



(RESEARCH ARTICLE)



## Factors related to compliance of Covid-19 health protocols among restaurant employees, Mandonga District, Kendari City, Indonesia

Arum Dian Pratiwi \*, Febi Tri Oktaviani, Nani Yuniar and Lisnawaty

*Department of Public Health, Halu Oleo University, Kendari, South-east Sulawesi, Indonesia.*

World Journal of Advanced Research and Reviews, 2023, 18(01), 174–180

Publication history: Received on 18 February 2023; revised on 05 April 2023; accepted on 07 April 2023

Article DOI: <https://doi.org/10.30574/wjarr.2023.18.1.0563>

### Abstract

The restaurant is one of the places that was given a permit to continue to run its business activities in the midst of the Covid-19 pandemic. Restaurant employees can act as spreaders or contracting diseases, this can be through contact between food brought by employees and when interacting with visiting consumers. Therefore, it is important to implement health protocols as an effort to prevent the transmission of Covid-19. The general purpose of this study was to determine the factors related to compliance with the Covid-19 health protocol in restaurant employees, Mandonga District, Kendari City. This study was an analytical study with a cross sectional. The sample in this study amounted to 120 people who were taken using the technique of incidental sampling. Statistical test used test Chi-square with independent variables namely knowledge, education, belief, availability of infrastructure, and economic status with measuring tools in the form of questionnaire sheets and interview methods. The results showed that 106 respondents (88.3%) did not comply with the Covid-19 health protocol and 14 (11.7%) complied with the Covid-19 health protocol. Knowledge variable (p-value =0.000), education (p-value = 0.038), confidence (p-value =0.000), the availability of infrastructure (p-value =0.000) indicates that there was a relationship with Covid-19 health protocol compliance, while the economic status variable (p-value =0.196) showed that there was no relationship with Covid-19 health protocol compliance. The conclusion of the study showed that the variables of knowledge, education, belief, availability of infrastructure have a relationship with Covid-19 health protocol compliance, while the economic status variable has no relationship.

**Keywords:** Covid-19; Compliance ; Knowledge; Restaurant Employee; Covid-19 Health Protocol

### 1. Introduction

Group of viruses from Coronavirus newly discovered in Wuhan, China at the end of 2019. Coronavirus this new type that can cause an infectious disease called Corona Virus Disease 2019 or Covid-19 [1]. Covid-19 is a disease airborne disease caused by a new type of coronavirus recently discovered for the first time in Wuhan. Covid-19 indicates that this disease transmitted from human-to-human through contact with a virus that is released through droplets or splashes of someone's saliva [2].

The Covid-19 outbreak was declared a global pandemic by the World Health Organization (WHO) on March 11, 2020, due to the 13-fold increase in cases reported outside China, within a few weeks [3]. The number of positive cases of Covid as of August 25, 2020, which were confirmed to have been infected by 217 countries with a transmission rate of 23,725,505 cases. The number of positive cases of Covid-19 continues to increase significantly, until October 25, 2020, a total of 42,906,084 cases and 1,154,210 deaths and the number of recovered patients reached 31,650,029 worldwide [4].

\*Corresponding author: Arum Dian Pratiwi  
Department of Public Health, Halu Oleo University, Kendari, South-east Sulawesi, Indonesia

On March 11, 2020, Indonesia reported its first positive case of Covid-19 with a total of 2 cases. Until October 25, 2020 the development of Covid-19 cases in Indonesia. Based on PHEOC data from the Ministry of Health, the total number of cases was 389,712 cases, 13,299 deaths and 313,764 recovered [5]. Conditions in Southeast Sulawesi province also showed an increase in positive cases of Covid-19 as many as 19 4,664 cases, 79 deaths and 3,329 recovered cases. Kendari City, which is the capital of Southeast Sulawesi, which is included in the red area with a positive number of Covid-19 as of October 25, confirmed 2,495 cases, 1766 patients recovered and 31 deaths.

All provinces and regencies/cities need to identify new cases, manage, and provide interventions for new cases of Covid-19, as well as efforts to prevent the transmission of new cases in adapting new habits by implementing strict health protocols in every community activity [5]. The health protocol is a form that must be practiced to prevent the transmission of corona virus contamination [6]. This health protocol includes personal protective equipment in the form of masks, washing hands with soap and running water or using alcohol-based sterile solutions/hand sanitizers, between steps of at least one meter for every other individual, maintaining immune organs by implementing Clean and Healthy Living Behavior (PHBS).

