Original Article

COMPLIANCE ANALYSIS OF MASK WEAR OBLIGATION POLICY FOR COMMUNITY AS PREVENTION OF COVID 19 TRANSMISSION IN BANYUMAS DISTRICT

Arif Kurniawan[1], Arrum Firda Ayu Maqfiroch[2], Yuditha Nindya Kartika Rizqi[2]

[1]. Public Health Departement, Faculty of Health Sciences, Jenderal Soedirman University

Corresponding author : Yuditha Nindya Kartika Rizqi, Email: yudithanindya93@gmail.com

ABSTRACT

Background: The Banyumas Regency Government issued Regional Regulation Number 2, 2020 concerning the prevention and management of diseases in Banyumas Regency, which was implemented on April 21, 2020, especially the obligation to wear masks. However, in Banyumas Regency, community compliance in applying masks when outside the home tends to be low. This study aims to determine the factors that affect compliance with the obligation to use masks in communities outside the home in Banyumas Regency to prevent transmission of COVID-19.

Methods: This study used quantitative methods with cross sectional approach.

Results: The results showed the level of compliance with wearing masks in the Covid-19 pandemic era had a high level of adherence 60.5%. The factors that influence community compliance with the obligation to use masks outside the house in Banyumas Regency are attitude (p-value 0.001) and personality (p-value 0.003). Meanwhile, environmental factors (p-value 0.003), referral power (p-value 0.003), force encouragement (p-value 0.003) and supervision support (p-value 0.003) have no effect on people's compliance with using masks when outside the home.

Conclusion: The government needs to increase repressive / corrective disciplinary measures that are stricter on violations of compliance with wearing masks that are consistent with the Regional Regulation that has been made. Intervention with the community is also needed to increase public understanding of the benefits of preventing the transmission of Covid 19 and how to use mask correctly.

Key words: Compliance, Covid-19, Policy, Wear Mask

INTRODUCTION

On December 31, 2019, the WHO China Country Office reported a case of pneumonia of unknown etiology in Wuhan City, Hubei Province, China. On January 7, 2020, China identified pneumonia of unknown etiology as a new type of coronavirus (coronavirus disease, COVID-19). On January 30, 2020, WHO has designated it as a Public Health Emergency of International Concern (KKMMD / PHEIC). The increase in the number of COVID-19 cases is progressing fast enough and there has been a spread between countries (Kemenkes, 2020). During the COVID-19 outbreak, one patient from Chongqing, China, had transmitted COVID-19 to 5 people in one vehicle when he was not wearing a mask while no one was infected later in the second vehicle he took when he was wearing a mask. face, showing the importance of wearing face masks for everyone in confined spaces (Liu and Zhang, 2020).

COVID-19 cases in Indonesia based on data from the Indonesian Ministry of Health on April 13, 2020 in 34 provinces, as many as 4,557 positive cases, 380 recovered cases, and 399 cases died. Based on the official data update covid19.banyumaskab.go.id, the number of People Under Monitoring (ODP) in Banyumas Regency is 1,570 people, with details of 1,358 still being monitored and the remaining 221 people have finished monitoring. Then there are 70 patients under surveillance (PDP) with details of 31 laboratory results being negative, 38 are still waiting for lab results, and 1 person has died. There are currently 6 patients confirmed positive for Covid-19 in Banyumas, 2 of which are still being treated at local hospitals.

Wearing masks throughout society can contribute

to COVID-19 control by reducing the number of infected saliva emissions and respiratory droplets from individuals with subclinical or mild COVID-19 (Cheng *et al*, 2020). In the era of the Covid-19 pandemic, it is time for the government and public health agencies to make rational recommendations so that everyone wear face masks to prevent Covid-19 transmission (Feng *et al*, 2020). Currently there is still a social stigma regarding the disease, including people are labelled, stereotyped, discriminated against, treated separately, and/or experience loss of status because of a perceived link with a disease (WHO, 2020). This might cause people to be reluctant to use masks in public. It is shown that wearing mask associated with levels of anxiety, depression and stress. Health education with scientific education is needed in order to promote the proper use of mask and reduce social stigma (Wang *et al*, 2020).

