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Cleaning Officers' Behavior in Solid Waste Management According Based on Standart Operating Procedure (SOP) in X Jember Hospital

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ABSTRACT

Waste management is very important especially in Hospitals. Hospital waste management must be done properly and correctly so that it can be prevented from diseases caused by waste that will be felt by all residents of the Hospital. The purpose of this study was to analyze factors related to the behavior of cleaning officers in waste management in X Hospital. The research design used was cross sectional. The results showed that age, education, years of service, knowledge and supervision were related to the behavior of cleaning officers in waste management with p value of <0.05. The results also showed that gender, attitudes and facilities were not related to cleaning officer's behavior in waste management in X Hospital. The test results of the most related factors to cleaning officer's behavior were supervision or control from the Hospital management. Improvements that can be made to improve the behavior of cleaning officers is by increasing management supervision by conducting inspections at least twice a week and providing education to all the cleaning officers on the proper management of waste. There is a need for regular supervision of the cleaning officers' in carrying out his work at least 2 weeks so that the cleaning officers feels heeded and does the job correctly and according to the SOP.

Keywords: Management, Waste, Supervision

INTRODUCTION

Background

Hospital is a place to improve health, do prevention, and cure diseases as well as restore health. One problem that can affect customer judgment is environmental cleanliness⁽¹⁾. Running a Hospital is like running a business. It means that if the Hospital is unable to offer proper and quality medical services for patients, they will go to other health workers and the reputation of the Hospital will be bad. Nosocomial infections in Indonesia can be seen from the surveillance data carried out by the Indonesian Ministry of Health in 2013 at 10 RSU Pendidikan, where the number of nosocomial infections was quite high about 6-16% with an average of 9.8%. A research done in 11 Hospitals in DKI Jakarta in 2013 revealed that 9.8% of inpatients received new infections during their treatment⁽²⁾.

The results of a study of 100 Hospitals in Java and Bali in 2013 showed that the average waste production was 3.2 kg / bed / day. Further analysis showed that domestic waste production which was 76.8% and 23.2% was infectious waste. It is estimated nationally that Hospital waste production is 376,089 tons / day, so that from the description it can be estimated the magnitude of the possibility of potential Hospital waste to pollute the environment and the possibility of causing accidents and transmission of disease if it is not managed properly⁽³⁾. The Hospital management on waste management in Indonesia refers to the Decree of the Minister of Health of the Republic of Indonesia No. 1204 of 2004 about the environmental health requirements of the Hospital which consists of sorting, storing, reusing and recycling, then collecting, transporting and storing in the Hospital environment, and transporting out of Hospital⁽⁴⁾. The SOP for waste management is a procedure that has been

regulated by the Hospital that must be implemented by the officers in conducting waste management. The success of waste management in accordance with the SOP of the Hospital is determined by many factors, one of them which plays a direct role is the cleaning officer⁽⁵⁾.

Factors that have the potential to influence behavior and environmental determinants are classified according to their impact. The three main classifications of impact types are predisposing factors, enabling factors and reinforcing factors. Predisposing Factors (knowledge, attitude), Reinforcing Factors (facilities such as waste dumps, temporary collection points, transportation equipment, final destruction sites), Enabling Factors (house control and internal affairs heads). New behavior or adoption of behavior based on positive knowledge and awareness will be long lasting compared to the behavior that is not based on knowledge and awareness. For example, the cleaning officers sort medical and non-medical waste in the right place because they are supervised by their superiors without knowing the meaning and purpose of the sorting, so this sorting behavior will not be done immediately if the supervisor does not exist⁽⁶⁾.

