



## Analysis of Sanitation Fulfillment with Visitors Comfort in Kreo Cave Semarang

MG Catur Yuantari<sup>1✉</sup>, Novia Aryaningrum<sup>1</sup>, Amelia Devi Putri Ariyanto<sup>2</sup>

<sup>1</sup>Dian Nuswantoro University, Indonesia

<sup>2</sup>Sepuluh Nopember Institute of Technology, Indonesia

### Article Info

#### Article History:

Submitted 28 Februari 2022

Accepted 02 Maret 2022

Published 30 April 2022

#### Keywords:

Sanitation; Comfort  
Level; Visitors; Tourist  
Attractions; Kreo Cave

#### DOI

<https://doi.org/10.15294/jhe.v7i1.55196>

### Abstract

**Background:** Enjoying natural beauty, fresh air, and beautiful scenery has become a necessity at this time. Identification of sanitation compliance and visitors' comfort level at tourist sites needs to be done to increase visitor comfort, which can increase tourist attraction. This study aimed to analyze the relationship between the fulfillment of sanitation to the comfort level of visitors to tourist attractions. **Methods:** The research method used is cross-sectional, with the number of respondents as many as 100 people. The research location is in the tourist area of Kreo Cave, Semarang. **Results:** The results showed that there was a relationship between the fulfillment of sanitation and the comfort level of visitors to Kreo Cave (P-value <0.005) with a reasonably strong relationship strength (Rho: 0.370). **Conclusions:** The better the fulfillment of sanitation, the more perceived level of comfort by visitors. Fulfillment of toilet cleanliness, availability of water, friendliness of officers, and implementation of health protocols makes visitors feel comfortable at tourist attractions. However, in this tourist spot, it is necessary to install a disaster evacuation route signboard that has not been carried out by the tourist spot manager and improve the cleanliness of the food and beverage sellers

✉ Correspondence Address:

Email : [mgcatur.yuantari@dsn.dinus.ac.id](mailto:mgcatur.yuantari@dsn.dinus.ac.id)

## INTRODUCTION

Indonesia is a country that has very high biodiversity. Abundant natural resources in Indonesia have the potential and a vital role in the development of tourism to increase state income. Tourism is a series of travel activities by individuals or groups, from their residences to other places, to make tourist visits, not work or earn income at the destination (Mulasari et al., 2020; Soedarso, Muchammad Nurif, 2014).

Data from the Central Bureau of Statistics of Central Java Province shows the number of visitors who visited tourist attractions in Central Java in 2015 was many as 421,191 foreign visitors and 33,030,843 domestic visitors (Badan Pusat Statistik, 2015). The Semarang City Central Statistics Agency data also shows that the number of foreign visitors through the Ahmad Yani Airport entrance has decreased by 99.5% (Semarang, 2020). The decline in the number of foreign visitors occurred because, in September 2019, there were 1981 foreign visitors, while from August to September 2020, only ten foreign visitors were visiting Semarang. The management of tourist attractions felt the decline in the number of visitors due to the Covid-19 pandemic in Indonesia since July 2020.

The city of Semarang is the capital of Central Java, Indonesia. The tourist attractions in the city of Semarang include Sam Poo Kong Temple, Kota Lama, Tugu Muda, Lawang Sewu, and Kreo Cave. Kreo Cave is a cave formed by nature and is located in the middle of the Jatibarang Reservoir, located in Kandri Village, Gunung Pati District, Semarang City, Central Java. Some of the facilities at Kreo Cave are bathrooms, trash cans, parking areas, hand washing stations, directions, tourist attraction entrance counters, information centers, and tourist attraction information media. Tourist attractions such as Kreo Cave require special attention. These particular concerns include sanitation, compliance with health protocols from visitors to minimize the transmission of Covid-19, and control of disasters.

Sanitation is one of the efforts to monitor and prevent the transmission of diseases such as cholera, diarrhea, dysentery, hepatitis A, typhoid, and polio in tourist attractions (Nyoman & Made, 2018; Utami, 2018). Every

manager of tourist attractions will pay attention to sanitation in their environment so that there is no spread of disease. The spread of disease in tourist attractions can be minimized by adhering to operational standards of tourist attractions. Facilities and cleanliness need to be considered in the sanitation of tourist attractions.