Chu et al [7] mentioned the analysis of maintaining a distance of 1 meter, wearing a mask efficiently preventing corona outbreaks, and eye protection as additional personal protection. Chu et al also mentioned that maintaining a physical distance of 1 m or more was associated with a much lower risk of infection. His findings found that the risk of infection was highly dependent on the distance to the infected individual and the type of face mask and eye protection worn. From a policy and public health perspective, the current policy of physical distancing of at least 1 m appears to be strongly associated with a large protective effect, and 2 m distance could be more effective.

Based on several studies, it is known that the Covid-19 virus can survive on clothes. At room temperature, the corona virus that causes Covid-19 that sticks to the surface of cloth or clothing can last up to 2 days. And from other studies it is known that this virus can survive up to three days on fabrics made of polyester. Therefore, the use of work clothes should be considered so that transmission does not occur at work, from work to home or vice versa [8].

Restaurants or restaurants are a gathering place for many people who want to buy food and drinks either to take home or eat on the spot, this makes the dining area crowded and visited by many people. Moreover, the current condition of the Covid-19 pandemic will be more at risk of transmission of the Covid-19 virus, it is necessary to pay attention to the implementation of the health protocol. The condition of places to eat should meet the requirements for cleanliness, be safe, healthy, and pay attention to the implementation of health protocols. If the place to eat is not paid attention to from a health perspective, it can become a source of disease and a source of spread of disease due to the negligence of both food handlers and visitors who carry diseases and viruses [9].

Compliance and awareness are some of the efforts aimed at eradicating the endemic transmission of the Covid-19 virus. Compliance is a form of individual behavior. According to Lawrence Green (1980) the behavior of a person or individual is influenced by 3 factors, namely: predisposing factors which include knowledge, age, education, attitudes, beliefs [10]. Enabling factors include the availability of infrastructure, economic status. The driving factors include family, health workers. The seeds of the Covid-19 disease are growing and are at stake. When various authorities in various fields, the field is more influential and very bearable, is the economic sector. Based on this incident, the Indonesian government gives permission for activities to return to normal. The restaurant as one of the businesses that were given permission to continue their business life during the virus outbreak. Restaurants in Kendari City, especially restaurants located in Mandonga District amid the Covid-19 pandemic, are still carrying out their business activities and are still visited by customers. Based on the author's initial observations of restaurants located in Mandonga District, Kendari City, it was found that in 8 restaurants there were employees who did not comply with the Covid-19 health protocol for restaurant workers, namely employees who did not wear masks when serving consumers/buyers or when not serving consumers/ Buyers hereby can be dangerous because if they don't wear masks in exposed areas, they can get the virus, as explained by WHO, Covid-19 seems to spread through the air and germs can continue to spread. Based on the problem above, the following investigators conducted research on factors related to compliance with the Covid-19 health protocol in restaurant employees, Mandonga District, Kendari City.

---

## 2. Material and methods

The study type is analytic observational study with a cross-sectional approach. The study was conducted in a 42 restaurants located around Mandonga District, Kendari City. The study was conducted from April to May 2021. The sample in this study was 120 respondents working in restaurant. The technique sampling was incidental sampling. Primary data in this study was taken from the respondents answer in the questionnaires. The data were proceeded by several stages, start from editing, coding, scoring, entry, tabulating, and cleaning, and were analyzed by using univariate

analysis and bivariate analysis. Univariate analysis was carried out based on each variable by calculating the frequency distribution to know the characteristics of the research subject. Bivariate Analysis used Chi-square Test to determine the relationship between two variables consisting of the independent variable and the dependent variable.

There are six (6) variables in this study, the independent variable is the knowledge, education, belief, availability of facilities, economic status, and the dependent variables is the Covid-19 health protocol compliance. Covid-19 health protocol compliance is the obedience behavior of a person with one recommended by the Ministry of Health and has been determined by the Government in implementing the Covid-19 Health Protocol for Restaurant Employees. The measuring instrument used a questionnaire containing 11 questions with objective criteria divided into 2 categories, namely obedient and disobedient. Knowledge is an understanding or information on what respondents/employees know about the Covid-19 health protocol for Restaurant Employees. The measuring instrument used a questionnaire containing 13 questions with objective criteria divided into 2 categories, namely sufficient and insufficient. Education is the last formal education that has been completed by the respondent until the study is carried out. The measuring instrument uses a questionnaire containing 5 levels of education with objective criteria divided into 2 categories, namely basic education and middle education. Belief is the perception of a person/respondent believing that complying with the Covid-19 health protocol is an effort to prevent the transmission of Covid-19. The measuring instrument used a questionnaire containing 6 questions with objective criteria divided into 2 categories, namely good and bad. Availability of facilities is the availability of Covid-19 prevention facilities for Restaurant Employees at work that is based on KMK No HK.01.07-MENKES-382-2020. The measuring instrument used a questionnaire containing 5 questions with objective criteria divided into 2 categories, namely complete and incomplete. Economic status determined by monthly income in Rupiahs. The measuring instrument used a questionnaire containing 2 levels of income with objective criteria divided into 2 categories of moderate and low. Called moderate if the respondent's monthly income is above the provincial minimum wage.