X Hospital in Jember refers to a type C Hospital in Jember which has been accredited by 5 stars plenary in 2017 and has conducted a second validation in 2018 with a 5-star plenary status. Based on a preliminary study, researchers at X Hospital found that waste management carried out by cleaning officers' is still not optimal. This is indicated by the process of transporting waste without cover, the garbage is transported in full condition, some rubbish bins have leaked and cracked. The SOP for solid waste management in X Hospital that must be done by the cleaning officers' is regulated in the SOP of the X Hospital waste management. The cleaning officers must prepare cleaning equipment before working, distinguishing between medical and non-medical waste, separating sharp objects, using personal protective equipment while working and applying garbage transportation every day.

Purpose

The objective of this study is "Analyzing what factors are related to Cleaning Officers' behavior in managing solid waste based on the SOP at X Hospital in Jember". The behavior of cleaning officers is assessed by several factors, predisposing factors, enabling factors and reinforcing factors with the behavior of cleaning officers in the management of solid waste. Predisposing Factors (age, education, gender, years of service, knowledge, attitude), Reinforcing Factors (facilities such as waste dumps), Enabling Factors (house control and internal affairs heads).

METHODS

The research belongs to observational analytic with a quantitative approach. The observational analysis is done by observation without doing treatment. The research design was cross-sectional. The study was conducted at X Hospital, which is a type C Hospital in Jember. This research was conducted approximately 5 months, in August 2018-December 2018. Based on this opinion, the sample of this study was all cleaning officers' at X Hospital about 37 people. 37 respondents were the combination from the morning shift and the afternoon shift.

The instruments of data collection in this study are presented in accordance with the research variables, including interviews, observations, and questionnaires. The researcher used a questionnaire to obtain data on knowledge and attitudes about waste management and supervision carried out by the Hospital. Distribution of questionnaires is carried out approximately one week according to the work shift of the respondents. In addition, observations were made to obtain data on Hospital facilities and infrastructure and the behavior of respondents in managing solid waste in Hospital X.

While the instruments were questionnaires. The trial of instrument validity was done on 20 cleaning officers' at Kaliwates General Hospital (RSUK) due to having the same Hospital type status as X Hospital (Type C). Data analysis in this study used logistic regression test.

This study used several research ethics, namely informed consent, anonymity, confidentiality, and ethical clearance. Ethical clearance was issued by the Faculty of Dentistry, the University of Jember with No.146/UN25.8/KEPK/DL/2018.

RESULTS

Behavior of Cleaning Officer

Data distribution and results of analysis of predisposing factors with cleaning officer's behavior in waste management in X Hospital can be seen in Table 1.

Table 1. The relationship between predisposing factors and behavior of cleaning officers in waste management in x Hospital

Predisposing factors	Behavior of Cleaning Officers				p-value
	Appropriate to SOP		Unappropriate to SOP		
	n	%	n	%	
Age					
Teenagers	10	27	3	8	0.04
Adult	4	11	13	35	
Elderly	1	3	6	16	
Total	15	41	22	59	
Education					
SD	1	3	7	19	0.019
SMP	3	8	9	24	
SMA	11	30	6	16	
Total	15	41	22	59	
Gender					
Male	12	32	15	41	0.427
Female	3	8	7	19	
Total	15	41	22	59	
Years of Service					
<5 th	4	11	6	16	0.044
5-10 th	10	27	7	19	
>10 th	1	3	9	24	
Total	15	41	22	59	
Knowledge					
Well	3	7	6	16	0.012
Normal	11	30	6	16	
Less	1	4	10	27	
Total	15	41	22	59	
Behavior					
Positive	11	30	13	35	0.373
Negative	4	11	9	24	
Total	15	41	22	59	

Table 1 shows that predisposing factors related to cleaning officer's behavior in waste management are age, education, years of service, and knowledge due to p value of <0.05, while gender and attitudes are not related to cleaning officer's behavior due to p value of > 0.05.

Facilities and Infrastructure in X Hospital

Data distribution analysis of the relationship between enabling factors and behavior in waste management in X Hospital can be seen in Table 2. Enabling factors are facilities and infrastructure owned by X Hospital.