Several studies explain the relationship between tourist facilities and visitor satisfaction. Marianti researched the influence of tourism facilities and infrastructure on visitor satisfaction of Lejja Hot Springs in the Soppeng Regency (Marianti, 2019). The study stated that the facilities and infrastructure at the Lejja hot spring tourist spot had a positive and significant effect on visitor satisfaction. Matulesy et al. conducted research related to analyzing visitor perceptions of infrastructure and comfort at the Karmon Waterfall tourist spot, Yawosi, North Biak (Matulesy et al., 2020). The results of this study indicate that the existing infrastructure in these tourist attractions is still inadequate. Research by Jinayan surveyed the level of visitor satisfaction with the tourist attractions of Topejawa Beach in Takalar Regency (Jinayan, 2019). The type of research used in Jinayan's research is a descriptive method, where the data that has been collected is then analyzed quantitatively and qualitatively. The study also revealed that only about 32.5% of Topejawa Beach visitors were satisfied with the existing infrastructure.

Several previous studies have shown that not many have researched the relationship of sanitation to visitors' comfort level at Kreo Cave tourist attractions, Semarang. Kreo Cave was chosen because it is one of the historical caves formerly the temple of Sunan Kalijaga for meditating. The cave is preserved through conservation. Conservation is an effort to protect and maintain something done to prevent damage or destruction (Sandbrook, 2015).

Therefore, it is necessary to identify the fulfillment of sanitation in Kreo Cave Semarang tourist attractions, such as parking lots, toilets, trash cans, and evacuation route signs in Kreo Cave. This identification can be used as additional information and knowledge about the relationship between the fulfillment

of sanitation and the comfort of visitors in Kreo Cave for managers of Kreo Cave tourist attractions so that it can attract more visitors to come to Kreo Cave. Thus, the purpose of this study was to analyze the relationship between the fulfillment of sanitation and the comfort level of visitors at Kreo Cave tourist attractions, Semarang.

## METHODS

The independent variable in this study is the fulfillment of sanitation in Kreo Cave, Semarang and the dependent variable is the comfort of visitors in Kreo Cave. This type of research is included in analytical observational research. Analytical observational research referred to in this study is research that conducts an analysis related to sanitation facilities at Kreo Cave tourist attractions for the comfort of visitors. A survey is needed in the form of a checklist on the availability of sanitation facilities in Kreo Cave. Besides the survey, observations were also made of tourist attractions in Kreo Cave. This observation aims to find out the reality in Kreo Cave through direct observation activities by observing and recording the completeness of sanitation provided there.

The method used in this study is a cross-sectional method. The number of samples taken is as many as 100 people. The sample was taken by selecting and seeing respondents who had finished visiting the Kreo Cave tourist attractions to fill out the survey provided in this study. The time of data collection was carried out from June 2021. The collected data was then processed using the Spearman rank test. This research has gone through an ethical review with 038/EA/KEPK-FKES-UDINUS/V/2021.

## RESULTS AND DISCUSSIONS

Kreo Cave Tourism Semarang is located in Talun Kacang, Kandri Village, Gunungpati District, Semarang City, Central Java. The word "Kreo" comes from "Mangreho" which means pet or guard. Two things become the attraction of this tourist area. First, the cave became the nest of dozens of wild monkeys. Second, this area is also used as a water tourism object, namely Jatibarang Reservoir.

Table 1 shows the age of most respondents

in this study, with a range of 15 – 26 years, as much as 53%. The age of the respondents who were the least found in this study was 39–50 years old, which was only 13%. Characteristics of respondents related to the number of visits twice obtained the highest percentage of 41%. The gender which often visits Kreo Cave tourist attractions is female. The occupations of most respondents who visited Kreo Cave were employees.

Table 2 shows the existing sanitation in Kreo Cave tourist attractions. As many as 80 respondents agreed that the condition of the toilets in Kreo Cave was clean, the floor was not slippery, and it did not smell. There is clean water, and there is no shortage of clean water when using the toilet. Kreo Cave tourist attractions have implemented health protocols and provided handwashing with stamping the feet. Washing hands properly for 20 seconds is one way to prevent the transmission of Covid-19 (Chandrayani Simanjorang, GraciaChristy Tooy, Grace Wuaten, 2021). Officers at the Kreo Cave tourist spot have also reminded visitors constantly to wear masks and keep their distance from other visitors. However, the parking area at Kreo Cave tourist attractions is still not adequate. Food and drinks sold by traders who sell around the tourist attractions of Kreo Cave are still not guaranteed to be clean. In addition, the signboard for the disaster evacuation route is also not yet available at the Kreo Cave tourist spot.

