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CLEAN AND HEALTHY LIVING BEHAVIOUR AND INFECTIOUS DISEASES (COVID-19) DIFFRERENCES BETWEEN DORMITORY AND HOME DURING THE COVID-19 PANDEMIC

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ABSTRACT

Introduction: Based on the results of the 2018 Basic Health Research, it was found that only 39.1% of households implemented clean and healthy living behavior (CHLB). During the COVID-19 pandemic, students living in dormitory and at home continue their studies at the Modern Islamic Boarding School. The differences in living conditions have an impact on Clean and Healthy Living Behavior (CHLB) and infectious diseases (COVID-19). **Aims:** this research is to compare CHLB and infectious diseases (COVID-19) between students living at dormitory and home. **Methods:** A cross-sectional design study was conducted in January-February 2023 at Madrasah Aliah Mranggen, Demak, involving 232 students aged 16-18 years. The sample size is calculated using a formula to test the difference in means between two unpaired population groups with numerical data. Subjects were selected through systematic random sampling based on inclusion and exclusion criteria. Data were collected using a household CHLB questionnaire. The data were analyzed using Mann Whitney and Chi Square Test. **Results:** showed no differences in age, CHLB, and infectious diseases among students living at dormitory and home. There were differences in handwashing with soap and water after using the toilet (p=0.041) and handling money (p=0.014), as well as the absence of smoking by dormitory mates/family members inside the Home/dormitory (p=0.001) between the two groups. **Conclusion:** There were no differences in CHLB and infectious diseases (COVID-19) between students living in dormitories and at home during the COVID-19pandemic.

Keywords: Clean and Healthy Living Behavior, Modern Islamic Boarding School, Dormitory, Home, COVID-19

INTRODUCTION

Based on the results of the 2018 Basic Health Research, it was found that only 39.1% of households implemented clean and healthy living behavior (CHLB). Overall, the data shows that less than half of the people at the national level actually implement CHLB well. CHLB is a key element in determining community health status (Ministry of Health of the Republic of Indonesia, 2019).

The increase in COVID-19 cases cannot be avoided due to community activities, and an increase in the number of positive COVID-19 cases is starting to emerge in new clusters. One of these clusters is related to the dominant Islamic boarding school group. The Indonesian government urges the public to comply with health protocols by implementing

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CHLB to avoid viruses. In the context of Islamic boarding schools, CHLB includes all actions carried out based on understanding and awareness, which give students the ability to independently prevent disease, improve health, and play an active role in creating a healthy environment (Collein, Aminuddin and Supetran, 2022).

Half of the Islamic boarding school's teenage students (50%) showed CHLB which could be categorized as poor, especially in terms of personal hygiene indicators (Yuli Fatmawati et al., 2016). Damayati's (2020) research at the Darussalam Gontor modern Islamic boarding school, East Java stated that CHLB status is closely related to the incidence of infection (Damayanti, 2020). Another research by Yuliani in Jakarta showed that santri were still low in practicing CHLB in the form of washing their hands during the COVID-19 pandemic (Shahibah and Nova, 2022). Islamic boarding schools that strictly implement CHLB have a lower rate of transmission of COVID-19 compared to Islamic boarding schools that pay less attention to CHLB. This research highlights the important role of CHLB in protecting the community in Islamic boarding schools from the threat of COVID-19 (Smith, 2020).

The Basic Health Research Survey in Central Java revealed that the proportion of CHLB implementation in this province was below the national average in 2013 (Kementerian kesehatan Republik Indonesia, 2019). Demak is a city in the province of Central Java and has a Healthy Family Index score of 0.184. Demak has hundreds of Islamic boarding schools, and Mranggen subdistrict in Demak is one of the subdistricts with the largest number of Islamic boarding schools. Apart from that, this area had the highest number of COVID-19 cases in Demak Regency on July 8 2021. This subdistrict borders the city of Semarang (Satgas COVID-19, 2020). The research was at the Madrasah Aliah level or the equivalent of a high school at a modern Islamic boarding school in Mranggen District, Demak Regency.

