hepatitis.

Bivariate Statistical Test Results

Table 6: The Relationship between Education and Knowledge

Characteristics		Knowledge				P Value
		Good		Lack of knowledge		
		n	%	n	%	
Education	1. Associate degree	33	45,8	39	54,2	0,813
	2. Ners	15	46,9	17	53,1	
	3. Master's degree	3	100	0	0	

Based on the table above, it can be seen that there is no significant relationship between education and knowledge about health education about Hepatitis with a P value of 0.813 (P>0.05).

Table 7: The Relationship between Education and Attitude

Characteristics		Attitude				P Value
		Agree		Disagree		
		n	%	n	%	
Education	1. Associate degree	42	58,3	30	41,7	1,299
	2. Ners	21	65,6	11	34,4	
	3. Master's degree	3	100	0	0	

Based on the table above, it can be seen that there is no significant relationship between education and nurses' attitudes regarding health education about Hepatitis, with a P value of 0.813 (P>0.05).

Table 8: The Relationship between Education and Behavior

Characteristics		Behavior				P Value
		Doing		Not Doing		
		n	%	n	%	
Education	1. Associate degree	39	54,2	33	45,8	0,110
	2. Ners	20	62,5	12	37,5	
	3. Master's degree	0	100	3	100	

Based on the table above, it can be seen that there is no significant relationship between education and nurses' behavior regarding health education about Hepatitis, with a P value of 0.110 (P>0.05).

Table 9: Relationship between Experience and Knowledge

Characteristics		Knowledge				p Value
		Good		Lack of knowledge		
		n	%	n	%	
Experience	1. < 1 year	1	33,3	2		0,000
	2. >1 year-5 years	12	27,9	31	66,7	
	3. > 5 years-10 years	11	44,0	14	72,1	
	4. > 10 years	27	75,0	9	56,0	

Based on the table above, it can be seen that there is a significant relationship between experience and nurses' knowledge about Hepatitis health education with a P value of 0.000 ($P < 0.05$).

Table 10: Relationship between Experience and Attitude

Characteristics		Attitude				P Value
		Agree		Disagree		
		n	%	n	%	
Experience	1. < 1 year	2	66,7	1	33,3	0,885
	2. >1 year-5 years	26	60,5	17	39,5	
	3. > 5 years-10 years	17	68,0	8	32,0	
	4. > 10 years	21	58,3	15	41,7	

Based on the table above, it can be seen that there is no significant relationship between experience and nurses' attitudes regarding Hepatitis health education, with a P value of 0.885 ($P > 0.05$).

Table 11: Relationship between Experience and Behavior

Characteristics		Behavior				P Value
		Doing		Not Doing		
		n	%	n	%	
Experience	1. < 1 year	2	66,7	1	33,3	0,255
	2. > one year -5 years	27	62,8	16	32,7	
	3. > five years -10 years	15	60,0	10	40,0	
	4. > 10 years	15	41,7	21	58,3	

Based on the table above, it can be seen that there is no significant relationship between experience and nurses' behavior regarding Hepatitis health education, with a P value of 0.255 ($P > 0.05$).

Hepatitis is a health problem that occurs throughout the world. Awareness of this disease's dangers and impacts is necessary for efforts to prevent and control disease, especially for nurses. The research results by Ayyat *et al.* [30] show that nurses need to be educated about washing hands and avoiding exposure to needles to control exposure to Hepatitis B.

The results of this study showed that 52.3% of respondents had poor knowledge and 47.7% had good knowledge, and based on work experience, 40.2% of respondents had work experience of 1-5 years, and 33.6% had work experience of >10 years. According to Hurlock, the older you are, the more mature a person's level of maturity and strength will be in thinking and working. Regarding public trust, someone more mature is trusted more than someone not yet mature. Respondents' sufficient knowledge is thought to be related to length of service >10 years. Nurses' behavior and actions can be influenced by several factors, one of which is knowledge. Knowledge is a very important domain in shaping a person's behavior. Knowledge is needed to encourage growing self-confidence and encouraging attitudes and behavior, so it can be said that knowledge is a stimulus for a person's actions. In addition, behavior whose formation is based on knowledge will last longer.

Based on the results of this study show that 55.1% of respondents provided education about Hepatitis, and 44.9% did not provide education about Hepatitis. Based on the results of bivariate tests, it is known that there is no significant relationship between education and nurses' behavior regarding health education about Hepatitis with a P value of 0.110 ($P > 0.05$). Many factors cause nurses' non-compliance in providing education about Hepatitis. The supporting factors manifested in the physical environment include various facilities and infrastructure, for example, funds, transportation, and facilities (complete equipment), which also support behavior to prevent transmission of hepatitis. Apart from that, the moderate behavior experienced by respondents is thought to be related to obtaining information sources because as many as (58.8%)

received information about Hepatitis through seminars or training. By providing information, knowledge will increase, and then, with this knowledge, it will raise awareness and ultimately cause people to behave based on their knowledge.