The frequency distribution of the comfort level of Kreo Cave visitors can be seen in Table 3. In the table, it can be seen that visitors are comfortable using the toilets available at Kreo Cave tourist attractions. Visitors also feel comfortable when the officer who checks the temperature of tourists is friendly and polite. However, even though Kreo Cave has provided a handwashing area, visitors feel uncomfortable using it. The uncomfortable feeling occurs because the available handwashing facilities are still deemed inadequate. Visitors also feel uncomfortable when the officers on duty often urge them to keep their distance from other visitors. A total of 89 respondents stated that they were not comfortable buying food or drinks sold by traders in Kreo Cave because they felt it was not hygienic.

Table 4 is a table of the results of the sanitation relationship test at Kreo Cave tourist attractions with the level of visitor comfort. The data from the table obtained a P-value of 0.000 (P-value <0.05), which means that there is a relationship between sanitation in Kreo

Cave tourist attractions and the comfort level of visitors when visiting Kreo Cave tourist attractions in Semarang. There is a very strong relationship between sanitation in Kreo Cave and visitors' comfort level because the rho value is 0.370 and is positive.

**Table 1.** Characteristics of Respondents (n=100)

Characteristics of Respondents	Information	Frequency	Percent (%)
Age	15-26	53	53.0%
	27-38	34	34.0%
	39-50	13	13.0%
Number of Visits	1	30	30.0%
	2	41	41.0%
	3	18	18.0%
	4	10	10.0%
	5	1	1%
Gender	Male	48	48.0%
	Female	52	52.0%
Profession	Student	19	19.0%
	Employee	42	42.0%
	Entrepreneur	26	26.0%
	Civil Servant	13	13.0%

**Table 2.** Sanitation Frequency Distribution in Kreo Cave

Questions	Agree		Do Not Agree	
	F	%	F	%
The location of the Kreo Cave tourist attraction is clean.	84	84.0%	16	16.0%
The condition of the entry counter or ticket booth is decent.	13	13.0%	87	87.0%
The distance between Kreo Cave and the city center is close.	90	90.0%	10	10.0%
The road to Kreo Cave is good (it is well paved).	14	14.0%	86	86.0%
The location of Kreo Cave is strategic (besides the main road).	9	09.0%	91	91.0%
There is a security guard on duty inside the tour.	19	19.0%	81	81.0%
There are officers to remind visitors to continue to wear masks and maintain social distance.	86	86.0%	14	14.0%
Good parking area.	13	13.0%	87	87.0%
There are public toilets inside and outside the tourist area, and there are adequate numbers.	7	07.0%	93	93.0%
The condition of the toilet is clean (the floor is not slippery and does not smell).	84	84.0%	16	16.0%
There is clean water in the toilet, and there is no shortage of clean water.	85	85.0%	15	15.0%
There is a liquid soap, a dipper, and a bucket in the toilet.	8	08.0%	92	92.0%
There is an evacuation route signpost.	7	07.0%	93	93.0%
Lots of trash and covered.	8	08.0%	92	92.0%
The seller sells offers at an affordable price.	8	08.0%	92	92.0%
Sellers who sell food are guaranteed cleanliness.	39	39.0%	61	61.0%
Tour guides understand the stories that occur at tourist attractions.	58	53.0%	42	42.0%
The tour guide is well-dressed, polite, and friendly.	5	05.0%	95	95.0%
Tourist attractions have implemented health protocols.	4	04.0%	96	96.0%
Provision of handwashing soap using a footstool.	58	58.0%	42	42.0%
Plenty of rest within the (seating) area.	35	35.0%	65	65.0%
There are two paths for visitors who will enter the tourist attraction and visitors who exit the parking lot.	58	58.0%	42	42.0%
There is an appeal from the tourist management officer to be careful when feeding the monkeys.	86	86.0%	14	14.0%
The distance traveled by visitors to get to the tourist icon is quite far.	57	57.0%	43	43.0%
The condition of the road to tourist attractions is categorized as decent or good (not slippery, not much mud).	85	85.0%	15	15.0%

