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**RESEARCH**

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## **Unmasking the Pandemic's Shadow: A Systematic Review of The Multifaceted Impact of COVID-19 Stigma in Asia**

**Yosephina Elizabeth Sumartini Gunawan<sup>1a\*</sup>, Leni Landudjama<sup>1b</sup>, Servasius To'o Jala Mulu<sup>2c</sup>, Irene Febriany Mamo Kitu<sup>1d</sup>, Maria Christina Endang Sukartiningsih<sup>1e</sup>, Dwi Febryanto<sup>3f</sup>, Guang-Hsing Liu<sup>4g</sup>, Yuliana Dafroyati<sup>1h</sup>**

<sup>1</sup> Department of Nursing, Poltekkes Kemenkes Kupang, Kupang, East Nusa Tenggara, Indonesia

<sup>2</sup> Department of Emergency, Tanali Hospital, Ende, East Nusa Tenggara, Indonesia

<sup>3</sup> Department of Nursing, STIKES St. Elisabeth Semarang, Semarang, Central Java, Indonesia

<sup>4</sup> Department of Psychiatry, China Medical University Hospital, Taichung, Taiwan

<sup>a</sup> Email address: [bettytjang@gmail.com](mailto:bettytjang@gmail.com)

<sup>b</sup> Email address: [lenildj92@gmail.com](mailto:lenildj92@gmail.com)

<sup>c</sup> Email address: [oriesmulu77@gmail.com](mailto:oriesmulu77@gmail.com)

<sup>d</sup> Email address: [ines.kitu@gmail.com](mailto:ines.kitu@gmail.com)

<sup>e</sup> Email address: [endang.inovari@gmail.com](mailto:endang.inovari@gmail.com)

<sup>f</sup> Email address: [dwifebryanto37@gmail.com](mailto:dwifebryanto37@gmail.com)

<sup>g</sup> Email address: [hsinlim10@livemail.tw](mailto:hsinlim10@livemail.tw)

<sup>h</sup> Email address: [yulianambeton@gmail.com](mailto:yulianambeton@gmail.com)

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### **Abstract**

The COVID-19 pandemic has exacerbated stigma toward health workers, patients, and survivors while intensifying social inequalities through rising unemployment, poverty, and social exclusion. This systematic review examined literature from ProQuest, Science Direct, Google Scholar, and PubMed, focusing on the stigma of COVID-19 in Asia. Original research employing quantitative or qualitative methods was included for articles that published in 2020-2021, while review articles were excluded. Screening followed PRISMA guidelines, with data collection and analysis conducted from November 2021 to April 2022, resulting in 24 articles. Data extracted included titles, authors, publication years, participants, methods, findings, strengths, and limitations. Quality was assessed using JBI's critical appraisal tools, and thematic analysis was performed using Braun and Clarke's framework. The review identified three key themes: general characteristics of COVID-19 stigma, affected populations, and the multifaceted impacts. Stigma in Asia has led to widespread fear and discrimination against infected individuals, survivors, health workers, and vulnerable groups with significant psychological, spiritual, economic, and health repercussions. We recommend that the government raise public awareness to minimize misinformation by providing education about COVID-19 and efforts to address the impacts caused by stigma, as well as integrating anti-stigma measures into policies and expanding mental health services for those affected.

**Keywords:** Coronavirus Infection, COVID-19, Negative Label, Pandemic, Stigma.

### **Corresponding Author:**

Yosephina Elizabeth Sumartini Gunawan

Department of Nursing, Poltekkes Kemenkes Kupang, Kupang, East Nusa Tenggara, Indonesia

Email: [bettytjang@gmail.com](mailto:bettytjang@gmail.com)



## 1. INTRODUCTION

The COVID-19 pandemic, since the beginning of 2020, has created a stigma that threatens many people's lives, including health workers, patients, and disease survivors (Bagcchi, 2020). State leaders and policymakers worldwide have begun implementing various policies to limit the spread of COVID-19. Lockdowns or large-scale social restrictions are considered good options. This condition causes significant changes in people's health, social, cultural, and economic fields (Miconi et al., 2021; Roelen et al., 2020). These changes require an in-depth scientific understanding of COVID-19, and changes must always be followed in the latest news about the disease and then presented to the entire world community. Understanding this disease can have implications for improving health changes, social roles, and stigma about COVID-19 (Turner-Musa et al., 2020).

Stigma associated with COVID-19 poses a serious threat to the lives of healthcare workers, patients, and survivors of the disease. In May 2020, a community of advocates comprising 13 medical and humanitarian organizations, including, among others, the International Committee of the Red Cross, the International Federation of the Red Cross and Red Crescent Societies, the International Hospital Federation, and the World Medical Association issued a declaration that condemned more than 200 incidents of COVID-19 related attacks on healthcare workers and health facilities during the ongoing pandemic (Bagcchi, 2020).

The social stigma surrounding COVID-19 incidents includes a pregnant woman being abandoned by her family in India after testing positive for SARS-CoV-2 post-childbirth. At the same time in India faced stalking on social media. In Harare, Zimbabwe, a COVID-19 survivor was startled to find his street named "Corona Road," prompting avoidance due to infection fears. WHO advocates open dialogue to combat stigma, emphasizing the importance of communication in fighting the disease without initiating fear with destigmatization efforts rather than legal mandates and increasing health education as the most effective means to prevent social harassment and promote collaborative pandemic containment efforts (Sahoo, et al., 2020).