### 3. Results and discussion

#### 3.1. Sample Characteristics

The study was conducted to 42 restaurants in Mandonga District of Kendari City, Indonesia. The data collection was carried out in April-Mei 2021. Table 1 presents the characteristics of the subject in this study with observed frequencies and percentages. Based on the table, most of the respondents are in age 26-35 years old (49.2%) and female (67.5%). Most of the respondents are senior high school (78.3%). Most of the restaurant employee in Kendari City have low knowledge as 85 respondents (70.8%), bad belief (85%), incomplete facilities (94.2%), low economic status (73.3%).

**Table 1** Characteristics of the subjects of the study

| Characteristics | Criteria           | Frequency | Percentage |
|-----------------|--------------------|-----------|------------|
| Age             | 16-25              | 55        | 45,8       |
|                 | 26-35              | 59        | 49.2       |
|                 | 36-45              | 4         | 3.3        |
|                 | 46-55              | 2         | 1.7        |
| Gender          | Male               | 39        | 32.5       |
|                 | Female             | 81        | 67.5       |
| Education       | Primary School     | 6         | 2.5        |
|                 | Junior High School | 20        | 16.7       |
|                 | Senior High School | 94        | 78.3       |
| Knowledge       | Moderate           | 35        | 29.2       |
|                 | Low                | 85        | 70.8       |
| Belief          | Good               | 18        | 15         |
|                 | Bad                | 102       | 85         |

|  |             |     |      |
|--|-------------|-----|------|
| Availability of Facilities             | Complete    | 7   | 5.8  |
|  | Incomplete  | 113 | 94.2 |
| Economic Status                        | Moderate    | 32  | 26.7 |
|  | Low         | 88  | 73.3 |
| Compliance of Covid-19 Health Protocol | Obedient    | 14  | 11.7 |
|  | Disobedient | 106 | 88.3 |

### 3.2. Bivariate Analysis

Bivariate analysis explains the association between knowledge and the practice as independent and dependent variable. The method used is chi-square with 95% confidence level (p-value <0.05). Table 2 shows that most of the restaurant employee in Kendari City disobedient about Covid-19 Health Protocols as 106 respondents (88.3%). The results of the chi-square test can be seen in the Table 2.

**Table 2** Determinants of Compliance of Covid-19 Health Protocol (an analysis by Chi-square Statistic Test)

| Variable                          | Compliance of Covid-19 Health Protocol |      |             |      | Total |      | p-value |
|-----------------------------------|--|------|-------------|------|-------|------|---------|
|                                   | Obedient                               |      | Disobedient |      | n     | %    |         |
|                                   | N                                      | %    | n           | %    |       |      |         |
| <b>Knowledge</b>                  |  |      |             |      |       |      |         |
| Moderate                          | 14                                     | 11.7 | 21          | 17.5 | 35    | 29.2 | 0.000   |
| Low                               | 0                                      | 0    | 85          | 70.8 | 85    | 70.8 |         |
| Total                             | 14                                     | 11.7 | 106         | 88.3 | 120   | 100  |         |
| <b>Education</b>                  |  |      |             |      |       |      |         |
| Basic Education                   | 14                                     | 11.7 | 80          | 66.7 | 94    | 78.3 | 0.038   |
| Middle education                  | 0                                      | 0    | 26          | 21.7 | 26    | 21.7 |         |
| Total                             | 14                                     | 11.7 | 106         | 88.3 | 120   | 100  |         |
| <b>Belief</b>                     |  |      |             |      |       |      |         |
| Good                              | 14                                     | 11.7 | 4           | 3.3  | 18    | 15   | 0.000   |
| Bad                               | 0                                      | 0    | 102         | 85   | 102   | 85   |         |
| Total                             | 14                                     | 11.7 | 106         | 88.3 | 120   | 100  |         |
| <b>Availability of Facilities</b> |  |      |             |      |       |      |         |
| Complete                          | 7                                      | 5.8  | 0           | 0    | 7     | 5.8  | 0.000   |
| Incomplete                        | 7                                      | 5.8  | 106         | 88.3 | 113   | 94.2 |         |
| Total                             | 14                                     | 11.7 | 106         | 88.3 | 120   | 100  |         |
| <b>Economic Status</b>            |  |      |             |      |       |      |         |
| Moderate                          | 6                                      | 5    | 26          | 21.7 | 32    | 26,7 | 0.196   |
| Low                               | 8                                      | 6.7  | 80          | 66.7 | 88    | 73,3 |         |
| Total                             | 14                                     | 11.7 | 106         | 88.3 | 120   | 100  |         |