Modern Islamic boarding schools are a type of Islamic boarding school that integrates formal education by adopting the national and religious curriculum. One of the levels of education at Islamic boarding school madrasah is madrasah aliah (equivalent to high school). The main components in Islamic boarding schools include leaders (kyai), teachers and students (Dhofier, 1984).

Students in modern Islamic boarding schools are divided into two groups, namely students who live in dormitories and students who live at home. Santri who live in dormitories are also called mukim santri and are those who live in Islamic boarding schools after completing madrasa activities. Meanwhile, students who live at home or santri kalong are students who immediately return to their respective homes after completing school activities (Dhofier, 1984).

The aim of the research is to compare the differences in clean and healthy living behavior and infectious diseases (COVID-19) between students living in dormitories and at home during the COVID-19 pandemic.

METHODS

Study settings

This research is observational with a cross-sectional design. The research population consisted of 1.350 teenage students aged 16–18 years from eight modern Islamic boarding schools in Madrasah Aliah, Mranggen District, Demak Regency, Central Java Province who lived in dormitories and homes, including 526 students who lived in dormitories and 824 Islamic boarding school students who lived at home. The inclusion criteria are being registered as a private student at a modern Islamic boarding school, being allowed to choose a place to live at home or in a dormitory

when entering the Islamic boarding school, not being exposed to COVID-19, and being in good condition. Santri who live in dormitories (santri mukim) are those who remain in the Islamic boarding school after completing their activities at the madrasah. Meanwhile, students who live at home (santri non-mukim or santri kalong) are those who immediately return to their homes without staying overnight at the Islamic boarding school after finishing their activities at the madrasah. Exclusion criteria are schools where all students must live in dormitories, there are no students during class (absent), and incomplete data. Research subjects were selected using systematic random sampling.

Data collection instruments and procedure

The sample size is calculated using a formula to test the difference in means between two unpaired population groups with numerical data. Taking into account a 5% error rate, 80% power, a standard deviation of 0.51, and a health behavior of 0.196, the minimum sample size required for each group was determined to be 106. Thus, the overall sample comprised 232 individuals, including 116 students living in dormitories (58 boys and 58 girls) and 116 students residing at home (58 boys and 58 girls) age 16-18 years, ensuring an equal gender distribution in both groups (Al-Hazzaa et al., 2013). Data were collected in the field in the period January to February 2022.

Data on subject characteristics were collected through interviews using a structured questionnaire. The CHLB variable uses a household level CHLB form which consists of checking with a health worker if you are sick, weighing yourself every month, using clean water, washing your hands with clean water and soap (before/after eating, after defecating, throwing away the trash, handling money, every time returning to home/dormitory, and touching external items), using a healthy toilet (use a latrine at home/dormitory and use the toilet for defecation and urination), eradicating mosquito larvae (throwing out trash and draining the bathroom tub once a week), eating vegetables and fruit every day, doing physical activity every day , and not smoking indoors (score 0-19). CHLB is categorized into two, namely low CHLB and high CHLB. A student's low CHLB score is ≤ 11.

High CHLB score is > 11. The infectious disease variable (COVID-19) is the student who has or is currently suffering from COVID-19 in the last three months during the pandemic.

Statistical analysis

Data normality was tested using the Kolmogorov Smirnov test, while data analysis was carried out using the Mann Whitney U and Chi Square tests. The software used for data analysis is IBM-SPSS Statistics 21 which is licensed by Diponegoro University. In all statistical tests, a p-value of less than 0.05 is considered the level of statistical significance.

Ethical issues

Data collection began after obtaining approval from the Medical/Health Research Bioethics Commission, Faculty of Medicine, Sultan Agung Islamic University, Semarang, which issued approval number 425/XII/2021/Bioethics Commission, and after the research subjects gave written consent after explanation.

RESULT

Table 1 illustrates that the results stated that there was no difference in age (16-18 years) between students living at home and in dormitories, with a value of p=0.127. Most of the subjects in the home and dormitory groups were 16 years of age. There is no difference in CHLB between the two groups (p=0.96). Most of

the subjects in the two groups fell into the low CHLB category, with a percentage of 54.3% for subjects in the dormitory group and 57.8% for subjects in the home group.