Moreover, the discrimination associated with COVID-19 has the potential to exacerbate prevailing social disparities by exacerbating unemployment and poverty and hindering various social processes like integration. For instance, individuals such as documented and undocumented migrants, refugees, ethnic and religious minorities, COVID-19 survivors, and marginalized groups might face socio-economic marginalization due to sudden policy shifts like VISA constraints in certain nations. Additionally, those who have faced legal penalties (for violating public health regulations) may encounter diminished opportunities for employment, housing, and medical care, exposing them to heightened risks of suicide and violence during and after the pandemic (Ransing et al., 2020).

Although various studies have discussed the stigma associated with COVID-19, systematic reviews providing a comprehensive overview remain limited. Most research has focused on the immediate impact of stigma on healthcare workers and patients, while its long-term effects on social, economic, and public well-being have been less explored. Therefore, this study aims to fill this gap by systematically reviewing the various forms of stigma that emerged during the pandemic and their implications for social life and health policies.

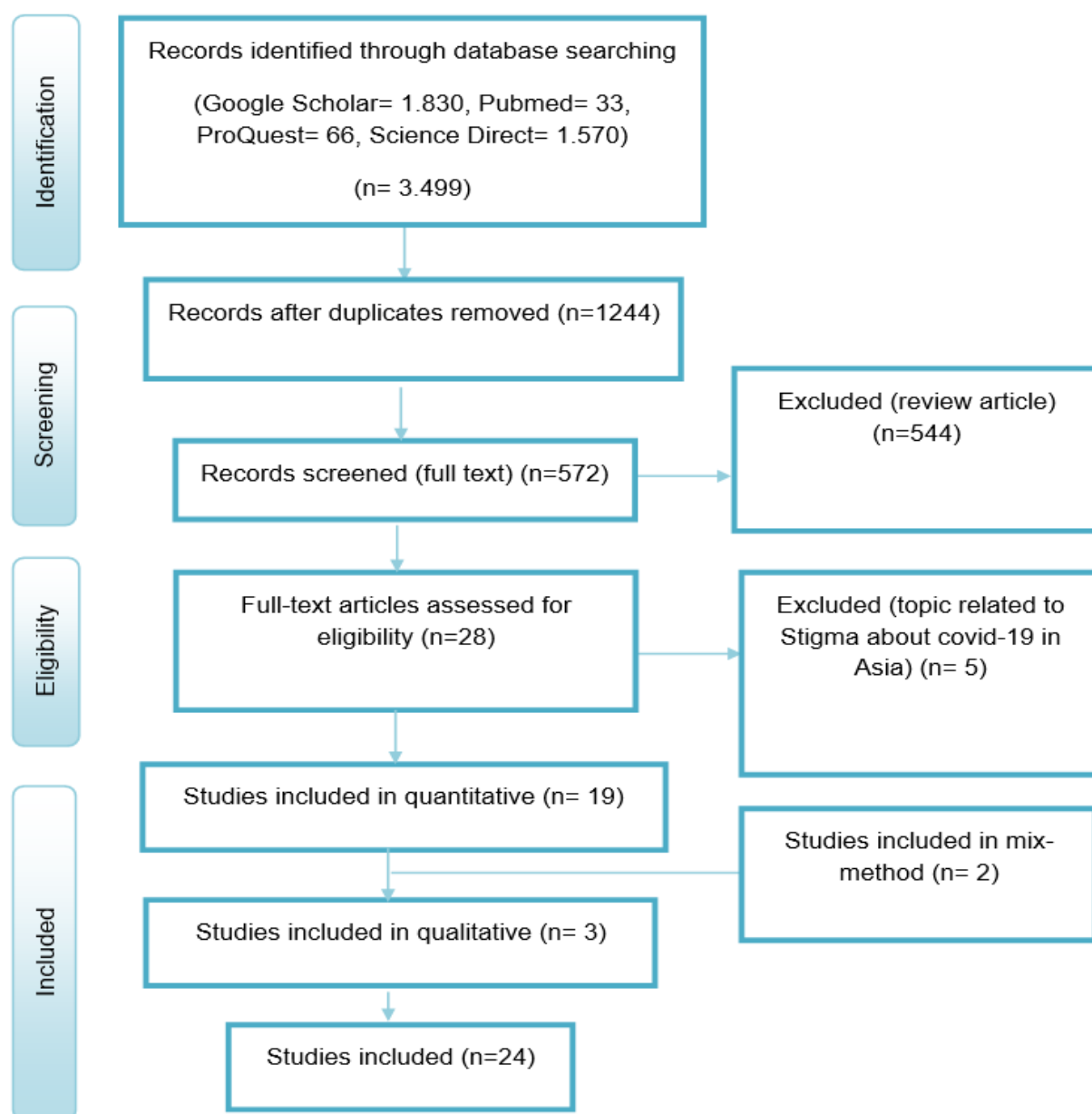
## 2. RESEARCH METHOD

This systematic review is based on search results, literature searches, and research articles from the ProQuest, Science Direct, Google Scholar, and PubMed databases, using the keywords "stigma about COVID-19 in Asia", "Pandemic Psychological Issues in Asia", and "stress effect in the pandemic period". Articles published in 2020-2021 and fitting the inclusion criteria, namely all original articles with quantitative or qualitative methods that review the stigma about COVID-19 in Asia, were selected. Articles using the review method were excluded.

The Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) method (Page et al., 2021) was used to screen and select articles. A selection process for all

collected research data was conducted according to this review's systematic objectives, as illustrated in the PRISMA Chart. A total of 24 articles were analyzed, as shown in Table 1. Searching for research articles and analyzing data was conducted from November 2021 to April 2022.

Extracted data are presented in Table 1, including the title, author, year, participants, methods, main findings, strengths, and weaknesses. The JBI's critical appraisal tools assessed the articles' trustworthiness, relevance, and results. Data analysis was performed using the thematic analysis method proposed by Braun and Clarke. The steps included understanding all the data, compiling codes, determining themes, and drawing conclusions (Byrne, 2021; Heriyanto, 2018).



**Figure 1.** PRISMA Flow Diagram

### 3. RESULTS AND DISCUSSION

**Table 1.** Combining Results of Journal Article Analysis

No	Title, Authors & year	Purpose	Method (Design)	Sampel	Data Analisis	Major Findings	Weakness	Strength
1	Seeking an ethical theory for the COVID-19 pandemic outbreak with special reference to Bangladesh's law and policy (Bhuiyan, 2020)	To identify deficiencies in the current epidemic management policy in Bangladesh, and assist in forming a new model and developing a systematic procedure for managing future pandemic outbreak situations	Bench research	Management policy papers adopted by the Bangladesh government's health sector	Model analysis	The Four-Tier Model to formulate policy in any disaster situation	This modeling has not yet been tested whether it can be used in other countries than Bangladesh	The model proposed in this article demonstrates an appropriate way to reduce or, if possible, avoid potential damages and losses from a pandemic outbreak
2	The association of being in quarantine and related COVID-19 recommended and non-recommended behaviors with psychological distress in Chinese	To know the associations between psychological distress, quarantine and the use of recommend and non-recommended behaviors	Cross sectional study	1134 respondent	Multivariate logistic regression	Psychological distress was highest amongst those at the original epicenter of the outbreak, as well as those in quarantine. Respondents in quarantine were faced with a range of	This study was cross-sectional and the responses were self-reported, the sample used was mostly young people.	This study uses a large sample so that it provides good results to describe the research objectives

	population (Ben-Ezraa, 2020)					challenges, both physical and psychological		
3	Psychological experience of patients admitted with SARS-CoV-2 infection (Sahoo et al., 2020)	to evaluate the emotional reactions/experiences which the patients go through, while admitted to the COVID-19 ward, at the time of discharge	mix-method research	50 patients	Pearson's correlation coefficient, Chi-square test, and independent t-test	Staying in an isolation ward can be very stressful, and despite psychological support, around two-fifths of patients experience psychological morbidity.	This study has several limitations when interpreting its results, including the small sample size, and the majority of study participants were asymptomatic or had only minimal symptoms of COVID-19.	The results of this study can be used as recommendations for stakeholders in providing health services in the response to Covid19
4	Religious Coping, Depression and Anxiety among Healthcare Workers during the COVID-19 Pandemic: A Malaysian Perspective (Chow et al., 2021)	to evaluate the prevalence of anxiety and depression among HCWs amid the pandemic and their association with religious coping.	a cross-sectional	200 HCWs	univariate and multivariate regression analyses → Spearman rank correlation p-value	The prevalence of anxiety and depression among healthcare workers was comparable to previous international studies. Positive and negative religious coping were found to be significantly correlated with anxiety and depression.	This study used a cross-sectional design with a nonprobability convenience sampling method, which has the potential to make the prevalence of the study population less accurate and limited to one university hospital	Conclusions To the knowledge of the authors, this is the first research evaluating the correlation between religious coping, anxiety and depression, specifically amongst the HCWs amidst the COVID-19 pandemic.

5	Lived experiences of the corona survivors (patients admitted in COVID wards): A narrative real-life documented summaries of internalized guilt, shame, stigma, anger (Sahoo et al., 2020)	To asses the experience of persons diagnosed with Covid-19 infection and admitted to the COVID ward	Qualitative study	3 patients	Thematic analysis	Most patients infected with Covid-19 experience stress, mental suffering, internalized stigma, feelings of guilt, shame, anger and social isolation.	This study is just a short narrative based on the experiences of several patients infected with Covid-19 and currently undergoing Covid-19 treatment	Learn more about a person's experience, starting from the history of the disease to planning for the future in fighting Covid-19
6	Factors related to preventive Covid-19 infection behaviors among people with mental illness (Chang et al., 2020)	To investigated potential factors explaining COVID-19 infection prevention behavior among individuals with mental disorders in Taiwan	cross-sectional study	414 patients	Pearson korelasi. Model regresi and Model Persamaan Struktural (SEM)	Trust in Covid-19 information sources and fear of Covid-19 significantly explain preventive behavior in individuals with mental illness.	This study is a correlational study in a local area (Taiwan) to see the relationship and most dominant factors.	The strength of this research lies in the sample used, namely 414 patients. Apart from that, this study looked at the most dominant factors related to Covid-19 prevention behavior
7	Infectious disease outbreak related stigma and discrimination	to explore factors related to target stigma based on the real-life	Qualitative study	A group of psychiatrists from 13 countries	Health Stigma Discrimination Framework	During COVID-19, Asian, Black, immigrant, and healthcare	It only provides a framework, does not display an abstract, the	Reviewing the stigmatization experiences of psychiatrists