Table 2. The relationship between enabling factors and behavior of cleaning officers in waste management in x Hospital

Facilities and Infrastructure	Total		Behavior of Cleaning Officers				P value
			Appropriate to SOP		Unappropriate to SOP		
	n	%	n	%	n	%	
Available	37	100	15	41	22	59	1
Unavailable	0	0	0	0	0	0	
Total	37	100	15	41	22	59	

The results of data analysis from Table 2 show that there is no relationship between the availability of infrastructure facilities with the behavior of cleaning officers in waste management due to the value of p value = 1.

Management Control

Data distribution and analysis results of the relationship between reinforcing factors and behavior in waste management in X Hospital can be seen in Table 3.

Table 3. Analysis of the relationship between reinforcing factors and the behavior of cleaning officers in waste management in x Hospital

Management Control	Total		Behavior of Cleaning Officers				p value
			Appropriate to SOP		Unappropriate to SOP		
	n	%	n	%	n	%	
Supervised	17	46	11	30	6	16	0.006
Not Supervised	20	54	4	11	16	43	
Total	37	100	15	41	22	59	

Table 3 shows that there is a relationship between Hospital management control and cleaning officer's behavior in waste management due to p value of <0.05.

Factors Associated with Behavior of Cleaning Officers

Data distribution and analysis results of the Most Relating Factor to the Behavior of Cleaning Officers in Waste Management in X Hospital can be seen in Table 4. Table 4 shows that the most related to cleaning officer's behavior is the supervisory control. Control of supervisors has OR 6.950 which means that when supervision is higher, the better the behavior of cleaning officers in accordance with SOP X Hospital, as well as the less control of supervisors, the behavior of cleaning officers will be worse or not in accordance with SOP.

Table 4. Factors associated with behavior of cleaning officers in waste management in x Hospital

Steps	Variables	Sig.	Exp (B) or OR
Step 1 ^a	Age	0.031	7.134
	Education	0.190	0.363
	Years of service	0.607	1.409
	Knowledge	0.426	1.722
	Supervisory control	0.045	6.855
Step 2 ^a	Age	0.028	7.204
	Education	0.191	0.374
	Knowledge	0.311	1.940
	Supervisory control	0.042	7.003
Step 3 ^a	Age	0.028	5.897
	Education	0.127	0.337
	Supervisory control	0.057	5.609
Step 4 ^a	Age	0.013	6.026
	Supervisory control	0.026	6.950

DISCUSSION

The results revealed that 46% of respondents aged 26-45 years or adults and 35% of respondents who behaved not in accordance with the SOP in managing Hospital waste were adults. The more mature a person should have better behavior but in this study, many adults who work are not in accordance with the SOP. The more mature a person is, the more maturity and strength levels of a person should be more mature in thinking and working in terms of the trust of a more mature society that will be more trusting than people who are not mature enough⁽⁷⁾. The cleaning officers' in X Hospital are also identified through the latest education. This study found that the final education of cleaning officers' was 46% coming from high school graduates and most of the high school graduates behaved according to the SOP. The higher the education of someone, the easier he is to receive information.

The results of the study also showed that the cleaning officers' had more men as much as 73% than women and 59% of them did not work in accordance with the SOP. The results showed that the working period of the cleaning officers was at most 46% working between 5-10 years and the cleaning officers who had a service period under 5 years most of them behaved in accordance with the SOP. The longer a person works, the more people's experience will be added so that the work will be better. Someone who works longer should be able to do a job better or in accordance with the SOP, but in this study, the cleaning officers who does work according to the SOP is a worker with a work period of fewer than 5 years⁽⁸⁾.

The cleaning officers in this study were 46% knowledgeable enough and most of them had behavior in accordance with the SOP. Attitudes on cleaning officers' show a positive direction about 67% and most of them do not work in accordance with the SOP. This shows that even though their attitude is positive but the work is not in accordance with the SOP because attitude is not yet an action or activity, it is a predisposition to an act of behavior. This is in line with the results of research which explains that attitude is a positive or negative evaluation system, namely a tendency to approve or reject⁽⁹⁾.