**Table 3.** Frequency Distribution of the Comfort Level of Kreo Cave Visitors

Questions	Agree		Do Not Agree	
	F	%	F	%
I can easily find the location of the Kreo cave tourist counter.	53	53.0%	47	47.0%
In finding the information provided by the manager regarding the origin of the Kreo cave tourist attractions, it is straightforward to find.	60	60.0%	40	40.0%
I find it challenging to find a parking space that has been provided.	93	93.0%	7	07.0%
I am comfortable when I am on the toilet.	60	60.0%	40	40.0%
It was tough for me to find it when looking for directions in and out of the Kreo cave tourist area.	88	88.0%	12	12.0%
When in an emergency, I find it challenging to find the evacuation route sign at this tourist spot.	93	93.0%	7	07.0%
I feel comfortable when doing worship.	15	15.0%	85	85.0%
All the staff and guards at the attraction do not pay attention to health protocols and make me uncomfortable.	86	86.0%	14	14.0%
When looking for health posts provided by tourist attractions, I find it challenging to find them.	91	91.0%	9	09.0%
It is straightforward to find tourist routes because they can be reached by public transportation.	54	54.0%	46	46.0%
When taking out the trash, it is easy for me to find a garbage dump.	17	17.0%	83	83.0%
I feel uncomfortable when going to wash my hands because the place is not suitable.	14	14.0%	86	86.0%
I feel comfortable when the officer on duty to check the temperature of tourists is friendly, polite.	91	91.0%	9	09.0%
I do not feel comfortable if the officer often asks me to keep my distance from other visitors	85	85.0%	15	15.0%
I am not comfortable when I want to buy food and drinks at sellers because it is not hygienic.	89	89.0%	11	11.0%
I do not feel comfortable when there is a photographer who always offers and ignores the protocol.	85	85.0%	15	15.0%
The tour guide, when explaining, is challenging to understand, so I feel dissatisfied.	84	84.0%	16	16.0%
I find it difficult to find gas stations near tourist attractions.	80	80.0%	20	20.0%
It is easy to find a restaurant near the Kreo Cave tourist attraction.	20	20.0%	80	80.0%
I am not comfortable with the condition of the road to the Kreo Cave.	84	84.0%	16	16.0%

**Table 4.** The Result of the Sanitation Relationship Test in Kreo Cave with the Comfort Level of Visitors

Variable	P-Value	Rho	Informations
Tourist Attractions Sanitation	0,000	0,370	There is a relationship
Visitor Comfort Level			

Natural beauty is not the only aspect needed by tourists. Facilities and infrastructure that exist in tourist attractions are also a necessity needed by tourists when traveling. Tourism facilities can be interpreted as providers of business services that provide services to tourists, and their lives depend on tourist arrivals, either directly or indirectly (Saad, 2015). Tourism infrastructure is all the equipment that makes it possible for tourism facilities to develop. This completeness can be in the form of natural resources and human resources needed by tourists when enjoying tourist destinations (Ju et al., 2020).

The relationship between sanitation and comfort level can be seen in the availability of sanitation toilets in Kreo Cave which are clean, odorless, and have non-slip floors so that visitors can feel comfortable using the toilets in Kreo Cave. The direct observations at the Kreo Cave tourist spot show that the toilets there are almost under the Regulation of the Minister of Tourism Number 3 of 2018 (P. M. P. R. Indonesia, 2018) regarding the standard criteria for tourist attractions. However, one criterion is not under the standard, namely air circulation. Air circulation in the toilets at the Kreo Cave tourist spot is still not good.

Therefore, an exhaust fan is needed that can be placed above the sink to speed up the drying of the floor and the environment around the toilet to avoid unpleasant odors, mold, and bacteria.

The study results indicate that sellers in Kreo Cave tourist attractions do not guarantee the cleanliness of the food and drinks they sell. Such behavior of sellers causes inconvenience for visitors to buy food and drinks because they feel that the goods sold by the sellers are less hygienic. Previous research conducted by Utami et al. also found a similar problem. Some food vendors in Bogor have not maintained the cleanliness of their food and beverages. The seller's negative behavior includes not washing hands with soap, both after and before handling the merchandise. Do not wash cooking utensils with running water, and do not dry the utensils with special cloths. Do not wash vegetables with running water (Utami et al., 2019). Cleanliness of the hands, feet, and nails also requires special attention so that the personal hygiene of the sellers is maintained. Personal hygiene is the behavior of taking care of oneself by always keeping the body and clothes clean to improve the overall health and well-being of the body (Al-Rifaai et al., 2018; Nurudeen & Toyin, 2020; Tamiru et al., 2017). Keeping nails clean is essential for sellers because germs can enter the body through nails. Thus, the nails of the sellers must remain clean and healthy (Pratama & Prasasti, 2018).