	during the COVID-19 pandemic: Drivers, facilitators, manifestations, and outcomes across the world (Ransing et al., 2020)	experiences of a group of psychiatrists from 13 countries using the Health Stigma and Discrimination Framework (HSDF)		(HSDF) analysis	workers have experienced stigma and discrimination that has also affected their families. This stigma is fueled by fear, beliefs, and guilt and blame.	research methodology is not explained in detail	from 13 countries
8	An Analysis on the panic during Covid-19 pandemic through an online form (Nicomedes, and Avila, 2020)	to investigates the panic of Filipinos during the Covid-19 pandemic in the Philippines focused on psychological effects such as anxiety, fear or unpleasant feelings, seeking reassurance about health.	Mix-method research	538 respondents	Mann - Whitney U Kruskal - Analisis Varians Wallis analisis tematik	The COVID-19 Panic Framework encompasses 19 behavioral themes ranging from negative to positive, from indifference to health awareness.	Using a mix of quantitative and qualitative methods
9	Adaptation of the Fear of COVID-19 Scale: Its Association with Psychological Distress and Life Satisfaction in	To adapt the Fear of COVID-19 Scale into Turkish and investigate the relationships between fear of COVID19,	Cross-sectional study (online survey)	1304 participants,	Cronbach's $\alpha$ , McDonald's $\omega$ , Guttman's $\lambda_6$ , and composite reliability	The fear of COVID-19 was found to be associated with psychological distress and life satisfaction. Results indicated	Various techniques were used to test the reliability of the Fear of COVID-19 Scale. This study involved a large sample



	Turkey ( <a href="#">Satıcı et al., 2020</a> )	psychological distress, and life satisfaction				that the Turkish version of the Fear of COVID-19 Scale had strong psychometric properties.	addition, the use of self-report data is at risk of source bias. Test-retest reliability testing has not been performed.	from 75 cities in Turkey with a wide age range, thus supporting the assessment of the psychological impact of COVID-19. community due to the pandemic.
10	The Anxiety and Stress of the Public during the Spread of Novel Coronavirus (COVID-19) ( <a href="#">Ahmed, Alrawili &amp; Alkawaja, 2020</a> )	to assess the public anxiety and stress during the spread of the novel Coronavirus (COVID-19)	Cross-sectional study (online survey)	304 respondents	Excel software.	Respondents felt that COVID-19 patients would be shunned by society, even though their sleep and eating patterns were not affected.	No informed consent was given to respondents	The results of this research provide quite good information on the psychosocial impact of Covid-19
11	A study on stigma and apprehensions related to COVID-19 among healthcare professionals in Delhi ( <a href="#">Yadav, Laskar &amp; Rasania, 2020</a> )	to assess their perceived stigma related to quarantine and isolation and also the apprehensions regarding getting tested and disclosure of results	cross-sectional study	424 participants	Chi square test	In view of the substantial stigma faced by the HCP, necessary measures to curb the fear and dispel misinformation related to	The study was limited to the city of Delhi and is therefore not representative of the entire country.	questionnaire was designed by adopting questions from a standardized and validated Stigma assessment and reduction of impact (SARI) Stigma scale



						COVID-19 must be undertaken.		
12	Asians and Asian Americans' Experiences of Racial Discrimination During the COVID-19 Pandemic: Impacts on Health Outcomes and the Buffering Role of Social Support (Lee, & Waters, 2021)	To investigated Asian Americans' experiences of racial discrimination during the COVID-19 pandemic and examined the relationship between these experiences and current mental and physical health problems	quantitative	410 participants	Bivariate correlations, content analysis	The multiple regressions showed significant results, with high discrimination and low social support predicting more health problems. Three main categories: personal experiences of discrimination, anti-Asian racist culture, and discrimination prevention efforts.	The study did not capture changes in levels or long-term impacts of discrimination, nor did it represent individuals without internet access. The diversity of Asian respondents' national origins was also not analyzed.	This finding speaks to the importance for people of color to live in a community with others of their race.
13	Does 'Fear of COVID-19' trigger future career anxiety? An empirical investigation considering depression from COVID-19 as a mediator	to identify whether 'Fear of COVID-19' impacted on future workforces' career anxiety at the first place and whether	Quantitative	246 responses	multivariate analysis	The study results show that fear of COVID-19 makes prospective workers anxious about their future careers. Depression mediated by fear	The study was conducted when almost all countries were in lockdown, so the sample size was limited. The majority of respondents were	This study is a novel work combining the concepts of fear and depression with career anxiety in a pandemic situation like COVID-19, and