The infrastructure facilities at Hospital are assessed by several evaluation points on the observation sheet which showed that the availability of the infrastructure owned by Hospital is available. Facilities and infrastructure in Hospital are that each room has a trash can at each radius of 20 meters, the trash cans are rustproof, waterproof, closed and resistant to sharp objects, the Hospital has a container for garbage disposal, garbage transport equipment, the garbage train, there is a route to transport garbage and the Hospital also has its own TPS. Hospital has facilities and infrastructure but there are still facilities and infrastructure that are not fulfilled, such as the trash cans are not distinguished in color and type of waste, plastic waste bags are quickly replaced when they are full, garbage disposal sites, and Hospital does not have an incinerator for sharp and dangerous objects yet.

Strengthening factor is a factor that strengthens a behavior by giving continuous appreciation to behavior and contributing to the occurrence of repetition. The results of this study indicate that the supervision carried out by the Hospital has not been felt by most of the cleaning officers' and those who are not supervised do not work in accordance with the SOP. They assume that the management of Hospital does not always ask for the availability of garbage bags, does not check every day so that the workers work according to their convenience. This is in line with the results of research regarding the perception of officers in biomedical waste management or Hospital waste management in India which states that all professional groups, like medical staff, management and cleaning officers' have not received clarity about better details due to the absence of proper HCWM practice system (Health Care Waste Management) at the Hospital⁽¹⁰⁾.

Behavior assessment was carried out on 37 cleaning officers' of Hospital Jember. The behavior in this study focused on the behavior of cleaning officers' in managing waste or garbage. Assessments were carried out when they worked starting from preparation to cleaning up garbage. The results of the study showed that most of the cleaning officers' did not work in accordance with the SOP. The results of the study stated that a person's behavior can be caused by several things, one of them is the supervision and notification from stakeholders⁽¹¹⁾.

Age is one of the predisposing factors associated with the occurrence of a person's behavior patterns. The results showed that age was related to Cleaning Officers' behavior in waste management. Employees with adult age or between 26-45 years of age are more likely to behave inappropriately in accordance with the SOP in waste management. This is in line with the research conducted at the Banjarbaru City Health Center stated that Age was related to the Cleaning Officers' actions⁽⁹⁾.

Education is a process with certain methods so that people gain knowledge, understanding, experience, and care behave according to their needs⁽¹²⁾. The results showed that education was related to the behavior of cleaning officers'. The behavior that is not in accordance with the SOP is mostly done by officers who are graduated from junior high school, while the behavior in accordance with the SOP is mostly carried out by cleaning officers from high school graduates. The higher the education, the more someone's knowledge will increase. This is not in line with the results of research which states that there is no relationship between education and the behavior of cleaning officers' in Bener Yogyakarta⁽¹³⁾.

Gender is a factor that can reduce the boundaries of working differences by sex in the context of work⁽¹⁴⁾. This study showed that gender is not related to Cleaning Officers' behavior in waste management. This study shows that the highest number of workers is male, this is because the cleaning staff's work is fairly heavy, so that it is dominated by men. This result is in line with the results of research which states that there is no relationship between gender and Cleaning Officers' behavior⁽⁹⁾.

The working period is the time a person works in the workplace in the size of the year starting from the beginning until the research takes place⁽¹⁵⁾. The results of the study indicated that the working period is related to the behavior of cleaning officers' in waste management. This research is not in line research which states that there is no relationship between the period of work and the behavior of cleaning officers'⁽⁹⁾. This result may be different because the behavior was not in accordance with the SOP in X Hospital which is mostly carried out by officers with a work period of more than 10 years while officers who have a work period of fewer than 5 years mostly work according to the SOP.