The Banyumas Regency Government issued Regional Regulation No.2, 2020 concerning the prevention and control of disease in Banyumas Regency which was implemented on April 21, especially the obligation to wear masks. Sanctions for those who do not wear masks range from a maximum fine of IDR 50,000 per person to the threat of imprisonment for 3 months. However, for the imposition of imprisonment sanctions, it may not be applicable in the midst of the Covid-19 pandemic situation. For the implementation of the trial, his party is still coordinating with the District Prosecutor's Office and the Purwokerto and Banyumas District Courts. According to him, the trial will be conducted by video conference. This is in accordance with trial protocol in the midst of the Covid-19 pandemic.

The problem of this research is the low compliance of the community in applying masks when outside the home in Banyumas Regency. The purpose of this study is to determine the factors that affect compliance with the obligation to use masks in communities outside the home in Banyumas Regency to prevent transmission of COVID-19.

METHODS

This research method uses a quantitative approach to determine the factors that affect compliance with the mandatory wearing mask policy outside the home in Banyumas Regency. This research will be conducted for one year in Banyumas Regency through a survey on the people of Banyumas Regency, through social media. The population of this research is the people who live in Banyumas Regency, amounting to 461,872 families. The number of samples in the study was conducted based on the Slovin formula to obtain a total of 400 samples because it was appropriate for research with a cross sectional approach. The data collection technique used accidental sampling method. The data collection technique in this study was a survey with a questionnaire that was distributed to the public through access to social media in the Banyumas Regency area. Research data processing using multivariate analysis using logistic regression. This research has received approval from the Health Research Ethics Committee of the Faculty of Health Sciences, Jenderal Soedirman University with ethical approval number 097 / EC / KEPK / V / 2020.

RESULTS

400 respondents participated in the study, with detailed characteristics as shown in Table 1.

Table 1 Variable Distributions

Variable	Freq	%
Characteristic of Respondents		
- Adult	333	83,3
- Teenager	67	16,7
Gender		
- Male	141	35,3
- Female	259	64,7
Size of Family		
- Small	259	64,8
- Medium	131	32,8
- Big	10	2,5
Education		
- Uneducated	2	5
- High School	134	33,5
- Diploma	31	7,8
- Undergraduate	233	58,3
Work		
- Unemployed	104	26
- State official	31	7,8
- Sales	38	9,5
- Health workers	20	5,0
- Professional	15	3,8
workers	167	41,8
- Students	8	2,0
- Others		
Dependent Variable		
Compliance		
- High	242	60,5
- Low	158	39,5
Independent Variables		
Knowledge		
- Good	291	72,8
- Bad	109	27,2
Behavior		
- Support	221	55,3
- Not support	179	44,2
Personality		
- Support	214	53,5
- Not support	186	46,5
Trust		
- Good	233	55,8
- Bad	177	44,2
Environmental Support		
- Good	172	43
- Bad	228	57
Information access		
- Have accessed	387	96,8
- Never accessed	13	3,3
Incentive support		
- High	175	43,8
- Low	225	56,2
Expert Trust		
- High	162	40,5
- Low	238	59,5
Referral Power Support		
- Yes	232	58
- No	168	42
Trust in Legal Authority		
- Yes	379	94,8
- No	21	5,2
Force Encouragement		
- High	200	50,0
- Low	200	50,0
Supervision Support		
- High	212	53,0
- Low	188	47,0
Infrastructure availability		
- High	202	50,5
- Low	198	49,5

The results of the univariate analysis in Table 1 show that the respondents of this study have adult characteristics (83.3%), are female (64.8%), have a small number of family members (64.8%), have a bachelor's education (58.3%) and work as students (41.8%). The results of the univariate analysis of the respondents' compliance level were high (60.5%).

