



THE COMMUNITY HEALTH NURSING ASSESSMENT OF TUNJUNGSARI SUBURBAN, BANTUR VILLAGE, MALANG DISTRICT: A CASE STUDY

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ABSTRACT

Background: The community health nursing assessment is a process to understand the health problems that are often found in such location including health behavior problems, environmental problem, also health services utilization problem which will cause various effect among age group population

Purpose: Researcher would like to perform nursing process to the community health problems at the Tunjungsari Suburban, Bantur Village, Malang District.

Methods: The case study with a cross sectional approach used as research design. The nursing community assessment checklist delivered to 641 respondents who lives at 217 households around Tunjungsari Suburban, Bantur Village. The data then analyzed using descriptive statistical analysis based on community nursing approach using community as partner theory.

Results: The results showed that the community had a risky health behaviour marked by 47% adult were smoking inside the house, 73% of the elders never performing any health check, 89% of the elder's never to come to the Posyandu. 38,27% of the total population experienced acute inflammatory respiratory disease during the past 6 months, and failed to managing the household waste due to limited facilities.

Conclusion: Based on the result of this study, it is recommended for the stakeholders to improve the community health services, increases the health promotion programs distribution especially targeting the elder's population. For the government providing final waste management in this community will help to increases the community health.

Keywords: *Case study; community health; nursing process.*

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INTRODUCTION

Bantur is one of the thirty-three village in Malang District. Astronomically, Bantur village is located between 112.5497 to 112.6066 East Longitude and 8.0916 to 8.1708 South Latitude. Whole areas in Bantur village are plains with the topography of all villages classified as plains within beachline in the South. The total area of Bantur District is around 15.9 km² or about 5.35 percent of the total area of Malang Regency. As an area whose topography is flat throughout the area, Bantur District is the transit route of choice to continue the journey via the southern route to Lumajang and Blitar Regencies. Bantur Health Center or Puskesmas

Bantur is a health center which is the main provider of primary health facilities in Bantur District, located adjacent to the Bantur District Office to the north and Bantur Traditional Market to the west. The Bantur Health Center oversees ten village areas including Bandungrejo, Bantur, Karang Sari, Pringgondani, Rejosari, Rejoyoso, Sumberbening, Srigonco, Wonokerto and Wonorejo. The Tunjungsari Suburban were located right at the Bantur village area, Malang district. In 2014, the Bantur village crowned as Desa Siaga Sehat Jiwa (DSSJ) and free from shackles in the province of East Java, these achievements obtained from the role of the Bantur Health Center (Puskesmas Bantur) working together

with the community, including mental health cadres to promote the quality of life also health status in the community. However, due to some determinants factors the common diseases were still arises among the community and need a solution.

ARI (Acute Respiratory Infection) or RTIs (Respiratory Tract Infections) is one of the causes of high morbidity and mortality of children under five in the world also to the older adults, including Indonesia (WHO, 2019; Williamson, 2020). Older adults also account for the majority of severe coronavirus disease 2019 (COVID-19) cases as one type of RTIs and associated deaths (Williamson, 2020). The under-five mortality rate due to ARI in Indonesia ranks first compared to other ASEAN countries. Based on the mortality survey in Indonesia, it shows that ARI is the most common cause of under-five mortality, with a percentage of 22.30% of all under-five deaths. The results of the 2018 Basic Health Research show that the under-five age group is ranked as the highest group of all ARI cases (Risksedas, 2018). Another research showed that the highest incidence of ARI was in children aged 0–4 years, ranging from 82 to 114 per 100,000 population [Fatmawati, 2021]. Among the elder’s population with comorbid like hypertension, 17.68% mortality rate was showed to be the highest proportion of death among the total number of COVID-19 cases by age in 2020 (Karyono et.al, 2020). Any types of respiratory infection cannot be underestimated and need to be prevented.