Knowledge is a very important domain for the formation of someone's behavior. The results showed that knowledge was related to Cleaning Officers' behavior in waste management. Most cleaning officers have sufficient knowledge. Respondents who are well-informed but the behavior of waste management is not good because they are lazy to do according to the SOP. This is in line with research that there is a relationship between knowledge and the behavior of cleaning officers⁽¹⁶⁾. In line with research that there is a relationship between knowledge and practice of Medical Waste Collection officers⁽¹⁷⁾. Intellectual ability, the individual intellectual ability factor is a factor that can affect the quality in doing its work⁽¹⁴⁾.

Attitude is an emotional or effective assessment. The results showed that attitudes were not related to Cleaning Officers' behavior in waste management. The cleaning officers' who behave according to SOPs have a positive attitude. The results of this study are in line with the research that there is no correlation between attitudes and practices of Medical Waste Disposal officers⁽¹⁷⁾. In line with the research conducted at one of the Hospitals in Bandung City stated that there was no relationship between the attitude with medical personnel on the management of solid medical waste. Most cleaning officers agree to work using APD such as special clothing, gloves, masks, and shoes. They also agreed to wash their hands, use soap and use clean water after working⁽¹⁸⁾.

Enabling factors in this study are facilities and infrastructure owned by Hospital. The results of the study showed that the facilities and infrastructure are not related to the behavior of cleaning officers'. This is because the assessment was carried out at X Hospital and all cleaning officers' were in the same Hospital, so they were in indistinguishable conditions. Besides, the Hospital has been declared to have almost complete facilities and infrastructure, like the Hospital, already has a trash can that is rust resistant, closed, resistant to sharp objects and waterproof. In addition, Hospital also has a temporary waste shelter and has a garbage transportation train. However, there is no distinguished type of garbage in Hospital, and the Hospital does not have an incinerator for the destruction of sharp and dangerous objects. This is not in line with the research which shows that there is a

relationship between the availability of facilities and the practice of medical waste disposal officers⁽¹⁷⁾. Facilities and infrastructure are supporting factors for managing medical waste in Hospitals. Inadequate facilities and infrastructure are often obstacles in the management of medical waste, especially infectious waste in Hospitals.

The reinforcing factor in this study was supervision carried out by the management of X Hospital. The results of the study showed that control of management supervision is related to the behavior of cleaning officers'. The Hospital provided a description of the duties to the cleaning officers when they were at the beginning of work, then when they worked and they did not understand about the treatment of medical waste, they were only assisted by a more senior cleaning officers. During their work, most of them never felt reprimanded on how to manage waste, they were only ever reprimanded by medical personnel when they were not clean in sweeping or transporting garbage in the inpatient room. Hospital supervision felt by cleaning officers' is still weak so they feel that they have done the right job. This is in line with the research states that supervision can affect the behavior of employees who are disciplined in work⁽¹⁹⁾.

The results showed that the most associated factor with Cleaning Officers' behavior in the management of Hospital waste was the control supervision. This is because supervisory controls have the highest level of risk for a behavior to occur. Supervision at Hospital has not been carried out maximally by the management. National Standard for Hospital Accreditation or SNARS states that supervision of environmental management must be carried out by the PPI team (Infection Prevention and Control)⁽²⁰⁾. But so far, most cleaning officers' feel that there is no supervision or reprimand and reward from the PPI team. Supervision is needed to monitor the work of cleaning officers' to comply with the SOP for waste management. In addition to supervision, it is necessary to provide training or providing education to officers about waste management properly and in accordance with the existing SOP of the Hospital⁽²¹⁾.

Suggestions that can be given from the results of this discussion are the recruitment of cleaning officers' should have conditions between the ages of 26-45 years. The recruitment of cleaning officers' should have a minimum education requirement of at least high school. The cleaning officers who has just worked or still has a working period of under 5 years, should get special attention by explaining in detail about the SOP of waste management correctly in accordance with the Hospital Accreditation standards. There needs to be educated with counseling or watching a film together from the Hospital Management for cleaning officers' about working safely and maintaining environmental health, including patients, medical workers, Hospital employees, visitors and cleaning officers' themselves. There is a need for regular supervision of cleaning officers' in carrying out their work at least once every two weeks so that the cleaning officers feels heeded and does the job properly according to the SOP.