	(Mahmud, Talukder, & Rahman, 2020)	depression from COVID-19 has any indirect effect on 'Fear of COVID-19' and future workforces' career anxiety.			has a significant indirect effect, indicating full mediation.	from urban or semi-urban areas.	also assists future researchers in many folds.
14	State of mental health services in various training centers in India during the lockdown and COVID-19 (Grover et al., 2020)	to evaluate the impact of lockdown and COVID-19 pandemic on mental health services in India's various training centers	an online survey	Valid information was received from 109 institutes.	This survey suggests that the COVID-19 pandemic and lockdown have led to the collapse of regular mental health services to a large extent. The present survey also suggests that mental health professionals have not been assigned/have not taken up different roles	Assessment of mental health services and the role of professionals was limited by the instruments used, and did not cover many important aspects. Evaluation of telecommunication s services was limited, and reported disruptions to health workers and quarantined individuals were based on memory rather than objective data.	this survey also suggests that mental health professionals have to play a major role in addressing the prevailing psychiatric morbidity, specifically related to the COVID-19 related issues, take care of the HCWs and act as advocates for their patients in terms of availability of proper psychotropic medications

15	The association of being in quarantine and related COVID-19 recommended and non-recommended behaviors with psychological distress in Chinese population (Ben-Ezra et al., 2020)	to examined associations between psychological distress, quarantine and the use of recommend and non-recommended behaviors	cross-sectional	an internet panel in China to recruit a national sample (n = 1134)	Data was analyzed using a multivariate logistic regression	Respondents were at risk of experiencing severe mental disorders. Psychological distress was higher. In contrast, recommended preventive behaviors were associated with lower psychological distress.	There is no data on medical or psychological history, length of quarantine, type of information received, level of awareness, or health literacy of individuals or communities.	The Authors declared that this was the first study to empirically examine the relationship between psychological distress, quarantine, and recommended and discouraged behaviors during COVID-19.
16	COVID19 Infection in Health Care Professionals: Risks, Work-Safety and Psychological Issues (Dabholkaret al., 2020)	to report cases of healthcare personnel (HCPs) contracting COVID19 in various settings in a tertiary care hospital, a designated COVID centre, with view to disseminate information and review safety and psychological health issues of	cross-sectional	40 healthcare workers	Descriptive statistics were used to summarise data as counts and percentages.	As many as 40 health workers were infected with COVID-19 and experienced anxiety, insomnia, and social stigma without psychological support. Some considered leaving their jobs and had suicidal thoughts.	This study is limited in generalization, lacks critical analysis of previous studies, and its conclusions are still general without discussion of practical implications. Data presentation also needs to be clarified to be more informative.	This article discusses a relevant topic with clear research methods and strong data analysis. The references used are credible and up-to-date, supporting the validity of the findings. The structure of the article is well-

		healthcare professionals.						organized, making it easy for readers to understand.
17	Factors related to preventive COVID-19 infection behaviors among people with mental illness (Chang, 2020)	to explain the preventive COVID-19 infection behaviors among people with mental illness in Taiwan	cross-sectional	414 patients with mental illness	Regression models and structural equation modeling (SEM),	Both regression models and SEM showed that trust in COVID-19 information sources and fear of COVID-19 significantly explained preventive behaviors among individuals with mental illness.	The findings cannot be generalized to individuals with severe mental disorders or to other countries due to differences in policies and cultures.	High trust in COVID-19 information sources increases fear in individuals with mental disorders, presumably due to greater exposure to information.
18	The outbreak of COVID-19, response, and the vulnerabilities of Rohingya refugees in Bangladesh (Alam, 2020)	to explore and analyze the risks that make the Rohingya refugees vulnerable to COVID-19, the ways the pandemic increases their socioeconomic vulnerabilities, the preventive and protective steps and	case study	cellphone interviews with 8 respondents	Content analysis	The risks of COVID-19, Actions taken, Challenges, outcome of services and actions required, Impacts	Due to restrictions, researchers were unable to interview refugees directly, so data was obtained from a small number of participants from related organizations.	This study examines COVID-19 risk factors, multi-stakeholder responses, and socio-economic challenges and vulnerabilities of Rohingya refugees in Bangladesh. Crowded infrastructure, shared facilities,

		preparedness taken to protect the refugees, and the challenges the humanitarian workers face.						rumors, and reluctance to test for COVID-19 were identified as risks for spread.
19	Weight Stigma as a Predictor of Distress and Maladaptive Eating Behaviors During COVID-19: Longitudinal Findings From the EAT Study (Puhl et al., 2020)	to examined longitudinal associations between prepandemic experiences of weight stigma and eating behaviors, psychological distress, and physical activity during the COVID-19 pandemic in a diverse sample of emerging adults.	cohort study	375 females, 201 males, and 8 participants identifying with another gender identity.	chi-square, independent samples t-tests,	Young adults who have experienced weight stigma may have increased vulnerability to distress and maladaptive eating during this pandemic. Public health messaging could be improved to support people of diverse body sizes and reduce the harmful consequences of weight stigma.	sample was comprised of emerging adults, most of whom were residing in one state during the study period and findings may not extend to people of other ages or those living in other areas across the USA.	Our study offers several important strengths and novel insights to the emerging literature of COVID-19 research.
20	Perceived Stress, Stigma, Traumatic Stress Levels and Coping Responses amongst Residents in Training	to explore changes in psychological responses (perceived stress, traumatic stress, stigma, coping) over time in residents, as	cross-sectional design	274 residents at baseline and 221 residents at 3 months follow-up	independent t-tests	residents reported experiencing less stress and stigma over time despite the ongoing pandemic	-	This study overcomes the limitations of previous research by involving different regions in different stages