According to Harnilawati (2013) community defined as a group of people who have similar values and interest which lives together in specific geographic boundaries, with institutionalized norms and values. Moreover, the community showed a sense of knowing each other and build interactions between members to one another. Community health nursing practice is a synthesis of nursing theory and public health theory for the promotion, maintenance and care of population health through the provision of nursing services to individuals, families and groups that have an impact on community health (Stanhope and Lancaster, 2019). Community health nursing is the practice of promoting health and protecting public health using nursing, social science and public health science approaches that focus on healthy disease promotion and prevention (Anderson & McFarlane, 2015).

The role of the community nurse is to help the families and communities to solve health problems by increasing the ability of families and communities to carry out the functions and duties of family health care. The community nurses had a role as the health educator so that the family and community are able to carry out the nursing care independently, as a coordinator and health supervisor for managing the program activities or from various disciplines, as a consultant in solving problems, as a facilitator of basic nursing care in families and communities suffering from non-communicable or any communicable diseases.

The purpose of the nursing process in this community is to prevent and improve public health through the some efforts, including a) Direct care to individuals, families, and families and groups in the context of the community; b) Direct attention to the health of the whole community (health general community) by taking into account public health problems or issues that may affect families, individuals and groups; c) Furthermore, it is specifically expected that individuals, families, groups and communities have the ability to identify health problems experienced, define the health problems and prioritize these problems, formulate and solve health problems, tackling the health problems independently and also evaluate the extent of solving the problems. This study aims to carry out the nursing process which consists of nursing assessment, formulation of diagnoses, preparation of nursing intervention plans, implementation and evaluation of nursing related to community health problems in Tunjungsari Suburban, Bantur village, Malang district.

METHOD

This research was a cross-sectional and quantitative research design using community as partner assessment approach. The community information collected using community nursing assessment forms. The population in this study were 641 respondents who lives at 217 houses around Tunjungsari Suburban RT 16 – 31, RW 1 - 3, Bantur Village among all age-group from 0 to 90 years old. The data then analyzed using descriptive statistical analysis based on community nursing approach. The activities were implemented during Universitas Tribhuwana Tungadewi Nursing Professional Education Program on Community Health Nursing practice in the academic year of 2021/2022 between July to October 2022. The whole program was implemented in collaboration with the students and leading from Puskesmas Bantur, Malang District.

RESULTS

1. The demographic characteristics of the respondents in this study are presented in the following table 1:

Table 1
Characteristics of respondents based on demographic variables

No	Variables	Indicator	N	%
1.	Age group	0-5	38	5,9
		6-13	83	12,9
		14-18	65	10,1
		19-45	204	31,8
		46-60	151	23,5
		61-90	97	15,1
		>90	3	0,7

No	Variables	Indicator	N	%
	Total		641	100
2.	Religion	Moslem	641	100
3.	Education	No school - kindergarten	86	13,4
		SD - SMP	374	58,3
		SMA - PT	181	28,2
	Total		641	100
4.	Occupation	Civil workers/Police/Military	17	2,65
		Private workers	22	3,43
		Entrepreneurship	122	19,03
		Cottar	28	4,36
		Farmer	160	24,96
		Fisher	6	0,93
		Domestic workers/housewife	100	15,60
		Don't have job	186	29,01
	Total		641	100
5.	Family earnings (Rp)	<1 Million	116	53,45
		1 -<3 Million	64	29,49
		> 3 Million	37	17,05
	Total		217	100
6.	Smoking inside the house	Yes	116	53,4
		No	101	46,6
	Total		217	100
7.	Family waste management	Open burning	203	93,5
		Piled	14	6,5
	Total		217	100
8.	Health insurance	BPJS	345	54
		Private	285	44
		Other	11	2
	Total		641	100

Based on the results of the study on 641 respondents, the age distribution of residents aged 0-5 years was 38 people (5.9%), those aged 6-13 years were 83 people (12.9%), those aged 14-18 years were 65 people (10.1%), 204 people aged 19-45 years (31.8%), 151 people aged 46-60 years (23.5%), 61-90 years old 97 people (15, 1%) and 3 people aged > 90 years (0.7%).