Table 1. Differences in Age and CHLB between Subjects in Dormitory and Home Groups

Variable	Residence				*p value*
	Dormitory		Home		
	Median±SD	Min-Max	Median±SD	Min-Max	
Age	16.7 ± 0.43	16.1-18.4	196.9 ± 0.53	16.1-18.8	0.127*[a]
CHLB (total score)	10.83 ± 2.77	2.0-17.0	11.08 ± 2.41	4.0-16.0	0.96*[b]

*[a]Independent T Test, *[b]Mann Whitney test

Students were intentionally matched, with 50% living in the dormitory and 50% living at home. There are no significant number of subjects who had suffered from an infectious disease (COVID-19) between the two groups with a value p=1.00. They are 6% of subjects in the dormitory who have suffered COVID-19 in the last three months during the pandemic (Table 1) and 8% of subjects in the home have suffered COVID-19 (Table 2).

Table 2. Differences in Gender and Infectious Disease in the Dormitory and Home Groups

Variable	Residence		*p*-value
	Dormitory n (%)	Home n (%)	
Gender			
Man	58 (50%)	58 (50%)	1.00
Women	58 (50%)	58 (50%)	
Infectious Disease (COVID-19)			
Have suffered	7 (6%)	8 (6.9%)	1.00
Never suffered	109 (94%)	108(93.1%	

Table 1. Clean and Healthy Living Behavior Score and Infectious Diseases (COVID-19)

Variable	Mean Rank	*p-Value*
Infectious Disease (COVID-19)		
Have ever suffered (n=15)	136.77	0.223
Never suffered (n=227)	115.10	

There is no relationship between CHLB and infectious diseases (COVID-19). (Table 3). Table 4 shows that there is no difference in checking yourself with a health worker, weighing yourself every month, using clean water, using a healthy latrine (available latrine and using a latrine), washing your hands with clean water and soap (available hand washing place, before and/ or after eating, after throwing away the trash, every time you come home), eradicating mosquito larvae and draining the bathroom), eating fruit and vegetables every day, and doing physical activity every day between the two groups. However, there was a difference in the category of subjects washing their hands with soap and water after defecating between subjects in the dormitory and home groups (p=0.041). Furthermore, there were differences in handwashing behavior with soap and water after handling money between the two groups (p=0.014), and there were also

differences in the category of housemates/family members who do not smoke indoors among the subjects in the dormitory and at home (p=0.001).

Table 2. Distribution of Clean and Healthy Living Behavior based on Residence

Variable	**Residence**			***p-Value***
	Dormitory	**Home**	**Total**	
	n (%)	**n (%)**	**n(%)**	
Check yourself with a health professional	74 (63.8%)	60 (51.7%)	134 (57.8%)	0.084
Measure your weight every month	14 (12.1%)	17 (15.5%)	31 (13.4%)	0.7
Use clean water	116 (100%)	116 (100%)	232 (100%)	
Hand washing facilities are available in the dormitory/home	102 (87.9%)	98 (84.5%)	200 (86.2%)	0.568
Wash your hands with clean water and soap, before and/or after eating	53 (45.7%)	62 (53.4%)	115 (49.6%)	0.293
Wash your hands with clean water and soap after defecating	93 (80.2%)	105 (99%)	198 (85.3%)	0.041*
Wash your hands with clean water and soap after throwing away the trash	60 (51.7%)	74 (67%)	134 (57.8%)	0.084
Wash your hands with clean water and soap every time you return home/dormitory	33 (28.4%)	45 (38.8%)	78 (33.6%)	0.126
Wash your hands with clean water and soap after handling money	7 (13.5%	20 (17.2%)	27 (11.6%)	0.014*
Wash your hands with clean water and soap after touching external items	20 (17.2%)	28 (24.1%)	48 (20.7%)	0.257
Have (have or use) a latrine at home/dormitory	116 (100%)	116 (100%)	232 (100%)	
Using the toilet for defecation and urination	116 (100%)	116 (100%)	232 (100%)	
Throw out trash	110 (94.8%)	112 (96.6%)	222 (95.7%)	0.746
Drain the bathroom tub once a week	89 (76.7%)	78 (67.2%)	167 (72%)	0.144
Eat vegetables every day	66 (56.9%)	62 (53.4%)	128 (55.2%)	0.692
Eat fruit every day	9 (7.8%)	16 (13.8%)	25 (10.8%)	0.204
Do regular physical activity/exercise every day	25 (21.6%)	25 (21.6%)	50 (21.6%)	1.00
Dormitory mates/members do not smoke in the home/dormitory	86 (74.1%)	58 (50%)	144 (62.1%)	0,000*
No smoking in the home/dormitory	84 (72.4%)	82 (70.7%)	166 (71.6%)	0.884