CONCLUSION

1. Most of the cleaning officers' in X Hospital are 26-45 years/adult and have high school education, male sex, have a working period of between 5-10 years, have sufficient knowledge of medical waste management, have positive traits, available facilities and infrastructure and most cleaning officers' feel that they are not supervised by the Hospital management.
2. Most cleaning officers' did not work not in accordance with the SOP. The behavior that is not in accordance with the most SOP is that the officers do not incorporate all solid waste contaminated by cytostatic drugs into cytotoxic waste bins which have been coated with purple plastic bags, while the cleaning officers' behavior who matched the most SOP was washing hands after doing their assignments.
3. Predisposing factors related to Cleaning Officers' behavior in waste management are age, education, years of service, and knowledge, while gender and attitudes are not related to Cleaning Officers' behavior.
4. Enabling factors such as facilities and infrastructure are not related to the behavior of cleaning officers in waste management. This is because the facilities and infrastructure owned by X Hospital have been assessed as available. The facilities and infrastructure in HOSPITAL are that each room has a trash can, a container for garbage collection, garbage transport equipment, a temporary garbage disposal place, a garbage train, there is a lane to transport garbage and the Hospital also has its own TPS. Facilities and infrastructure that are not fulfilled are the trash can is not distinguished in color and type of waste and the X Hospital does not yet have an incinerator for the destruction of sharp and dangerous objects.
5. Strengthening factor was the control of supervision from Hospital management related to the behavior of cleaning officers'.
6. The most related factor to Cleaning Officers' behavior was control supervision of X Hospital Management.

REFERENCES

1. Arifah U. The Effect of Service Quality on Outpatient Satisfaction in Balai Besar Kesehatan Paru Masyarakat (BBKPM) Surakarta (Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pasien rawat Jalan Di Balai Besar