Preventive measures against Hepatitis require nurses' ability as implementers, supported by facilities and infrastructure. Elements of knowledge and attitudes influence nurses' ability as providers of care in providing care services. These two elements influence nurses' behavior in providing nursing services, reflected in the implementation of care actions.

This study's results show a significant relationship between experience and nurses' knowledge about Hepatitis health education with a P value of 0.000 ($P < 0.05$). Experience is a source of knowledge or a way to obtain truthful knowledge; therefore, personal experience can also be used as an effort to gain knowledge. It is done by repeating the knowledge gained to solve problems faced in the past.

Knowledge of preventive measures plays an important role in controlling the disease. So nursing staff, if they know preventive measures, provide this knowledge to all patients who come into contact with them in their daily activities. This study shows a statistically significant correlation between years of experience in a hospital and practice among nursing staff. These findings follow the findings of Suchitra and Lakshmi [44], reporting that years of experience in hospitals significantly correlated with improved knowledge, attitudes, and practices among various categories of staff, but this did not translate into good clinical practices on the wards.

This study showed that 55.1% of nurses provided health education about Hepatitis prevention to patients. Providing education is useful in increasing patient knowledge regarding preventing and avoiding transmission of Hepatitis. It is following Rahmadona's statement [45] stating that there is a significant influence between health education with individual counseling methods and leaflet media on increasing pregnant women's knowledge about hepatitis B

in pregnancy which can be seen from the results of statistical tests, namely showing the Wilcoxon test results which are found in the p-value of these data is 0.000 ($p < 0.05$). According to Notoatmodjo [46], health education is the application of educational concepts in the health sector. The basic concept of education itself is a learning process, so health education can be interpreted as a learning process for individuals, groups, or communities from not knowing to knowing, from not being able to overcome health problems to being able to overcome health problems.

Conclusion

From the results of the analysis of the research data collected above, it can be concluded that: a) 2.3% of respondents had poor knowledge and 47.7% had good knowledge; b) 61.7% of respondents agreed with providing education about Hepatitis and 38.3% disagreed with providing education about Hepatitis; c) 55.1% of respondents provided education about Hepatitis and 44.9% did not provide education about Hepatitis; d) There is no significant relationship between education and knowledge about health education about Hepatitis with a P value of 0.813 ($P > 0.05$); e) There is no significant relationship between education and nurses' attitudes regarding health education about Hepatitis with a P value of 0.813 ($P > 0.05$); f) There is no significant relationship between education and nurses' behavior regarding health education about Hepatitis with a P value of 0.110 ($P > 0.05$); g) There is a significant relationship between experience and nurses' knowledge about Hepatitis health education with a P value of 0.000 ($P < 0.05$); h) There is no significant relationship between experience and nurses' attitudes regarding Hepatitis health education with a P value of 0.885 ($P > 0.05$); and i) There is no significant relationship between experience and nurses' behavior regarding Hepatitis health education with a P value of 0.255 ($P > 0.05$). Therefore, it is recommended that hospitals make SOPs as a guide for nurses in carrying out health promotion and increasing compliance in health education activities, especially health education for patients suffering from hepatitis.