*p<0.05, Chi Square

DISCUSSION

Age Differences between Dormitory and Home

There is no significant difference between the ages of students living at home and in dormitories because both groups are generally in the same youth age range, namely 12-19 years. Research shows that santri have heterogeneous backgrounds, and the experience of adjustment in Islamic boarding schools does not depend on age, but rather on the psychological and social factors experienced when adapting to a new environment. In addition, both students at home and in dormitories face similar challenges in terms of learning and social interaction (Prasetyaningrum and Nurhidayati, 2023; Resnayati, Riyanti, and Maryam, 2023).

Clean and Healthy Living Behavior and Differences between Dormitory and Home

The research results showed that there was no difference in CHLB between subjects in the dormitory and home groups. Subjects in the dormitory and home groups were still <50% in terms of practicing CHLB, namely weighing themselves regularly, washing their hands with soap, consuming fruit, and physical activity. Supporting facilities such as hand washing facilities and soap in dormitories and some homes are limited. This makes the implementation of CHLB less than optimal. Supervision from modern Islamic boarding schools regarding the implementation of CHLB by subjects in both groups is considered to be less intensive and less than optimal. Some subjects in both groups were considered to still not really understand how to implement CHLB correctly and consistently in their daily lives. The high mobility in and out of dormitories and homes means that monitoring of CHLB is also less effective.

This is a very important concern, because they are still lacking in implementing CHLB during the COVID-19 period. They need to receive education regarding CHLB This research is in accordance with research in Cirebon, West Java, concluding that sanitation facilities and health knowledge have more influence on santri's CHLB than where they live. So it can be concluded that this research shows that there is no significant difference in CHLB between students in dormitories and at home (Maulana and Suharto, 2020). The results of the study illustrate that all subjects in the dormitory and home groups used clean water, had toilets available in the dormitory/home, and used latrines for defecation and urination. Clean water has been distributed well in the Mranggen area, Demak. Sources of clean water are Regional Drinking Water Companies (RDWC) and wells. Clean water is useful for the body to avoid diseases such as diarrhea, cholera, dysentery, typhus, worms, eye diseases, skin diseases or poisoning (Proverawati and Rahmawati, 2017).

The dormitory uses an artesian well for daily needs such as ablution, bathing, cooking and washing clothes. The dormitory limits subjects to bathing once a day and receives sanctions if they violate this. Subjects used drinking water by purchasing refill drinking water outside the dormitory. Subjects in the home group use clean water from wells or Regional Drinking Water Companies. Those who have homes at the far end will get less RDWC water flow. They use buckets to collect water in the bathroom and provide spare buckets in case the RDWC water gets stuck. This RDWC water is used for cooking, bathing and washing clothes. Subjects who use wells feel that they do not lack water. They will buy artificial water for cooking purposes. Well water is used for bathing and washing clothes. They buy drinking water in the form of refill drinking water or mineral drinking water.

Subjects in the dormitory group are required to drain the bathroom tub once a week using a rotating system, either per room or per complex in the dormitory. The complex consists of several rooms. The condition of women's toilets looks clean, does not smell and is not slippery. Some men's latrine conditions do not comply with the rule of draining the bathroom tub once a week. The condition of the bathroom is smelly and slippery. The bathroom tub between one room and another is connected so that water-borne diseases (rats, scabies, etc.) can spread (Butarbutar et al., 2022). The availability of dormitory bathrooms is not sufficient for the number of students. Dormitory bathrooms are used only for showering and have separate toilets. The number of dormitory toilets is estimated at an average of 30 people or six rooms, namely one bathroom and two toilets. Ideally, for every additional 10 people one bathroom and one latrine are added (Muchaddam, 2009).