Tabel 2 Chi-Square Test Result

No	Independent Variables	p-Value	Conclusion
1	Gender	0,075	Not associated
2	Age	0,482	Not associated
3	Education	0,979	Not associated
4	Work	0,835	Not associated
5	Size of Family	0,987	Not associated
6	Knowledge	0,499	Not associated
7	Attitude	0,0001	Associated
8	Personality	0,003	Associated
9	Trust	0,145	Not associated
10	Environmental Support	0,522	Not associated
11	Information Access	0,938	Not associated
12	Incentive Support	0,202	Not associated
13	Government Expert Trust	0,012	Associated
14	Referral Power Support	0,05	Associated
15	Trust in Legal Authority	0,553	Not associated
16	Force Encouragement	0,008	Associated
17	Supervision Support	0,091	Not associated
18	Infrastructure availability	0,027	Associated

The results of the chi-square test show that the independent variables associated with compliance with the policy of wearing masks in the Banyumas district community are attitude (0.0001), personality (0.003), drive for referral power (0.012), compulsion (0.008), and availability of facilities infrastructure (0.027).The results of the analysis of the effect together with the independent variables on the compliance with wearing masks in Banyumas Regency used binominal logistic regression analysis with the backward Wald method.

Table 2 Analysis of Regression Binomial Logistic

No	Independent Variables	sig	Exp (B)	Conclusion
1	Attitude	0,001	2,254	correlated
2	Personality	0,003	1,898	correlated
3	Environmental Support	0,16	0,562	No correlation
4	Referral Power Support	0,68	0,666	No correlation
5	Force Encouragement	0,67	1,557	No correlation
6	Supervision Support	0,055	0,652	No correlation

The analysis result in Table 3 show that the variables that influence the compliance with the policy of wearing masks in Banyumas Regency are attitude (0.001) and personality (0.003). The attitude related to the individual beliefs that lead to individual action then influence a person in obeying policies (Kim *et al*, 2014).

DISCUSSION

a. **Compliance with the Policy of Wearing Masks in the Covid-19 Pandemic in Banyumas Regency**

Compliance is fulfilling other people's requests, defined as an action or action that will be carried out based on the wishes of others or doing anything that is requested by others, compliance refers to behavior that occurs in response to direct and derived requests. from the other party (Taylor, 2006). Compliance in this study is the public's compliance with the local government policy of Banyumas Regency regarding the obligation to wear a mask in the Covid-19 Pandemic era. The results showed that the distribution of the level of compliance with the respondent's mask showed that most respondents had a high level of adherence as much as 60.5%, and a low level of adherence as much as 39.5%. The level of disobedience of the people of Banyumas Regency in wearing masks is higher than the results of Sari's research (2020) which examined the compliance of the community using masks to prevent Covid-19 in Ngronggah which showed that the community's non-compliance in wearing masks was only 25.81% [9]. The level of compliance with wearing masks in the Banyumas district of Indonesia is also lower than the compliance of citizens when leaving the house in China, which is 98.0% (Zhong *et al*, 2020). However, it is still higher than the use of masks in public places in Malaysia, only 52.1% (Azlan *et al,* 2020). Though, it is shown in other Asian countries about 100% Vietnamese wearing face mask and 53% respondents from China, Iran and Philippines spent 20-24 hours per day at home (Wang *et al,* 2021).

Policymakers need guidance on how masks should be used by the general population to combat the Covid-19 pandemic. The main route of transmission of COVID-19 is likely via small respiratory droplets, and is known to be transmitted from asymptomatic and asymptomatic individuals (Howard *et al*, 2020). The results of this study indicated that 38.5% of the respondents sometimes opened their masks when they left the house. The use of masks by the community is ineffective if the wearer touches their faces more often, thereby increasing the likelihood of contracting Covid-19 (Stutt *et al*, 2020). However, when using masks with a high level of compliance combined with physical distancing in various countries, there is a significantly lower level of Covid-19 spread.

The results showed that a small proportion of respondents still used a mask that could not cover the mouth and nose safely by 1.8%, and the cloth mask used was not a mask that had two layers of cloth, and 39.3% of them still had stitches in the middle of the mask. This is not in accordance with WHO (2020) recommendations regarding the use of non-medical masks for the general public, which states that several things that must be considered in the use of non-medical masks are the number of layers of cloth / tissue, the ease of breathing for users of mask materials, watertight properties, the shape and size of the mask (WHO, 2020).