Among 641 respondents in Tunjungsari Suburban, it was found that 66 people (10.39) did not attend school, 20 people had Kindergarten education (3.12%), 255 people had Elementary School education (39.79%), who 119 people with junior high school education (18.56%), 114 people with high school education (22.46%) and 31 people graduated from university (5.77%). The distribution of married status amounted to 412 people (64.27%), and unmarried status up to 206 people (32.13%), while those with widow/widower status totaled 23 people (3.59%). All citizens are Muslim as many as 641 people (100%).

Based on the table above among 641 respondents, the data on the employment of residents about 17 respondents were working as civil servants/TNI-POLRI (2.65%), 22 respondents were working as private employees (3.43%), 122 entrepreneurs (19.03%), 28 participant working as cottar or farm laborers (4.36%), 160 working as farmers (24.96%), 6 participant working as fishermen (0.93%), 100 housewives (15.60%) and no working as many as 186 people (29.01%). Based on the assessment it was found that there were 116 participant who were smoking inside the houses (53%) and 101 smoking outside (47%). Moreover, among 217 households in the location, about 116 households (53.45%) had family income less than one million, 64 households (29.49%) had income from one million to less than three million, and as many as 37 households (17.05%) have family income of more than three million.

Based on the family waste management, it was found that most of the households were burned the family waste in the open area (N=203;93,5%), while some others piled up the waste behind the family houses (N=14,19.81%). Based on the discussion results during pre-MMD 1 (Musyarawah Masyarakat Desa 1) activity within some of the leaders of the local area, it is found that some of the families also throwing the garbage in the river due to no landfill in their area. About health insurance utilization, among 641 participants there are 345 people (54%) who actively member of Indonesian National Health Insurance program by BPJS, 285 people (44%) used independent insurance, and about 11 people (2%) who pay health insurance independently in the private insurance company.

2. The community morbidity among all age group during the last 6 months were presented in the following Table 2

Table 2
Morbidity during the last 6 months

Type of diseases	N	%
ARI/RTI	142	38.27
TBC	4	1.07
Hypertension	23	6.19
Heart problem	2	0.53
Kidney problem	1	0.26
Stroke	4	1.07
Diabetes Mellitus (DM)	2	0.53
Dengue Haemorrhagic fever (DHF)	1	0.26
Diarrhoea	10	2.69
Skin itchiness	13	3.5
Psychosis, mental problem	6	1.61
Other	163	43.93
Total	371	100

Based on the table above among 641 respondents, it was obtained that 371 had experienced illness in the last 6 months as follows:

142 people (38.27%) had acute respiratory infections/RTI, 4 people experienced TB (1.07%), 23 people had hypertension (6.19%), heart problem in 2 people (0.53%), kidney problem in 1 person (0.26%), stroke in 4 people (1.07%), DM in 2 people (0.53%), DHF in 1 person (0.26%), diarrhea in 10 people (2.69%), skin itchiness (N=13; 50%), mental disorders in 6 people (1.61%), and others diseases about 163 people (43.93%).

3. The elder’s health and health facilities utilization

Based on the number of the elders who lives around Tunjungsari Suburban, the health facilities utilization was presented in the following Table 3.

Table 3
The characteristics of elders and health facilities utilization

Variabes	Indicator	N	%
Visit to the Posyandu	Regular	1	1
	Rarely	10	10
	No visit	89	89
	Total	100	100
Health examination	Regular	3	16%
	Rarely	24	84%
	Never	73	
	Total	100	100%
Social activities	Regular	3	3%
	Rarely	24	24%
	No visit	73	73%
	Total	100	100%

Based on the distribution of the Posyandu utilization, it was found that majority of the elderly had never been to the Posyandu (N=89; 89%), about 10 elders (10%) rarely visit the Posyandu and while a small number of 1 respondent (1%) regularly visit to perform the health check at Posyandu. Based on the results of interviews with some of the participant, the barrier for elders to failed visiting the Posyandu regularly because of the distance of the Posyandu from their houses, and no vehicles or transportation support. The Posyandu (Pos Pelayanan Terpadu) is an integrated service post for the elderly in a certain area that has been agreed upon and driven by the community (Kemenkes RI, 2018). The risk-prone community may get health services regularly in Posyandu (Aeini, 2020).