Subjects in group homes draining the bathroom tub is borne by the parents, especially the mother, and there is no system of taking turns. Water storage uses buckets and large tubs. The bathroom is equipped with a toilet. Some bathrooms with bucket water reservoirs are slippery and smelly, even though they look clean. The bathroom is cleaned when it feels dirty, about once every 2 weeks – 1 month. In bathrooms with large water reservoir, the floor is not slippery and does not smell because it is cleaned once a week.

Subjects in the dormitory group checked themselves with a health worker when they were sick, had a place to wash their hands, drained the bathroom tub once a week, and did not smoke indoors more often than subjects in the home group. Subjects in the home group who did not see a health worker when they were sick preferred to drink herbal medicine, kerokan and buy over-the-counter medicine. They feel safe living with their parents so the decision to seek treatment rests with their parents. Subjects in the boarding group must be independent in making decisions. They choose to buy over-the-counter medicines when they don't check with a health professional.

The subject's family members in the home group who smoked indoors were brothers and father. Subjects in the home group followed their father's or older brother's smoking habits. Subjects in the dormitory group received dormitory regulations not to smoke in the dormitory area. If the administrator is caught smoking in the dormitory area, the subject will be punished. Subjects in both groups need to receive education about the dangers of smoking. There are differences in boarding friends/family members not smoking in the home/dormitory between subjects in the dormitory and home groups. This is influenced by several factors, namely the rules prohibiting smoking in dormitories are strictly enforced by the leaders and administrators of Islamic boarding schools. Second, the control mechanisms and sanctions for rule violators in the dormitory environment are generally stricter. Third, the level of awareness of the dangers of smoking tends to be higher among subjects in the boarding group because they receive more health education from the boarding school leadership. Lastly, the large number of residents in each dormitory room also makes students reluctant to smoke carelessly because it can disturb many people.

The negative impact of smoking habits on body health has been tested and proven through various studies. Many studies show that smoking increases the risk of various diseases. Recent research also reveals the dangers of exposure to cigarette smoke for non-smokers, known as passive smokers. Both active smoking and passive exposure to cigarette smoke have dangerous impacts on the body, such as the risk of chronic lung disease, stroke, heart attack, skin and uterine cancer, infertility, and increased bone fragility (Proverawati andRahmawati, 2017).

Insufficient hand washing facilities can influence people not to carry out CHLB hand washing (Proverawati and Rahmawati, 2017). At the beginning of the pandemic, 100% of dormitories provided hand washing facilities. However, when the researchers made observations, some of the hand washing facilities in the dormitory were missing, damaged and not reused.

Washing hands has an important role in eliminating or reducing the presence of microorganisms attached to hands. The process of washing hands must be done using clean water and soap. Unclean water contains germs and bacteria that can cause disease. When hands are exposed to germs, they can easily enter the body when we eat, increasing the risk of disease. Using soap in washing hands helps clean dirt and also kills germs. Without soap, dirt and germs can still remain on your hands. Therefore, washing hands with water and soap has significant benefits in killing germs and maintaining hand hygiene (Proverawati and Rahmawati, 2017). Clean hands will prevent transmission of COVID-19 and diarrhea.

The right time to wash your hands with water and soap is before and/or after eating, after defecating, after throwing away the trash, every time you come home, after handling money, and after touching objects from outside. Subjects in the dormitory and home groups admitted that they were too lazy to do this.

There were differences in washing hands with clean water and soap after handling money and after defecating between subjects in the dormitory and home groups. Subjects in the home group tended to be more accustomed and disciplined in washing their hands with soap after defecating and after handling money compared to subjects in the dormitory group. This is influenced by several factors. First, parents at home can supervise and remind their children more intensively to wash their hands regularly compared to supervision in dormitories where the number of students is relatively larger. Second, the availability of hand washing facilities such as hand washing facilities and soap at home is generally more adequate, whereas in dormitories it is still limited. Researchers found that latrines in dormitories are not equipped with a supply of soap for washing hands after defecating. Third, parents at home can get their children used to washing their hands after certain activities, whereas this habit is less practiced in dormitories. Finally, the level of health knowledge, including the importance of washing hands, among students at home is usually better because it is taught directly by parents. Subjects in the boarding group also argued that they were lazy about washing their hands with soap. Efforts are needed to increase education regarding CHLB.