References

1. Tulu SN, Cook P, Oman KS, Meek P, Kebede Gudina E. Chronic disease self-care: a concept analysis. *Nurs Forum*,2021;56(3):734-741.
2. Putri NK. Pengaruh Pendidikan Kesehatan Berbasis Video Melalui Zoom Meeting Terhadap Tingkat Kepatuhan Asupan Cairan Pasien Hemodialisa Di Ruang Hemodialisa Rspau Dr. S. Hardjolukito [Doctoral dissertation]. Yogyakarta: Poltekkes Kemenkes Yogyakarta.
3. Sharma M. Theoretical foundations of health education and health promotion. Burlington (MA): Jones & Bartlett Learning, 2021.
4. World Health Organization. Combating hepatitis B and C to reach elimination by 2030: advocacy brief. Geneva: World Health Organization, 2016.
5. Daka D, Hailemeskel G, Fenta DA. Prevalence of Hepatitis B Virus infection and associated factors among female sex workers using respondent-driven sampling in Hawassa City, Southern Ethiopia. *BMC Microbiol*,2022;22(1):37.
6. Svavarsdóttir MH, Sigurðardóttir ÁK, Steinsbekk A. Knowledge and skills needed for patient education for individuals with coronary heart disease: The perspective of health professionals. *Eur J Cardiovasc Nurs*,2016;15(1):55-63.
7. Sherwood GD, Shaffer FA. The role of internationally educated nurses in a quality, safe workforce. *Nurs Outlook*,2014;62(1):46-52.
8. Stanhope M, Lancaster J. Public health nursing: Population-centered health care in the community. 9th ed. St. Louis (MO): Elsevier Health Sciences, 2015.
9. Tampubolon K, Sibuea N. Peran Perilaku Guru dalam Menciptakan Disiplin Siswa. *All Fields Sci J Liaison Acad Soc*,2022;2(4):1-7.
10. Doyle EI, Ward SE, Early J. The process of community health education and promotion. 3rd ed. Long Grove (IL): Waveland Press, 2018.
11. Haber D. Health promotion and aging: Practical applications for health professionals. 7th ed. New York (NY): Springer Publishing Company, 2019.
12. Susilowati D. Promosi kesehatan. Jakarta: Publisher unknown.
13. Khuroo MS, Khuroo MS, Khuroo NS. Enteric hepatitis viruses: hepatitis A virus and hepatitis E virus. In: Khuroo MS, editor. *Clinical Epidemiology of Chronic Liver Diseases*. Cham: Springer, 2019. p,171-209.
14. Romanivna MS, Ivanovna BA, Ivanovych ZP. Hepatitis A: Etiology, Epidemiology, Diagnosis, Treatment And Prevention. *Colloquium-journal*,2023;(6):17-21.
15. Okonkwo U, Otu A, Ameh S, Okpara H. Public Awareness of hepatitis B virus infection in Cross River State, Nigeria: a population-based survey. *West Afr J Med*,2018;35(2):79-84.
16. Hung HF, Wang YC, Yen AM, Chen HH. Stochastic model for hepatitis B virus infection through maternal (vertical) and environmental (horizontal) transmission with applications to basic reproductive number estimation and economic appraisal of preventive strategies. *Stoch Environ Res Risk Assess*,2014;28:611-25.
17. Angahar LT. A Review on Pathogenesis, Transmission, Diagnosis and Prevention of Hepatitis B infection. *J Clin Rev Case Rep*. Forthcoming 2024.
18. Agustini A. Promosi kesehatan. Yogyakarta: Deepublish, 2014.
19. Thusi N. Dales and Blooms theory employed for NFT as pedagogy in accounting for non-financial students: conceptual research. *Public Admin Dev Altern*,2020:693.
20. Mazur JE. Learning and behavior: Instructor's review copy. 8th ed. New York (NY): Psychology Press, 2015.
21. Waisbord S. Family tree of theories, methodologies, and strategies in development communication. In: Servaes J, editor. *Handbook of communication for development and social change*. Singapore: Springer, 2020, 93-132.
22. Suda IK, Wirawan IG, Prawita NK, SS M. *Sosiologi Pendidikan Konsep dan Aplikasinya*. Jakarta: Publisher unknown.
23. Rivaldo Y, Nabella SD. Employee performance: Education, training, experience and work discipline. *Calitatea*,2023;24(193):182-8.
24. Sukartiningih MC. Hubungan pengetahuan ibu hamil tentang tanda bahaya kehamilan dengan keterampilan melaksanakan antenatal Caredi puskesmas

- pembantudauh puri denpasar tahun 2014. *Midwifery Med J*,2014;1(1):15-22.
25. Meilani R. Pengaruh Kompetensi Dan Motivasi Terhadap Self Efficacy Serta Dampaknya Pada Loyalitas Tenaga Kependidikan Di Perguruan Tinggi. *Tawshiyah: J Sos Keagam Pendidikan Islam*,2020;15(1).
 26. Ardimaningsih D. Terapi Behavior Dalam Menangani Anak Hiperaktif Di Harmony Psychology Bureau Rajabasa Bandar Lampung [Doctoral dissertation]. Lampung: UIN Raden Intan Lampung.
 27. Del Rosa Y. Servant Leadership, Self Efficacy and Job Satisfaction, on the Performance of Managers of Alahan Panjang Tourism Object, Solok Regency. *Asean Int J Bus*,2022;1(1):10-23.
 28. Barrow JM, Brannan GD, Khandhar PB. Research ethics. *StatPearls* [Internet],2023 [cited 2024 May 22]: Available from: <https://www.ncbi.nlm.nih.gov/books/NBK459281/>
 29. Pietilä AM, Nurmi SM, Halkoaho A, Kyngäs H. Qualitative research: Ethical considerations. In: Kyngäs H, Mikkonen K, Kääriäinen M, editors. *The application of content analysis in nursing science research*. Cham: Springer, 2020, 49-69.
 30. El Ayyat AA, Sayed HA, Abou Had AM. A KAP study among staff and student nurses about infection control in Theodor Bilharz Hospital. *J Egypt Soc Parasitol*,2000;30(2):511-22.