Hygienic behavior needs to be further improved through mentoring programs for sellers. Ensuring food safety implementation, which is better and more cost-effective than spending on treatment due to food poisoning. Cooperation between the Health Officer and Kreo Cave tourist attractions management is needed to promote hygienic behavior under Minister of Health Regulation no. 942 of 2003 (K. M. K. R. Indonesia, 2003). The socialization can be in the form of training on food safety, such as washing hands properly, using clean water to wash food and utensils, and understanding how to properly process, serve and store food and utensils (Utami et al., 2019). Traders who are sick are also better off not selling so they do not transmit the virus to their buyers (Isnadi et al., 2018).

Kreo Cave tourist attractions do not

yet have a signboard for disaster evacuation routes. The location of Kreo Cave is included in a landslide-prone location. Therefore, the manager of Kreo Cave needs to provide a signboard for disaster evacuation routes so that when an unexpected natural disaster occurs, visitors can easily and quickly save themselves when a disaster occurs suddenly.

The study results also show that the Kreo Cave tourist spot has educated the officers who stand guard there to remind visitors to keep wearing masks and always keep their distance. The World Health Organization recommends maintaining a safe distance of about one meter from other people. The purpose of maintaining distance is to reduce direct physical contact with other people who have symptoms of Covid-19 or other people who can transmit Covid-19 (Organization, 2020). Purnama et al. stated that every officer must provide hygiene and sanitation education related to Covid-19 in the community, workplace, and tourist attractions. The role of community leaders such as owners or managers of tourist attractions is needed to provide understanding and education in their environment (Purnama & Susanna, 2020). This understanding includes control, transmission, and prevention measures that can help the community deal with the Covid-19 pandemic. Thus, the actions taken by the managers and officers of the Kreo Cave tourist attractions are correct, who constantly remind and educate visitors to maintain health protocols during the Covid-19 pandemic. Although, as many as 85 respondents were not comfortable if the officers were too often asked to keep their distance from other visitors.

## CONCLUSION

There is a relationship between sanitation and visitors' comfort level at Kreo Cave tourist attractions, where the P-Value is 0.000, and the Rho value is 0.370, which means the strength of the relationship is quite strong. The survey results and direct observation in Kreo Cave show that clean toilets are available. However, personal hygiene for sellers who sell in the Kreo Cave area still needs improvement. The installation of evacuation routes also needs to be considered because the evacuation route boards are still not available at Kreo Cave

tourist attractions. Officers have reminded visitors to always comply with health protocols. Health protocols in Kreo Cave must be maintained to avoid the spread of Covid-19. The better the sanitation available at Kreo Cave tourist attractions, the more comfortable visitors will be. Therefore, the Kreo Cave tourist spot manager needs to evaluate the monthly sanitation available there for the convenience of visitors.