Subjects in the dormitory group weighed themselves every month, washed their hands with clean water and soap, disposed of rubbish properly, and ate fruit every day at a lower rate than subjects in the home group. The lack of scales available in schools means that subjects in boarding and home groups do not weigh themselves regularly. Those who regularly weigh themselves are subjects with overweight and obesity at the pharmacy and at home. Weighing your body weight is useful for monitoring changes in nutritional status for the better or vice versa.

Eradicating mosquito larvae is very beneficial because the mosquito population is controlled so that mosquito-mediated disease transmission can be prevented, such as Dengue Hemorrhagic Fever (DHF), Malaria, Chikungunya or elephantiasis. Almost 100% of subjects in the dormitory and home groups dispose of rubbish in the right place.

Daily consumption of vegetables and fruit is important because they contain vitamins and minerals which play a role in regulating growth and maintaining body health, and are rich in fiber. Based on

scientific research, it is known that consuming fruit and vegetables regularly can reduce the risk of developing diseases such as diabetes, stroke, cancer, high blood pressure, and even COVID-19 (Proverawati and Rahmawati, 2017). Both subjects in the dormitory and home groups were relatively similar in terms of consuming vegetables every day . However, in terms of consuming fruit, both subjects in the dormitory and home groups still consumed little fruit every day. This is because fruit is one of the primary needs due to possible economic factors and low parental knowledge. This is in accordance with data from the 2013 Basic Health Research showing that as many as 93.5% of the population aged over 10 years consume fewer than five portions of fruit every day (Kementerian kesehatan Republik Indonesia, 2019). This research was conducted in Madinah Munawaroh, Saudi Arabia, which explained that students who lived in dormitories consumed less fruit compared to students who lived at home (Tarighat et al., 2003).

Subjects in the dormitory and home groups were relatively similar in carrying out regular physical activity/exercise every day. Subjects in both groups (men) carried out regular physical activity every day by playing football. Subjects in the home group (female) in the overweight or obese category carried out physical activity in the form of walking every afternoon for one hour. The benefits of doing physical activity/exercise regularly every day are improving the work and function of the heart, increasing the body's metabolism to prevent obesity and maintaining ideal body weight, and improving the immune system (Proverawati and Rahmawati, 2017). The COVID-19 pandemic has led to a decrease in physical activity (Pitanga and Beck, 2020). Some other studies do not support the theory that reduced or excessive physical activity can make individuals more susceptible to SARS-CoV-2 infection (Crisafulli, 2020; Woods et al., 2020; Rowlandset al., 2021)

This research is in accordance with research in Madinah Munawaroh, Saudi Arabia which explains that no There are differences in physical activity between students in dormitories and at home (Alghamdi et al.., 2018).

Infectious Diseases (COVID-19) Differences between Dormitory and Home

The research showed that there was no difference in infectious disease (COVID-19) between subjects in the dormitory and home groups. Subjects in the dormitory and home groups had less than 7% of infectious diseases who had suffered from COVID-19. More subjects in the home group (6.9%) had confirmed COVID-19 than subjects in the dormitory group (6%). When one of the subjects in the dormitory group was confirmed to have COVID-19, learning activities were carried out online both at home and in the dormitory. To maintain safety and health, the dormitory decided to close school and dormitory activities, and gave permission for subjects to return to their respective homes for a period of 2 weeks to 1 month (Rahman and Widiyanto, A., 2020; Mulyana and Yusuf, 2021). The decline in cases is thought to be due to reduced social interaction, mobility and activity. outside due to restrictions during the pandemic. Protocols such as using masks and physical distancing also help prevent transmission of viruses or germs that cause infection (Irfan andMuttaqin, 2021).