Based on the health check distribution data, it was also surprisingly found that almost all of the elders had no visit at any health care facilities as many as 73 (73%) people. Some were rarely visit as many as 24 (36%) people, and only 3 (7%) elders were express they have regular visit to the health care facilities also participate in social activities around their houses and livings.

4. Nursing diagnose, Intervention, Implementation and Evaluation

Based on the results of the assessment and data analysis carried out during the research process, there were three nursing problems that we were found and adopted from the Indonesian Nursing Diagnostic Standard guidelines (SDKI, 2018) including: 1) Ineffective Health Care related to Inability to solve problems (Individual or Family) marked by the occurrence of ARI/RTI and hypertension (D.0003); 2) Community health deficit related to limited resources (family waste management) (D.0110); and the last 3) Risk-prone health behaviors related with less exposure to information (D.0099).

DISCUSSION

This part will explore more about the significance of the results of the study. Some primary and secondary data become the reasons for the first diagnose about ineffective health care associated with inability to solve problems (individual or family) is characterized by the number of ARI/RTI and hypertension were raised. For the first nursing diagnose, some of the elder’s said that they did not check their health at the Posyandu due to the distance of Posyandu from the houses, and there were no vehicles or transportation support. The secondary data showed that the community showed less interest in promoting healthy behaviour, unable to perform the healthy behaviour, and less support system. The finding was in line with a study using 2013 Indonesian Basic Health Survey (RKD) by Laksono et al (2019) showed that there was a disparity in health facilities utilization between urban-rural areas. People living in urban area of Indonesia show better utilization than people who living in rural areas, in the use outpatient and at the same time the use of inpatient care facilities. Supported this finding, a study by Douthit at.al (2015) mention in a review about barrier to health care access in USA that rural residents were found to have poorer health, with rural areas having difficulty in attracting and retaining physicians, and maintaining health services on a par with their urban counterparts. A sustainable program of reform with the aim to improve the provision of services, promote recruitment and distribution, training and career development of rural health care professionals, increase comprehensive health insurance coverage and engage rural residents and healthcare providers in health promotion is then recommend to be implemented.

In related with second diagnoses, during the discussion on MMD 1, the community representative said they did not have landfills, trash carts and did not have a final disposal site (TPA – Tempat Pembuangan Sampah Akhir) for family waste management. Moreover, the society prefer to burn the garbage in their yard, piled or throw it directly into the river. The residents need to know that if they do not stop this negative habit, the water will be contaminated by microplastics, such as The Brantas River, the longest river in East Java’s, which has been contaminated within abundance of microplastics in upstream as

well as the downstream (Buwono et. al, 2020). Abundant microplastics will disrupt the ecosystem also biogenetic of flora and fauna, it may become harmful pollutant in the drinking water resources. To the human, the longterm effects of microplastics uptakes will result in reduced food intake, developmental disorders, even behavioral changes (Issac et.al, 2021).

The head of Tunjungsari Suburban also stated that many elderly people experience shortness of breath, and most residents experience coughing and colds seasonally and these were may cause by inappropriate waste management by the community. Irianti & Prasetyoputra (2018) in their study about open burning household solid waste correlated with the RTI, urges to whole stakeholders including the community to tackle the prevalent practice of open burning. Open burning of solid waste will distribute pollutants to the air including oxides of nitrogen, sulfure dioxide, methane and non-methane compound which associated with the human health and environmental impacts (Okedere, 2019).

Based on the findings, the researchers and the team planned some nursing intervention according to SIKI (2018) as primary and secondary prevention efforts.

1. Promotion of health effort behavior (I.12472)

Target output of this intervention was the adequacy of cognitive information related to a particular topic increase. Due to this nursing plan, the researcher together with community established a program called GO-MEDIC targeted the elder's population to remedy the poor health habits by performing screening and health check also we carry out the health promotion on smoking and hypertension topics. The program was held in October 2nd 2022 also in collaboration with the Puskesmas Bantur nurses and midwives.



Figure 1. GO-MEDIC activity

Beside this program, the students also perform some health promotions using small group teaching approach around October 2022. The health promotion performed after the residents finish their social activity such as Tahlilan and PKK (Pemberdayaan Kesejahteraan Keluarga) activities. The students created a flyer as media promotion with the focused topics on smoking habit and hypertension.