The results of this study also show that the community has the availability of masks to wear when leaving the house is 99.3% with the availability of masks in the community in the form of cloth masks by 97.8% and medic masks by 37.2%. This research shows that most of the people 96.8% have the availability of masks according to the number of family members in one house. Most of the respondents (86.3%) also stated that masks are easy to get and buy in the market, and 78.0% of respondents stated that the price of masks on the market is cheap. Facial cloths can be made from household items such as 2 layers of cotton cloth, T-shirt, bandana, or bed sheets. The mask should be secured with ear loops or ties. Whatever material a face mask is made of, it must fit snugly and cover the nose and mouth. Masks should not limit the wearer's ability to breathe (Desai, 2020).

b. **Factors Affecting Compliance with Mask Wear Policy**

. The results of multivariate analysis using logistic regression showed that the variables that had a joint influence on the level of compliance with the policy of wearing masks in Banyumas were attitude (0.001) and personality (0.003). The exp (B) value of attitude is 2.254, meaning that there will be a change of 1 in attitude of 2.254 in the level of compliance with the policy of wearing masks in Banyumas Regency. The exp

(B) value of personality is 1.898, meaning that an increase of 1 will result in a change of 1.898 in the level of compliance with the policy of wearing masks in Banyumas Regency.

Personality is one of the factors that influence a person's compliance (Wilujeng, 2012). Thomas Blass stated that personality is an internal factor that an individual has. This factor will play a strong role in influencing the intensity of adherence when in a weak situation and the choices are ambiguous and contain many things. This factor depends on where the individual grows and the role of education received.

The results of this study indicate the personality of the people of Banyumas Regency who supports the use of masks as much as 53.5%, and does not support the use of masks as much as 46.5%. This shows that people who still have personalities that do not support adherence are quite high. This is shown in the personality that does not obey their parents since childhood (16.5%), the personality does not obey school rules since childhood (16%), the personality does not obey the use of a helmet when riding a motorbike (21.3%), the personality does not throw garbage. in place (11.8%), and personality does not pay taxes (13.0%).

In this study, the proportion of adolescents (11-19 years) was 16.8%, and the proportion of adults (20-60 years) also influenced personality differences that supported compliance with the policy of wearing masks. The results showed that the proportion of adolescents with personalities that did not support adherence to wearing masks (23.7%) was higher than the proportion of adolescents who had personalities that supported mask compliance (10.7%). Meanwhile, in the adult age group, it turns out that the proportion of adults who have a personality that supports a personality that supports masks (89.3%) is higher than the proportion of adults who do not support the policy of wearing masks (76.3%).

This study also shows that the proportion of the high school education group has a personality that does not support the use of masks (38.2%) is higher than the proportion of the high school education group who has a personality that supports the use of masks (29.4%). This is different from the undergraduate education group, in fact the proportion of undergraduate education who has a personality that supports mask compliance (63.1%) is higher than the proportion of the undergraduate education group with a personality that does not support compliance with mask use (52.7%).

The results of this study are also in accordance with Green's (1980) theory which states that attitude is a predisposing factor which is the basis of a person's motivation or intention to do something (behavior). In China, attitudes influence Covid-19 prevention practices [10].

The results of this study indicate the positive attitude of respondents towards the policy of using masks. Even so, this positive attitude was not matched by the practice of obedience to using masks. There is a positive relationship between respondents' attitudes and practices in using masks as an effort to prevent infectious diseases, but the relationship between attitude and practice of wearing masks is quite low. So that a positive attitude towards the rules for using masks is not always in line with the practice of using masks (Ho, 2012). On the contrary, in China wearing mask was associated with lower levels of anxiety and depression which led to higher face mask use regardless the symptoms. Therefore, it is necessary for government to arrange clear guidelines on the use of face masks (Wang *et al*, 2020).

c. **Factors that do not Affect Compliance with the Mask Wear Policy**

Taylor's theory of compliance states that compliance is influenced by information, rewards, expertise, referral power, legal authority, and coercion (Umami, 2010). Thomas Blass states that the factors that influence compliance are personality, belief, and environment (Wilujeng, 2012).