This research is in accordance with research in Bandung, West Java, concluding that there is no significant difference in the incidence of COVID-19 between high school students living in dormitories and at home. This is because the risk factor for contracting COVID-19 is more influenced by students' preventive behavior such as physical distancing, use of masks, and clean and healthy living behavior, not where they live in a dormitory or home. Other research relevant to this research was conducted in

Punjab , India. The findings of this study suggest that there is no significant difference in the incidence of COVID-19 between students living in boarding schools and students not living in hostels in India. This illustrates that the most influential factor in the spread of COVID-19 is the preventive behavior implemented by students, such as using masks, maintaining physical distance, and washing hands frequently, not just whether they live in a dormitory or not (Prasad, Singh andGupta, 2021).

Another cause that contributes to the reduction in the number of cases of infectious diseases (COVID-19 and diarrhea) is access to basic health facilities and the availability of medicines in Islamic boarding schools which are still quite good, so that infectious diseases (COVID-19 and diarrhea) that arise can be treated quickly. Even though there are some subjects in both groups who experience deficient and poor nutritional status, there are also subjects in both groups who have good nutritional status, which helps keep their immune system maintained (Pritasari and Wulandari, 2021). Therefore, increasing education health and nutrition, improving sanitation facilities and providing nutritious food are still highly recommended to improve the immune power of subjects in both groups for the better.

The Relationship between Clean and Healthy Living Behavior (CHLB) and Infectious Diseases (COVID-19).

This research is in accordance with research in Pangandaran, West Java which states that CHLB is not related to infectious diseases (COVID-19). Poor CHLB can increase the risk of spreading COVID-19, but there are many other factors that can influence the level of infection, such as vaccination rates, levels of exposure to the virus, and compliance with health protocols (Asyri et al., 2023). The same study conducted by Ismail, Salimba and Jahari (2021) in Malaysia did not find a significant relationship between the frequency of handwashing and bathing with the risk of contracting COVID-19 among adolescents aged 13-17 years. Clean hygiene habits were not proven to protect teenagers from infection .

Teenagers tend to be less disciplined in practicing clean hygiene habits and often ignore health protocols, putting them at risk of getting infected even if they regularly clean themselves (Ismail, Salimbaand Jahari, 2021). Other risk factors such as the duration of close contact with confirmed cases have a greater impact on the risk of COVID-19 transmission compared to hygiene practices like handwashing (Smith, Siednerand Kwon, 2021).

Policy on Clean and Healthy Living Behavior and COVID-19 Infection.

The policies that can be implemented in accordance with this article are (Rahim et al., 2022): Health education involves holding an educational program on CHLB for students, both in the dormitory and at home, so that they understand the importance of cleanliness in preventing infection. Health monitoring entails implementing a routine health monitoring system for students in dormitories and at home, including regular health checks and reporting of COVID-19 symptoms. Hygiene facilities must be ensured by providing adequate amenities, such as hand washing stations with soap and running water, both in the dormitory and at home. An awareness campaign should be conducted to emphasize the importance of maintaining a clean environment to prevent the spread of infectious diseases, including COVID-19. Additionally, increased physical activity can be promoted by encouraging students to participate in activities such as sports, gymnastics, or other exercises that improve fitness and burn calories, thereby enhancing the immune system.

The strength of this research lies in its relevance to the COVID-19 situation

and the importance of maintaining clean and healthy living behaviors to prevent infection. The study also compares two groups, namely dormitories and homes, providing broader insights into environmental factors that influence clean and healthy living behaviors. Additionally, it uses standardized CHLB indicators, allowing for a more systematic and comprehensive analysis. However, a limitation of this study is that it does not include external factors, such as parental education, which could potentially affect the results.

CONCLUSIONS

There is no difference in CHLB and infectious diseases between students who live in dormitories and at home. Suggestions in this research include education regarding CHLB, improving infrastructure (facilities and facilities) in modern Islamic boarding schools, as well as more intensive supervision and monitoring in modern Islamic boarding school environments. It is hoped that in future research, researchers will conduct research on the role of education and the effectiveness of CHLB intervention programs in modern Islamic boarding schools.

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