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	across Multiple Specialties during COVID-19 Pandemic—A Longitudinal Study (Chew et al., 2020)	well as their predictors.						of the pandemic and backgrounds, and considering various stressors that affect mental health. It also provides a picture of psychological responses and their changes in the short term.
21	One Virus, Four Continents, Eight Countries: An Interdisciplinary and International Study on the Psychosocial Impacts of the COVID-19 Pandemic among Adults (Génèreux, et al., 2020)	to examine how the psychological response to the pandemic varied across countries and identify which risk/protective factors contributed to this response.	multilevel logistic regression.	multinational sample of 8806 adults from eight countries/regions	multilevel logistic regression.	Factors most associated with the likelihood of GAD or MDE included: poor sense of coherence (SOC), young age, false beliefs, isolation, perceived threat, distrust of authority, stigma, financial loss, being female, and high level of information about COVID-19.	-	precisely the key role that the SOC plays in predicting common psychopathological symptoms in the face of adversity.

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22	COVID-19-related stigmatization among a sample of Egyptian healthcare workers (Mostafa, Sabry & Mustofa, 2020)	To explore coronavirus disease 2019 (COVID-19)-related stigma and its associated factors among Egyptian physicians	cross-sectional study	509 physicians participated in the study	Bivariate analysis was done using chi-squared test, independent samples t-test, Analysis of Variance (ANOVA), and linear	Participants reported severe level of COVID-19-related stigma. In the multivariable regression analyses, the overall COVID-19-related stigma score was higher in participants with lower qualifications and in those working in a quarantine hospital	Due to the lack of specific tools to measure COVID-19-related stigma, this study used scales derived from stigma from other diseases. The lack of similar studies limits comparisons, and the sampling technique used is at risk of selection bias.	This study is one of the first endeavours to measure COVID-19-related stigma among HCWs
23	Mental health circumstances among health care workers and general public under the pandemic situation of COVID-19 (HOME-COVID-19) (Nochaiwong et al., 2020)	to describe the short- and long-term consequences of the COVID-19 pandemic on mental health and psychosocial problems among health care workers and the general population in Thailand.	cross-sectional study	1310 general populations	multilevel logistic regression models with random intercepts to explore associations with individual-level	The findings help health workers and policymakers identify risk factors and design response strategies. This information is important for public policy and responses to the psychosocial impacts of the pandemic.	as this study leverages online survey data, thereby, responses rates and incomplete information in some questionnaires may limit our findings.	Our findings provide insight into the short- and long-term mental health conditions and psychosocial responses to COVID-19 among healthcare workers and the general



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								population in Thailand.
24	COVID-19 related stigma and its association with mental health of health care workers after quarantined in Vietnam (Do Duy et al., 2020)	to measure the stigma experienced and its association with mental health problems among HCWs after 23 days of quarantined at Bach Mai Hospital (BMH).	cross-sectional study	61 participants	Cronbach's alpha, Spearman correlation	Higher level stigma was found in “negative self-image” and “concerns about public attitudes” domains, with the most common were the feeling of guilt towards family members and friends, and the avoidance of contact from the neighborhoods and the community.	small sample size, using an instrument that has not been extensively validated to measure the stigma, and the insufficient of baseline data	this the first study to report the COVID-19 related stigma among HCWs who experienced a long duration of quarantine in the country.

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## DISCUSSION

### General description of COVID-19 stigma

The COVID-19 pandemic is a disaster that has never been imagined by all mankind, especially since the spread of COVID-19 is increasingly uncontrolled, causing global fear and panic (Guo et al., 2020; Mahmud et al., 2021; Nicomedes & Avila, 2020; Sahoo et al., 2020; Satici et al., 2020; Sahoo et al., 2020). This condition creates a strong stigma in society and discrimination against those infected with COVID-19, COVID-19 survivors, health workers and other groups who are at risk of being exposed to COVID-19 (Ben-Ezra et al., 2020; Bhuiyan, 2021; Center for Disease Control and Prevention, 2025; Guo et al., 2020; Satici et al., 2020). Fear for their health and the health of their family, fear of death, losing someone close to them, losing their source of income, and various other losses form self-stigma, which instead looks like an unreasonable fear (Ahmed et al., 2020; Bhuiyan, 2020). Self-stigma towards COVID-19 is closely correlated with psychological pressure, mental status, life satisfaction, and spiritual beliefs, which the community feels (Chang et al., 2020; Chow et al., 2021; Satici et al., 2020).

This condition can be overcome by taking concrete actions requiring immediate treatment. The government is responsible for making urgent but appropriate decisions by considering aspects of ensuring the community's moral values, psychological knowledge, and understanding of pandemic containment zones as a means of activating the legal system and implementation strategies (Bhuiyan, 2020; Sahoo et al., 2020). Important ideas can be generated by increasing community resilience and independence and developing various societal strengthening systems (Bhuiyan, 2020). Appropriate education through various media and methods that suit the community's needs can help suppress the wild formation of stigma in society regarding COVID-19 due to the infodemic (Ransing et al., 2020).