## REFERENCES

- Al-Rifaai, J. M., Al Haddad, A. M., & Qasem, J. A. (2018). Personal hygiene among college students in Kuwait: A Health promotion perspective. *Journal of Education and Health Promotion*, 7, 92. [https://doi.org/10.4103/jehp.jehp\\_158\\_17](https://doi.org/10.4103/jehp.jehp_158_17)
- Badan Pusat Statistik. (2015). *Output Tabel Dinamis Subjek Pariwisata*.
- Chandrayani Simanjourang, GraciaChristy Tooy, Grace Wuaten, N. P. (2021). Knowledge, Attitudes, and Practices Towards COVID-19 among North Sulawesi Indonesia Residents. *Journal of Health Education*, 6(2), 57–64.
- Indonesia, K. M. K. R. (2003). *Pedoman Persyaratan Hygiene Sanitasi Makanan Jajanan (Patent No. Peraturan Menteri Kesehatan No. 942 Tahun 2003)*.
- Indonesia, P. M. P. R. (2018). *Petunjuk Operasional Pengelolaan Dana Alokasi Khusus Fisik Bidang Pariwisata (Patent No. Peraturan Menteri Pariwisata Nomor 3 Tahun 2018)*.
- Isnadi, Y., Malaka, T., Dahlan, H., & Novrikasari. (2018). Food hygiene and sanitation in six food providers at University X, South Sumatra. *Kesmas*, 12(4), 194–201. <https://doi.org/10.21109/kesmas.v12i4.1414>
- Jinayan, J. (2019). *Survei Tingkat Kepuasan Pengunjung Terhadap Objek Wisata Pantai Topejawa Di Kabupaten Takalar [UNIVERSITAS NEGERI MAKASSAR]*. <http://eprints.unm.ac.id/id/eprint/13937>
- Ju, J., Wei, S. J., Savira, F., Suharsono, Y., Aragão, R., Linsi, L., Editor, B., Reeger, U., Sievers, W., Michalopoulou, C., Mimis, A., Editor, B., Ersbøll, E., Groenendijk, K., Waldrauch, H., Waldrauch, H., Bader, E., Lebhart, G., Neustädter, C., Saillard, Y. (2020). Persepsi Masyarakat Terhadap Ketersediaan Sarana Dan Prasarana Di Pulau Komodo Kabupaten Manggarai Barat. *Journal of Chemical Information and Modeling*, 43(1), 7728.
- Marianti, M. (2019). *Pengaruh Sarana Prasarana Pariwisata Terhadap Kepuasan Wisatawan Pada Objek Wisata Permandian Air Panas Lejja Di Kabupten Soppeng [Universitas Negeri Makassar]*. <http://eprints.unm.ac.id/id/eprint/14886>
- Matulesy, Salakory, H., & Saragih, Y. (2020). Analisis Persepsi Wisatawan Terhadap Infrastruktur Wisata Dan Kenyamanan Objek Wisata Air Terjun Kermon Distrik Yawosi Biak Utara. *Jurnal Kajian Dan Terapan Pariwisata*, 1, 58–70. <https://doi.org/10.53356/diparojs.v1i1.16>
- Mulasari, S. A., Masruddin, M., Izza, A. N., Hidayatullah, F., D.P.B.M.A, F., Axmalia, A., & Tukiyo, I. W. (2020). Pengetahuan Keselamatan dan Kesehatan Kerja (K3) pada Kelompok Sadar Wisata di Desa Caturharjo Yogyakarta. *Jurnal Berkala Kesehatan*, 6(1), 31. <https://doi.org/10.20527/jbk.v6i1.8355>
- Nurudeen, A. S. N., & Toyin, A. (2020). Knowledge of Personal Hygiene among Undergraduates. *Journal of Health Education*, 5(2), 66–71. <https://doi.org/10.15294/jhe.v5i2.38383>
- Nyoman, I. S., & Made, I. T. S. (2018). *Sanitasi, Hygiene dan Keselamatan Kerja Hotel*.
- Organization, W. H. (2020). COVID-19.
- Pratama, K. F., & Prasasti, C. I. (2018). Gangguan Kulit Pemulung Di Tpa Kenep Ditinjau Dari Aspek Keselamatan Dan Kesehatan Kerja. *The Indonesian Journal of Occupational Safety and Health*, 6(2), 135. <https://doi.org/10.20473/ijosh.v6i2.2017.135-145>
- Purnama, S. G., & Susanna, D. (2020). Hygiene and sanitation challenge for covid-19 prevention in Indonesia. *Kesmas*, 15(2), 6–13. <https://doi.org/10.21109/KESMAS.V15I2.3932>
- Saad, M. A. (2015). Strategi Pengembangan Prasarana Dan Sara Obyek Wisata Bahari Pulau Sembilan Di Kabupaten Sinjai. *Jobman: Journal of Organization and Bussines Management*, 2(1), 1–99.
- Sandbrook, C. (2015). What is conservation? *Oryx*, 49(4), 565–566. <https://doi.org/10.1017/S0030605315000952>
- Semarang, B. P. S. K. (2020). *Perkembangan Pariwisata Kota Semarang Bulan Juni 2020*. 1–7.
- Soedarso, Muchammad Nurif, W. (2014). Potensi Dan Kendala Pengembangan Pariwisata Berbasis Kekayaan Alam Dengan Pendekatan Marketing Places (Studi Kasus Pengembangan Pariwisata Di Kabupaten Bojonegoro). *Jurnal Sosial Humaniora*, 7(2), 136–149.
- Tamiru, D., Argaw, A., Gerbaba, M., Ayana, G., Nigussie, A., Jisha, H., & Belachew, T. (2017). Enhancing Personal Hygiene Behavior and Competency of Elementary School

- Adolescents through Peer-Led Approach and School-Friendly: A Quasi-Experimental Study. *Ethiopian Journal of Health Sciences*, 27(3), 245–254. <https://doi.org/10.4314/ejhs.v27i3.6>
- Utami. (2018). Dampak Sanitasi Lingkungan Terhadap Kesehatan Masyarakat di Wilayah Pesisir Kecamatan Kota Agung. *Jurnal Abdimas Dewantara*, 53(9), 1689–1699.
- Utami, D. F. R., Rahayu, W. P., & Nuraida, L. (2019). Consumption of fresh vegetable salad and sanitation of street food stalls at four locations in Bogor City. *Kesmas*, 13(3), 124–131. <https://doi.org/10.21109/kesmas.v13i3.2051>