Figure 2. Health promotion in residents' social activities

2. Community Environment Management (I.14515)

The definition of this intervention was to manage the community environmental which may relate to the diseases in the community. Together with the community and Puskesmas we targeted that the river that runs through the Tunjungsari Suburban were clean and no piles of the garbage that block the rivers flows. The program was held in awareness that established the landfill or waste box were cannot be implemented due to the limited resources and time. The activity was performed in October 2nd 2022.



Figure 3. Gotong royong or mutual assistance in cleaning the river between the students with the residence

3. Health Education (I.12383)

The definition of this intervention was to teach especially targeted the elder's population in Posyandu about the disease risk factors and healthy clean-living behaviour (PHBS). The activity was held in October 6th, 2022 at RT 29. The students using flyer as media promotion. By the end of the programs, nursing evaluations were held together with the Head Nurses of Puskesmas Bantur in the MMD2 activities.



Figure 4. Health education in Posyandu (RT 29)

CONCLUSION

Based on the community of Tunjungsari Suburban which consisted of three RWs and 16 RTs (RT 16-31) among 650 houses with a total of 2,683 people with a randomly selected obtained 217 houses consisting of 641 people. Based on the disease in the last 6 months about 641 people, there were 305 people with respiratory infection disease and 23 people with hypertension. The survey conducted on 100 elderly people showed that almost all elders never visit the Posyandu as many as 89 elderly people, and about 73 elders never perform any screening or health check. The distribution of landfills resulted in the most of the family waste being burned by 109 households and disposed of in the river by 108 households. Regarding the smoking activity, there were 116 participants smokes inside the houses.

Nursing diagnoses that emerged were community health deficits in related with limited resources marked by the burning garbage and garbage disposal in rivers; ineffective health care in related with inability to solve problems marked by having a history of behavior seeking health care that was lacking and health behavior tending to be at risk in related with smoking behavior inside the houses. By the end of the nursing community program, the students also provide 3in1 Glucose, Cholesterol, and Uric acid check-up devices also sphygmomanometer to the village nurses within the intention to equip the

Tunjungsari Suburban Posyandu facilities and so on limit the barrier of the elders to do the performing routine healthy check in their nearest health facilities. It is recommended for the stakeholders to improve the community health services, increases the health promotion programs distribution especially targeting the elder's population health literacy. Moreover, for the government by providing final waste management in this community will significantly help to increases the community health and quality of life in general.

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REFERENCES

- AEINI, K. E. N. (2020). Kajian Keaktifan Lansia di Posyandu Lansia (Doctoral dissertation, Poltekkes Kemenkes Yogyakarta).
- Anderson, E. T., & McFarlane, J. M. (2015). *Community as partner: Theory and practice in nursing*. Philadelphia, PA: Wolters Kluwer.
- Buwono, N. R., Risjani, Y., & Soegianto, A. (2021). Distribution of microplastic in relation to water quality parameters in the Brantas River, East Java, Indonesia. *Environmental Technology & Innovation*, 24, 101915.
- Badan Penelitian dan Pengembangan Kesehatan. National Report of Basic Health Research 2018 [Laporan Nasional Riskesdas 2018]. Jakarta: Lembaga Penerbit Badan Penelitian dan Pengembangan Kesehatan; 2019. <https://www.litbang.kemkes.go.id/laporan-riset-kesehatan-dasar-riskesdas/>
- Bappenas. (2013). *Planning Guidelines for the National Movement Program for the Acceleration of Nutrition Improvement in the Context of the First Thousand Days of Life (1000 HPK Movement)*. Jakarta: National Development Planning Agency.
- BKKBN. (2014). *Report on the Performance of Government Agencies of the 2014 National Population and Family Planning Agency (BKKBN)*. Jakarta.
- Dwi Widiyaningsih, Dwi Suharyanta.(2020). *Promosi Dan Advokasi Kesehatan*. Yogyakarta: CV Budi Utama.
- Enie Novieastari, Kusman Ibrahim, Sri Ramdaniati, Deswani Deswani. (2019). *Fundamentals of Nursing Vol 1- 9th Indonesian Edition* - Google Books. Jakarta: Hooi Ping Che.
- Fathmawati, F., Rauf, S., & Indraswari, B. W. (2021). Factors related with the incidence of acute respiratory infections in toddlers in Sleman, Yogyakarta, Indonesia: Evidence from the Sleman Health and Demographic Surveillance System. *PLOS ONE*, 16(9), e0257881.