The stigma against COVID-19 is described in two large groups: perceived stigma and experienced stigma. Those affected, such as health workers or their families, feel the stigma. They and their family members feel this stigma. This stigmatizing treatment is experienced in the community where they live or work environment (Mostafa et al., 2020; Yadav et al., 2020). The facts about the incidence of stigma related to COVID-19 experienced by people in various countries are influenced by several factors such as feelings of fear of being infected and having to undergo quarantine, believed spiritual values, confusion, feelings of guilt and shame. This guilt is caused by feeling like a virus carrier for others, especially those closest to you (Chew et al., 2020; Do Duy et al., 2020; Génereux et al., 2020; Ransing et al., 2020).

The stigma against COVID-19 in Asia has been ingrained in society since the beginning of this pandemic. The unforeseen circumstances and rapid spread of the virus have created an atmosphere of deep fear and widespread panic worldwide. The stigma against COVID-19 has become a serious issue that has hit society, triggered by the unexpected circumstances of the pandemic and the increasingly uncontrolled spread of the virus. Fears about personal health, losing people closest to them, and losing sources of income have formed self-stigma, which is correlated with psychological pressure and life satisfaction. This results in stigma being felt by affected individuals, such as health workers and their families, in their communities and work environments. Addressing this stigma requires an immediate and sustainable response, with the government responsible for making urgent but appropriate decisions and increasing community resilience and independence through appropriate education and strengthening existing reinforcement systems. Effective educational efforts through various media and methods can help reduce the formation of stigma related to COVID-19 in society, thereby creating a more inclusive and supportive environment for all individuals.

The facts about the incidence of stigma related to COVID-19 experienced by people in various countries are influenced by several factors, such as feelings of fear of being infected

and having to undergo quarantine, believed spiritual values, confusion, and feelings of guilt and shame. People who feel they are infected or have family members who are infected with COVID-19 often experience stigmatization in the environment where they live or work. Feelings of guilt arise because they feel like they are carriers of the virus to others, especially those closest to them (Bezerra et al., 2020; Ransing et al., 2020). Therefore, dealing with COVID-19 stigma not only requires efforts to reduce direct discrimination but also needs to address the psychological impacts experienced by affected individuals and groups. With a better understanding of the factors that influence stigma formation and a comprehensive approach to addressing it, we can help individuals and communities face this global health challenge with greater resilience and stronger solidarity.

In this research, it has been revealed that the stigma towards COVID-19 in Asia is not just a social problem but also has a profound impact on mental health, psychological well-being and social relationships. This stigma can hinder affected individuals from seeking the appropriate medical care and support they need. Therefore, efforts to overcome the stigma of COVID-19 must be a priority for the government, health institutions and society. Implement concrete measures such as enhancing public awareness, offering robust social support, and enacting inclusive policies immediately. Only then can we build a more empathetic, inclusive and resilient environment in facing the challenges of this pandemic and safeguard the mental health and psychological well-being of individuals and communities in Asia and around the world (Bu et al., 2021; Roelen et al., 2020).

### **Affected populations**

Those who are directly affected by the stigma about COVID-19 are COVID-19 sufferers themselves, COVID-19 survivors, Health Workers, Families, social minorities/Asian people, which we detail as follows:

#### **1. COVID-19 sufferers**

People who are diagnosed positive for COVID-19 and treated in the COVID-19 ward give rise various negative emotional reactions in some respondents who are positive for COVID-19, namely causing fear which leads to social isolation and stigma, feelings of shock, sadness, panic or anxiety, worry, feeling isolated and distrustful, there is anger, irritability, fear of death, feelings of disconnection, hopelessness, if the thought is considered 'will die' when diagnosed with COVID-19. This feeling is also supported by the results of previous research, which shows that there is psychological pressure among people diagnosed positive for COVID-19, which is explained significantly in the form of fear of COVID-19, self-stigma, as well as the psychological effects of COVID-19 focusing on anxiety, existential crisis and intervention. , depressive symptoms and poor sleep quality, lower age, false beliefs, isolation, perceived threat to self/family, distrust of authorities, stigma, a threat to the country/world, financial loss, being a woman and having high-level information about COVID-19 (Ahmed et al., 2020; Chang et al., 2020; Génereux et al., 2020; Nicomedes & Avila, 2020; Sahoo et al., 2020; Sahoo, et al., 2020).

#### **2. COVID-19 survivors**

Some respondents also reacted when they saw health professionals using PPE, namely that they felt like they were interacting with aliens, astronauts/space scientists, or robots. In assessing the respondents' experience of being treated in the COVID-19 ward, it was as if they were living in prison; it was considered a nightmare, torture was worse than prison and painful, and this experience was one of the worst phases of life and the most terrible moments in their lives (Sahoo et al., 2020; Sahoo et al., 2020).