- Kesehatan Paru Masyarakat (BBKPM) Surakarta). Master Thesis. Surakarta: Universitas Muhammadiyah Surakarta; 2013.
2. Kemenkes RI. Basic Health Research 2013 (Riset Kesehatan Dasar 2013). Jakarta: Balitbangkes Kemenkes RI; 2013.
 3. Astuti A, Purnama SG. Study of Waste Management in West Nusa Tenggara Provincial Hospital (Kajian Pengelolaan Limbah di Rumah Sakit Provinsi Nusa Tenggara Barat (NTB)). *Community Health*. 2014;2(1):12-20.
 4. Kemenkes RI. Decree of the Minister of Health of the Republic of Indonesia Number 1204 / Menkes / SK / X / 2004 concerning Hospital Environmental Health Requirements (Keputusan Menteri Kesehatan Republik Indonesia Nomor 1204/Menkes/Sk/X/2004 Tentang Persyaratan Kesehatan Lingkungan Rumah Sakit). Jakarta: Kemenkes RI; 2004.
 5. Notoatmodjo S. Health Promotion and Health Behavior (Promosi Kesehatan dan Perilaku Kesehatan). Jakarta: Rineka Cipta; 2012.
 6. Setyonugroho W, Kennedy KM, Kropmans TJB. Patient Education and Counseling Reliability and Validity of OSCE Checklists Used to Assess the Communication Skills of Undergraduate Medical Students: A Systematic Review. *Patient Education and Counseling*. 2015;98:1482-1491.
 7. Nursalam. Research Methodology of Nursing Science (Metodologi Penelitian Ilmu Keperawatan). Jakarta: Salemba Medika; 2016.
 8. Ranupendojo, Heidjrachman, Husnan S. Personnel Management (Manajemen Personalia). Yogyakarta: BPFE; 2009.
 9. Agustina N, Irianty H, Wahyudi NT. Relationship between Characteristics and Waste Management in the Health Center in Banjarbaru City (Hubungan Karakteristik dengan Pengelolaan Sampah di Puskesmas Kota Banjarbaru). *Jurnal Publikasi Kesehatan Masyarakat Indonesia*. 2017;4(2):35-43.
 10. Joshi SD, Diwan V, Tamhankar AJ, Joshi R, Shah H, Sharman M, Pathak A, Macaden R, Lundbrorg CS. Staff Perception on Biomedical or Health Care Waste Management: A Qualitative Study in a Rural Tertiary Care Hospital in India. *PLOS ONE Journal*. 2015;10(5):1-15.
 11. Guerrero LA, Maas G, Hogland W. Solid Waste Management Challenges for Cities in Developing Countries. *Built Environment Department*. 2013;33(1):220-232.
 12. Gurdijta. The Relationship between the Level of Formal Education and the Attitudes of Citizens with Their Behavior (Hubungan antara Tingkat Pendidikan Formal dan Sikap Warga dengan Perilakunya). *Jurnal Pendidikan & Ilmu Pengetahuan*. 2008;4(2):53-67.
 13. Sari N, Asti, Mulasari. Knowledge, Attitudes and Education with Waste Management Behavior in Bener District Tegalrejo Urban Village, Yogyakarta (Pengetahuan, Sikap dan Pendidikan dengan Perilaku Pengelolaan Sampah di Kelurahan Bener Kecamatan Tegalrejo Yogyakarta). *Medika Respati Journal*. 2017;12(2):74-83.
 14. Prayitno H. Occupational Health and Safety (K3) in the Standard Operating Procedure (SOP) (Keselamatan dan Kesehatan Kerja (K3) pada Standart Operasional Prosedur (SOP)). Ponorogo: Forikes; 2016.
 15. Handoko H. Personnel Management and Human Resources (Manajemen Personalia dan Sumberdaya Manusia). Yogyakarta: BPFE UGM; 2010.
 16. Indasah. Changes in Attitude of Students of SD Tosaren IV Kediri in Choosing Snack Food after Health Education was Given (Perubahan Sikap Siswa SD Tosaren IV Kediri dalam Memilih Makanan Jajanan setelah Diberikan Pendidikan Kesehatan). *Jurnal Ilmiah Kesehatan*. 2015;4(1):35-42.
 17. Jasmawati M. Relationship between knowledge, attitudes, and availability of facilities with the practice of medical waste collector officers at Abdul Wahab Hospital Sjahrani Samarinda. (Hubungan pengetahuan, sikap, dan ketersediaan fasilitas dengan praktik petugas pengumpul limbah medis di RSUD Abdul Wahab Sjahrani Samarinda). *FKM Universitas Hasanudin Journal*; 2012(1):7-14.
 18. Maharuni AF, Afrandi I, Nurhayati T. Knowledge and Attitude of Health Workers on Management of Solid Medical Waste in One Hospital in Bandung (Pengetahuan dan Sikap Tenaga Kesehatan terhadap Pengelolaan Limbah Medis Padat pada Salah Satu Rumah Sakit di Kota Bandung). *JSK*. 2017;3(2):84-89.
 19. Inayati A. Relationship between Supervision and Employee Discipline at the Dharmasraya Youth and Sports Education Office (Hubungan Pengawasan dengan Didiplin Kerja Pegawai pada Dinas Pendidikan Pemuda dan Olahraga Kabupaten Dharmasraya). *Jurnal Administrasi Pendidikan*. 2014;2(1):340-348.
 20. Komisi Akreditasi Rumah Sakit. National Hospital Accreditation Standards (Standart Nasional Akreditasi Rumah Sakit (SNARS)). Jakarta: Komisi Akreditasi Rumah Sakit; 2018.
 21. Manullang M. Human Resource Management (Manajemen Sumber Daya Manusia). Jakarta: PT. Tokoh Gunung Agung; 2015.