- <https://doi.org/10.1371/journal.pone.0257881>
- Germany, P., & Constantine, NA (2010). Demographic and Psychological Predictors of Parent-Adolescent Communication About Sex: A Representative Statewide Analysis. *Journal of Youth and Adolescence*, 39 (10), 1164–1174. <https://doi.org/10.1007/s10964-010-9546-1>
- Hapsari, et. All. (2018). Knowledge of Surveillance Officers on Identification of Healthcare-associated Infections in Surabaya. <https://e-journal.unair.ac.id/JBE/article/download/8613/5369>
- Irianti, S., & Prasetyoputra, P. (2018). Open Burning of Household Solid Waste and Child Respiratory Health: Evidence from Indonesia. *Jurnal Ekologi Kesehatan*, 17(3), 123-134.
- Issac, M. N., & Kandasubramanian, B. (2021). Effect of microplastics in water and aquatic systems. *Environmental Science and Pollution Research*, 28(16), 19544-19562.
- Kemkes RI, 2018. Pedoman Umum Pengelolaan Posyandu. Jakarta: Kementerian Kesehatan RI
- Kim, M. Y., & Oh, S. (2020). Nurses' Perspectives on health education and health literacy of older patients. *International journal of environmental research and public health*, 17(18), 6455.
- Laksono AD, Wulandari RD, Soedirham O. Urban and Rural Disparities in Hospital Utilization among Indonesian Adults. *Iran J Public Health*. 2019 Feb;48(2):247-255. PMID: 31205878; PMCID: PMC6556184.
- Litchman G, Nair PA, Atwater AR, Bhutta BS. Contact Dermatitis. 2021 Feb 7. In: *StatPearls [Internet]*. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. PMID: 29083649.
- Mafutha, N. G., Mogotlane, S., & De Swardt, H. C. (2017). Development of a Hypertension Health Literacy Assessment Tool for use in primary healthcare clinics in South Africa, Gauteng. *African Journal of Primary Health Care and Family Medicine*, 9(1), 1-8.
- Mathur, P. (2010). *Hand Hygiene: back to the basics of infection control*. New Delhi: Indian J Med Res. 2011 Nov; 134 (5).
- Nies, M. A., & McEwen, M. (2014). *Community/public health nursing-E-book: promoting the health of populations*. Elsevier Health Sciences.
- Nursalam. (2015). *manajemen keperawatan : aplikasi dalam praktek keperawatan profesional (edisi 5)*. Jakarta: Salemba medika.
- Nursalam. (2016a). *Metodologi Penelitian Ilmu Keperawatan: Pendekatan 60 Praktis (edisi 4)*. Jakarta: Salemba medika.
- Notoatmodjo, Soekidjo, 2014. *Metodologi Ilmu Kesehatan*. Jakarta: Penerbit Rineka Cipta.
- Notoatmodjo, Soekidjo, 2016. *Metodologi Penelitian Kesehatan*. Jakarta: Penerbit Rineka Cipta.
- Okedere, O. B., Olalekan, A. P., Fakinle, B. S., Elehinafe, F. B., Odunlami, O. A., & Sonibare, J. A. (2019). Urban air pollution from the open burning of municipal solid waste. *Environmental Quality Management*, 28(4), 67-74.
- Oktaviani.J. (2018). *Jurnal Berkala Epidemiologi Volume 6 Nomor 2 (2018)*. <https://sinta.unud.ac.id/uploads/wisuda/1202116022-3-bab%202.pdf>
- Priyono, 2016. *metode penelitian kuantitatif*. Sidoarjo: Zifatama Publishing. Rokhman, Wahibur.
- Patricia A. Potter, et al.(2019). *Essentials for Nursing Practice - E-Book*. [https://books.google.co.id/books?id=wDtRDwAAQBAI&pg=PA249&dq=\(CDC,+2009\)+hand+sanitizer&hl=id&sa=X&ved=2ahUKewiMusKDhprtAhVKzTgGHayDJIQ6AEwAHoECAYQA g](https://books.google.co.id/books?id=wDtRDwAAQBAI&pg=PA249&dq=(CDC,+2009)+hand+sanitizer&hl=id&sa=X&ved=2ahUKewiMusKDhprtAhVKzTgGHayDJIQ6AEwAHoECAYQA g)
- Rachman, I., Soesanto, Q. M. B., Khair, H., & Matsumoto, T. (2020). Participation of leaders and community in solid waste management in indonesia to reduce landfill waste load. *Journal of Community Based Environmental Engineering and Management*, 4(2), 75-84.
- Sularsito, S.A. & Djuanda, S. 2013, *Ilmu Penyakit Kulit dan Kelamin : Dermatitis*, 6th edn, Badan Penerbit FKUI, Jakarta.
- Sularsito, S.A. & Soebaryo, R.W. 2018, *Ilmu Penyakit Kulit dan Kelamin : Dermatitis Kontak*, 6th edn, Badan Penerbit FKUI, Jakarta.
- Sugiyono.(2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: PT Alfabet
- World Health Organization. (2010). *WHO Guideline on Handhygiene in Health care (Advanced Draft) tahun 2006 WHO/EIP/SPO/QPS/06.2 [cited 2006: Available at: <http://premierinc.com/safety/topics/guidelines/downloads/whohand-hygiene-guidelines.pdf>*.
- PPNI, Tim Pokja SDKI DPP. "Standar Diagnosis Keperawatan Indonesia (SDKI)." (2018).
- PPNI, Tim Pokja SIKI DPP. "Standar Intervensi Keperawatan Indonesia (SIKI)." (2018).
- PPNI, Tim Pokja SLKI. "Standar Luaran Keperawatan Indonesia (SLKI)." (2019).
- RI Ministry of Health. (2018). *InfoDATIN Data and Information Center Ministry of Health RI: Adolescent Reproductive Health Situation*. Jakarta.
- Shiferaw, K., Getahun, F., & Asres, G. (2014). Assessment of adolescents 'communication on sexual and reproductive health matters with parents and associated factors among secondary and preparatory schools' students in Debremarkos town, North West Ethiopia. *Reproductive Health*, 11 (1), 2. <https://doi.org/10.1186/1742-4755-11-2>
- Stanhope, M., & Lancaster, J. (2019). *Public health nursing e-book: Population-centered health care in the community*. Elsevier Health Sciences.