Primary data, April-May 2021

Result discussion section should be typed in character size 10pt Cambria and alignment justified. Author can directly select Normal style from styles of this template. The results and discussion may be combined into a common section or obtainable separately. An easy way to comply with the conference paper formatting requirements is to use this document as a template and simply type your text into it.

Based on the Table 2, there is a relationship between knowledge and compliance of Covid-19 Health Protocol ( $p$ -value=0.000) in Restaurants' employees in Kendari City. Knowledge is the antecedent of behavior. Knowledge is obtained from learning outcomes or from information obtained. Good knowledge or understanding is expected to be the basis for someone to be able to behave well. So that, knowledge can indeed influence a person to be able to behave well too.

Knowledge or cognitive is a very important domain for the formation of one's actions, through experience and research it turns out that behavior based on knowledge will be more lasting than behavior that is not based on knowledge. Knowledge is a very important factor in shaping one's actions [10]. The results of the analysis of respondents' answers, most of them have an inaccurate understanding in terms of implementing the Covid-19 health protocol before and after work. As many as 73.3% of employees lack an understanding of the importance of paying attention to distance when interacting with someone or consumers. Lack of knowledge about the benefits of using masks at work (48.3%), and 80.8% of employees do not understand the dangers of touching their face, nose, eyes and mouth before washing their hands.

Education related to compliance of Covid-19 Health Protocol ( $p$ -value=0.038) in Restaurants' employees in Kendari City. The level of education can increase a person's knowledge which makes it easier for someone to understand information. The higher a person's level of education, the more effective the idea of knowledge gained and will form a good behavior [11].

Most of the respondents have middle education (SMA) which is 78.3%. Of the 94 respondents (78.3%) who have middle education, 80 respondents did not comply with the Covid-19 health protocol. Based on the data, it is known that although respondents have higher education than other respondents, they still do not comply with health protocols. This can happen because the influence of respondents' knowledge about Covid-19 is still quite low (70.8%).

Belief related to compliance of Covid-19 Health Protocol ( $p$ -value=0.000) in Restaurants' employees in Kendari City. This is in accordance with the theory of Health belief model (HBM), individual health behavior is influenced by knowledge and belief. Belief is the basis, because with strong belief will give birth multiplied potential for action concretely as the embodiment of long process of success, in this case is compliance with the Covid-19 health protocol [12].

Hawa'im [13] stated that belief factors influencing each attitude are behavior belief, namely the belief that it will be successful or not successful in an action, to subjective norm is normative belief, namely the belief that their actions are supported or not supported by certain people or society, and the perception of behavior control is control belief, namely the belief that individuals are able to take action because they are supported by internal and external resources.

Based on Table 2 showed that the facilities of Covid-19 prevention in the restaurants in Kendari city was mostly incomplete. most of the respondents said that hand sanitizers, the provision of masks, and the provision of special work clothes from restaurants had not been provided. But for the hand washing and hand shop, all respondents answered that they had been provided by the restaurants. Based on the statistical test showed that there are relationship between availability facilities and compliance of Covid-19 health protocol. This can happen because someone can carry out an activity, in this case comply with health protocols, if there are facilities to support these activities. The availability of facilities such as a place for washing hands, hand soap, hand sanitizer, masks, and work clothes make it easier for workers in restaurants to comply with the Covid-19 protocol.

The results of this study indicate that there is no relationship between economic status and adherence to the COVID-19 health protocol. In this study, economic status is determined based on the respondent's income whether it is above or below the Provincial Minimum Wage (Rp 2,351,870). Economic status has no effect on employee compliance because obedient employees do not necessarily have a high level of economic status. This is contrary to the opinion of Saiful and Deni [14] which states that someone who feels his current economic situation is better, he tends to have a positive attitude and behavior towards every policy issued by the government. This can be different from what researchers get in the field that low or high economic status does not affect a person's behavior according to his economic level because there are other factors that further support a person's behavior to want to comply with health protocols, namely the availability of facilities that can help someone. to comply with established policies. This can happen because their compliance depends on the facilities provided at the venue.