Public knowledge is related to compliance with the use of masks as an effort to prevent Covid-19 in Ngronggah [9]. The binary logistic regression analysis on the dependent variable on mask use among elementary school students in Wuhan, China, the influencing variables are the mother's education level and place of residence (Chen *et al*, 2020).

The problem of trust is influenced by many specific factors that are related to the compliance or non-compliance of people in trusting health workers and the government (Krentel *et al,* 2013). Meanwhile, compliance failure by individuals is largely influenced by information and reward issues (Weaver, 2014). Understanding of policy information is inversely related to policy support. This means that the higher the public's understanding of policy information, the lower the support provided for the policy (Porumbescu *et al*, 2017). The gap in understanding comprehensive information about the risks obtained from COVID-19 transmission is strongly related to the readiness of the community to face a pandemic outbreak (Cvetkovic *et al* 2020).

Proper health information should be disseminated by re-designing training programs and communications among influencer and stakeholder using internet, online newspaper and social networks where most people get the detail for Covid-19 information (Tran *et al* 2020). Wider community should also be involved in epidemic sanitation training and

disaster prevention, including medical students for epidemic responses (Nguyen *et al*, 2020). Intersectoral collaboration is needed in order to increase the epidemic preparedness and responses throughout training interdistrict and interprovincial governance mechanism (Le *et al,* 2020).

Three of the five components of the health belief model, namely perceived vulnerability, cues to act and perceived benefits, are significant predictors of wearing face masks in SARS prevention (Tang *et al,* 2004). The most significant factor in determining adherence to wearing masks is the perceived benefit (Sim *et al,* 2014). Self-efficacy was the second predictor influencing motivation for disease prevention behavior (Yarmohammadi *et al,* 2014). Cognitive and affective factors, such as perceived efficacy, perceived vulnerability and mental distress, have a strong relationship to behavior change (Lau *et al,* 2010).

Policy instruments, such as incentives, prohibitions and orders, communication and encouragement, are instruments capable of encouraging behavior change in society. Even so, the government needs to increase broader support, not only relying on policy instruments (Tummers, 2019). The mandatory use of masks policy in Banyumas Regency is a new policy implemented during the pandemic period to prevent the transmission of COVID-19. In this study, the variables of power encouragement, reward, coercion and encouragement of supervision had no effect on public compliance in using masks. Changes in the social and political environment are able to produce a negative image from wearing masks which in turn prevents people from adopting this health behavior. The lack of a comprehensive understanding of the perception of wearing masks allows respondents to not comply with the new policy (Siu, 2016).

CONCLUSION

The level of compliance with wearing masks in the Covid-19 pandemic era in Banyumas Regency is 60.5%, has a high level of compliance, and 39.5% has a low level of compliance. Factors that influence compliance with wearing masks are personality and community attitudes. Efforts to increase understanding of the benefits of preventing the transmission of Covid 19 and how to use masks need to be done to increase compliance with wearing masks. In addition, the government needs to carry out stricter repressive / corrective disciplinary measures for violations of compliance with wearing masks that are consistent with the District Regulation that has been made. This study did not analyze the extent to which local regulations were implemented. It is necessary to carry out further analysis regarding the evaluation of the implementation of the mandatory use of masks policy on the community in preventing the transmission of COVID-19. This study only provides evidence of the compliance mask-wearing in Banyumas regency according to the regional policy using cross-sectional method. Further research is needed to deliver more information about compliance mask-wearing in other region.

REFERENCES

Azlan AA, Hamzah MR, Sern TJ, Ayub SH, Mohamad E. Public knowledge, attitudes and practices towards COVID-19: A cross-sectional study in Malaysia. Tu W-J, editor. PLoS One. 2020 May;15(5):e0233668.

Chen X, Ran L, Liu Q, Hu Q, Du X, Tan X. Hand Hygiene, Mask-Wearing Behaviors and Its Associated Factors during the COVID-19 Epidemic: A Cross-Sectional Study among Primary School Students in Wuhan, China. Int J Environ Res Public Health. 2020 Apr;17(8):2893.