- Susilarini NK, Haryanto E, Praptiningsih CY, Mangiri A, Kipuw N, Tarya I, et al. Estimated incidence of influenza-associated severe acute respiratory infections in Indonesia, 2013–2016. *Infl Other Respir Viruses*. 2018;12: 81–87. pmid:29205865
- Taddele, M., Jara, D., & Hunie, A. (2018). Level of Parent Adolescent Communication on Sexual and Reproductive Health Issues and Associated Factors among Debre Markos Preparatory School Students, in Debre Markos Town, East Gojjam, Zone, Ethiopia. *Universal Journal of Public Health*, 6 (4), 203–209. <https://doi.org/10.13189/ujph.2018.060406>
- WHO. World Health Statistics 2019: Monitoring Health for SDGs, Sustainable Development Goals. Geneva: World Health Organization; 2019. <https://apps.who.int/iris/handle/10665/324835>
- Williamson EJ, Walker AJ, Bhaskaran K, et al. Factors associated with COVID-19-related death using OpenSAFELY. *Nature* 2020 ; 584:430–6.
- Yohannes, Z. (2015). Factors Associated with Parent-Adolescent Communication on Sexual and Reproductive Health Issues Among Secondary and Preparatory School Students in Mekelle City, North Ethiopia. *Science Discovery*, 3 (6), 55. <https://doi.org/10.11648/j.sd.20150306.13>