---

#### 4. Conclusion

The study applied quantitative methods to determine factors affecting compliance of Covid-19 health protocol among employee in restaurants in Kendari City. Study results have demonstrated factors related to compliance of Covid-19 protocol are knowledge, education, belief, and availability of facilities. Meanwhile, the factor did not related is economic status. From the above results, some advices proposed. For the government to be able to pay attention to restaurant businesses and employees by providing an understanding of the implementation of health protocols in their daily trading activities. Restaurant owners are expected to be able to provide the facilities needed to prevent the transmission of Covid-19 such as hand washing soap and masks. Food handlers are expected to comply with health protocols to prevent Covid-19 such as keeping their distance, wearing masks, and washing their hands frequently.

---

#### Compliance with ethical standards

##### *Acknowledgements*

The authors would like to thank Halu Oleo University for their support and all restaurants' employees who have been willing to become respondents.

##### *Disclosure of Conflict of interest*

The authors declare that there is no conflict of interest.

##### *Statement of informed consent*

All samples in the study have stated their consent to be used as samples by signing an informed consent.

---

#### References

- [1] WHO [Internet]. Coronavirus Disease (Covid-19); © 2020 [cited 2021 March 15]. Available from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-coronaviruses>.
- [2] Diah H, Dwi RH, Fathiyah I, Erlina B, Heidy A. Penyakit Virus Corona 2019. *Jurnal Respiriologi Indonesia*. April 2020; 40(2):119-129.
- [3] Budi Y, Wahiduddin, Yuliana MDA, Nawan, Eko M, Revi GHN, Natalia SM. Community Knowledge, Attitudes, and Behavior Towards Social Distancing Policy As Prevention Transmission of Covid-19 in Indonesia. *Jurnal Administrasi Kesehatan Indonesia. Spesial Issue 2020*; 8(2):4-14.
- [4] Worldometer [Internet]. Report Coronavirus Cases. © 2020 [cited Oct 2020]. Available from <https://www.worldometers.info/coronavirus/>.
- [5] Kementerian Kesehatan Republik Indonesia. Standar Alat Pelindung (APD) Dalam Manajemen Penanganan Covid-19 dalam Kefarmasian dan Alat Kesehatan. Jakarta: Direktur Jenderal Kefarmasian dan Alat Kesehatan; 2020.
- [6] Francesco DG, Damiano P, Claudia M, Mario A, Vincenzo R, Nicola V, Lee S. Coronavirus Disease (COVID-19) Current Status and Future Perspectives: A Narrative Review. *International Journal of Environmental Research and Public Health*. 2020; 17(8):1-11.
- [7] Derek KC, Elie A, Stephanie D, Karla S, Sally Y, Holger JS. Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. *The Lancet*. Juni 2020; 395(10242):1973-1987.
- [8] Bestari KD [Internet]. Ahli Ungkap Berapa Lama Virus Corona Beryahan di Pakaian dan Cara Mencucinya; © 2021 [cited March 2022]. Available from [https://www.kompas.com/sains/read/2021/06/28/193000223/ahli-ungkap-berapa-lama-virus-corona-bertahan-di-pakaian-dan-cara?page=all&lgm\\_method=google](https://www.kompas.com/sains/read/2021/06/28/193000223/ahli-ungkap-berapa-lama-virus-corona-bertahan-di-pakaian-dan-cara?page=all&lgm_method=google).
- [9] Santoso I. *Inspeksi Sanitasi Tempat-Tempat Umum*. Yogyakarta: Gosyen Publishing; 2015.
- [10] Notoadmodjo. *Promosi Kesehatan dan Perilaku Kesehatan*. Jakarta: Rineka Cipta; 2012.

- [11] Wiranti, Ayun S, Wulan K. Determinan Kepatuhan Masyarakat Kota Depok terhadap Kebijakan Pembatasan Sosial Berskala Besar dalam Pencegahan Covid-19. *Jurnal Kebijakan Kesehatan Indonesia:JKKI*. September 2020; 09(03): 117–124.
- [12] Devi T, Dessie W, Fajar T.W., 2019. Keyakinan sebagai Faktor Penting dalam Kepatuhan Pengobatan TB pada Anak. *Jurnal Keperawatan Raflesia*. Mei 2019; 1(1): 11-20.
- [13] Hawa'im M, Urip P. Behavioral Measurement Based on Theory of Planned Behavior. *Insan Media Psikologi*. 2010; 12(01):64–72.
- [14] Saiful M, Deni I. Sikap dan Perilaku Warga terhadap Kebijakan Penanganan Wabah Covid-19. *Politika: Jurnal Ilmu Politik*. Oktober 2020; 11(2):219–238.