Cheng VC-C, Wong S-C, Chuang VW-M, So SY-C, Chen JH-K, Sridhar S, et al. The role of community-wide wearing of face mask for control of coronavirus disease 2019 (COVID-19) epidemic due to SARS-CoV-2. J Infect. 2020 Jul;81(1):107–14.

Cvetković VM, Nikolić N, Nenadić UR, Öcal A, Noji EK, Zečević M. Preparedness and preventive behaviors for a pandemic disaster caused by COVID-19 in Serbia. Int J Environ Res Public Health. 2020;17(11):1–23.

Desai AN, Aronoff DM. Masks and Coronavirus Disease 2019 (COVID-19). JAMA. 2020 May;323(20):2103.

Feng S, Shen C, Xia N, Song W, Fan M, Cowling BJ. Rational use of face masks in the COVID-19 pandemic. Lancet Respir Med [Internet]. 2020 May;8(5):434–6. Available from: https://linkinghub.elsevier.com/retrieve/pii/S22132600203 0134X

Ho HSW. Use of face masks in a primary care outpatient setting in Hong Kong: Knowledge, attitudes and practices. Public Health. 2012 Dec;126(12):1001–6.

Howard J, Huang A, Li Z, Tufekci Z, Zdimal V, Westhuizen H-M van der, et al. Face Mask Against COVID-19: An Evidence Review. Br Med J. 2020;(April):1–8.

Kementerian Kesehatan Republik Indonesia. Pedoman Pencegahan dan Pengendalian Corona Virus Disease (COVID-19). Jakarta, Indonesia: Direktorat Jenderal Pencegahan dan Pengendalian Penyakit; 2020.

Krentel A, Fischer PU, Weil GJ. A Review of Factors That Influence Individual Compliance with Mass Drug Administration for Elimination of Lymphatic Filariasis. PLoS Negl Trop Dis. 2013;7(11).

Kim SH, Yang KH, Park S. An integrative behavioral model of information security policy compliance. Sci World J. 2014;2014.

Lau JTF, Griffiths S, Choi K, Lin C. Prevalence of preventive behaviors and associated factors during early phase of the H1N1 influenza epidemic. Am J Infect Control. 2010 Jun;38(5):374–80.

Le HT, Mai HT, Pham HQ, Nguyen CT, Vu GT, Phung DT, et al. Feasibility of Intersectoral Collaboration in Epidemic Preparedness and Response at Grassroots Levels in the Threat of COVID-19 Pandemic in Vietnam. Front public Heal [Internet]. 2020;8:589437. Available from: http://www.ncbi.nlm.nih.gov/pubmed/33313040

Liu X, Zhang S. COVID-19: Face masks and human-to-human transmission. Influenza Other Respi Viruses. 2020 Jul;14(4):472–3.

Nguyen DN, Le HT, Thai PK, Le XTT, Hoang MT, Vu LG, et al. Evaluating Training Need for Epidemic Control in Three Metropolitans: Implications for COVID-19 Preparedness in Vietnam. Front public Heal [Internet]. 2020;8:589331. Available from: http://www.ncbi.nlm.nih.gov/pubmed/33224921

Porumbescu G, Bellé N, Cucciniello M, Nasi G. Translating policy transparency into policy understanding and policy support: Evidence from a survey experiment. Public Adm. 2017 Dec;95(4):990–1008.

Sari D, Sholihah Atiqoh N. HUBUNGAN ANTARA PENGETAHUAN MASYARAKAT DENGAN KEPATUHAN PENGGUNAAN MASKER SEBAGAI UPAYA PENCEGAHAN PENYAKIT COVID-19 DI NGRONGGAH. Infokes J. 2020;10(1):52–5.

Sim S, Moey K, Tan N. The use of facemasks to prevent respiratory infection: a literature review in the context of the Health Belief Model. Singapore Med J. 2014 Mar;55(3).

Siu JY. Qualitative study on the shifting sociocultural meanings of the facemask in Hong Kong since the severe acute respiratory syndrome (SARS) outbreak: implications for infection control in the post-SARS era. Int J Equity Health. 2016 Dec;15(1):73.

Stutt ROJH, Retkute R, Bradley M, Gilligan CA, Colvin J. A modelling framework to assess the likely effectiveness of facemasks in combination with 'lock-down' in managing the COVID-19 pandemic. Proc R Soc A Math Phys Eng Sci. 2020 Jun;476(2238):20200376.

Tang CS, Wong C. Factors influencing the wearing of facemasks to prevent the severe acute respiratory syndrome among adult Chinese in Hong Kong. Prev Med (Baltim). 2004 Dec;39(6):1187–93.

Taylor SE. Psikologi Sosial. Jakarta, Indonesia: Erlangga; 2006.

Tran BX, Dang AK, Thai PK, Le HT, Le XTT, Do TTT, et al. Coverage of Health Information by Different Sources in Communities: Implication for COVID-19 Epidemic Response. Int J Environ Res Public Health [Internet]. 2020 May 20;17(10):3577. Available from: https://www.mdpi.com/1660-4601/17/10/3577

Tummers L. Public Policy and Behavior Change. Public Adm Rev. 2019 Nov;79(6):925–30.

Umami Z. Hubungan Antara Dukungan Sosial Dengan Kepatuhan Terhadap Aturan Pada Mahasiswa Penghuni Ma'had Sunan Ampel Al-Aly Di Universitas Islam Negeri (Uin) Maulana Malik Ibrahim Malang Malang. UIN Malang; 2010.

Wang C, Chudzicka-Czupała A, Grabowski D, Pan R, Adamus K, Wan X, et al. The Association Between Physical and Mental Health and Face Mask Use During the COVID-19 Pandemic: A Comparison of Two Countries With Different Views and Practices. Front Psychiatry [Internet]. 2020 Sep 9;11. Available from: https://www.frontiersin.org/article/10.3389/fpsyt.2020.569981/full

Wang C, Pan R, Wan X, Tan Y, Xu L, McIntyre RS, et al. A longitudinal study on the mental health of general population during the COVID-19 epidemic in China. Brain Behav Immun [Internet]. 2020 Jul;87:40–8. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0889159120305110

Wang C, Tee M, Roy AE, Fardin MA, Srichokchatchawan W, Habib HA, et al. The impact of COVID-19 pandemic on physical and mental health of Asians: A study of seven middle-income countries in Asia. PLoS One [Internet]. 2021;16(2):e0246824. Available from: http://www.ncbi.nlm.nih.gov/pubmed/33571297

Weaver RK. Compliance Regimes and Barriers to Behavioral Change. Governance. 2014 Apr;27(2):243–65.

WHO. A guide to preventing and addressing social stigma associated with COVID-19 [Internet]. Who. 2020 [cited 2021 Apr 24]. Available from: https://www.who.int/publications/m/item/a-guide-to-preventing-and-addressing-social-stigma-associated-with-covid-19?gclid=Cj0KCQjwyZmEBhCpARIsALIzmnLglaBmxZBpC_FJU8wExyXmPx_sRQ3ot2sMFVAFZs-4WhWdqj1aWv0aAvcPEALw_wcB

WHO. Anjuran mengenai penggunaan masker dalam konteks COVID-19. World Heal Organ. 2020;(April):1–17.

Wilujeng A. Efektivitas Pelatihan Berfikir Positif Terhadap Kepatuhan pada Aturan Santri Pondok Pesantren Tebuireng Jombang. Maulana Malik Ibrahim Malang; 2012.

Yarmohammadi P, Sharifabad MA, Rahaei Z, Sharifirad G. Determination of preventive behaviors for pandemic influenza A/H1N1 based on protection motivation theory among female high school students in Isfahan, Iran. J Educ Health Promot. 2014;3(1):7.

Zhong B-L, Luo W, Li H-M, Zhang Q-Q, Liu X-G, Li W-T, et al. Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: a quick online cross-sectional survey. Int J Biol Sci. 2020;16(10):1745–52.