### 3. Health workers

Some respondents felt uncomfortable when they saw health workers wearing Personal Protective Equipment (PPE), such as feeling like they were interacting with a strange figure, similar to an alien, astronaut or robot. Their experience of being treated in the COVID-19 ward is considered to be similar to prison; even worse, describing it as a nightmare, painful torture and one of the most terrifying times of life. In addition, the substantial stigma that has developed in society towards COVID-19 also has an impact on the health profession, causing discrimination, violent behaviour and harassment of health workers. Many health workers also experience negative coping, such as anxiety, depression and loneliness, as well as facing stigma and fear of transmitting the virus to those closest to them. Some even considered leaving work or had suicidal thoughts after testing positive for COVID-19 (Ahmed et al., 2020; Chew et al., 2020; Chow et al., 2021; Dabholkar et al., 2020; Sahoo et al., 2020). Most people think that the media increases the public stigma of COVID-19 towards health workers, and during the COVID-19 pandemic, the most common concern that arises is their health. The most helpful measure suggested is public orientation through mass media. Positive religious coping methods are very important in reducing anxiety and depression among those amid the pandemic. Strategies that increase positive religious coping and reduce negative coping should be emphasized to improve mental health among health workers.

### 4. Family

Some think that they should stay away from their families until COVID-19 subsides, especially if they regularly have contact with COVID-19 patients. The formation of associative stigma and feelings of guilt can expose their families to infection, as well as self-stigma, where some people report that their neighbours are the people who stigmatize them the most. In addition, many health workers feel that they are most stigmatized by other people who are not colleagues, family, friends, neighbours or household members, but rather they are ostracized by strangers. Their families are also ostracized and affected by this negative stigma. Their families are becoming anxious and depressed about this situation, while they cannot do anything to avoid the COVID-19 pandemic. Experiences of discrimination have led some people affected by COVID-19 to hide positive test results as a form of anticipating stigma (Chow et al., 2021; Mostafa et al., 2020).

### 5. Asians/Social minorities

The impact of COVID-19 also affects people of Asian descent, so there have been reports of racially discriminatory behaviour among Asians, which has increased since the pandemic, experiences of anti-Asian racist culture, which is stigmatizing which has had an impact on physical and mental health such as increased anxiety, depressive symptoms, difficulty sleeping and lower levels of social support may predict more problems. COVID-19 also has an impact on the experience of weight imbalance, which is influenced by stress or mood, symptoms of depression, eating behaviour, and physical activity (Ben-Ezra et al., 2020; Lee & Waters, 2021; Puhl et al., 2020).

In this research, we found that this stigma is not only limited to one group or layer of society but is rampant at all levels, from infected groups to those who continue to fight on the front lines, such as health workers. COVID-19 victims and survivors often experience unfair treatment and social rejection, both directly and indirectly. This situation can hurt their mental health, increasing levels of anxiety and depression, as well as creating feelings of isolation and loneliness. On the other hand, health workers who are struggling hard to overcome this pandemic are often the targets of stigma and discrimination. They may experience rejection from society, even in their neighbourhood, because they are considered potential virus carriers.

As a result, they feel isolated and unappreciated, even though they are heroes fighting to save lives. Not only that, other groups at risk of exposure to the virus, such as families of infected individuals, vulnerable populations in society, and Asian people as a whole, also face similar stigma. They may experience discrimination in various aspects of life, including employment, education, and social interactions. Thus, the impact of COVID-19 stigma is not only limited to the individual level but also covers broad social, economic and public health aspects. Therefore, handling this stigma is very important in overcoming this pandemic.

The social and psychological effects of COVID-19 stigma extend deeply, especially within Asian communities, where anti-Asian discrimination surged during the pandemic. Research highlights that such stigma has significantly elevated depression, anxiety, and sleep disorders as mental health challenges while also increasing vulnerability to physical health issues. The economic pressures of reduced community support and heightened isolation compound these effects. For instance, a study on Asian American and Pacific Islander populations found that over two-thirds of respondents facing COVID-19-related racial discrimination reported at least one clinically significant mental health issue, such as depression or anxiety (Boden-Albala et al., 2023; Zhou et al., 2021).

Previous research has shown that the impact of COVID-19 stigma is similar to previous public health crises, where stigmatization and xenophobia often occur. However, the scale of this problem is more extensive, even exacerbated by social media and geopolitical issues. Strategic steps are needed to overcome this discrimination, such as health education to correct misunderstandings, improve culturally friendly mental health services, and policies that actively combat discrimination. With a focused, direct approach that involves the community, it is hoped that the long-term consequences of the pandemic stigma can be reduced (Lee & Waters, 2021; Zhou et al., 2021).

Efforts to educate the public about the scientific facts about the virus, along with increasing awareness of the importance of empathy and social support, can help reduce the negative impact of this stigma in the long term. First of all, the stigma against COVID-19 creates an atmosphere of fear and suspicion towards individuals who are infected or have recovered from this virus. Society tends to view infected individuals as potential sources of viral transmission, even after they have recovered. As a result, infected or recovered people are often socially shunned. They may face rejection in daily life, from work to living environments. In many cases, this stigma leads to discrimination against the individual. They may lose their jobs, be evicted from their homes, or even become targets of verbal or physical violence (Ben-Ezra et al., 2020; Lee & Waters, 2021; Puhl et al., 2020).

This overreaction emotionally damages the affected individual and creates significant social isolation. This social isolation can have a serious impact on the mental health and psychological well-being of affected individuals. Feelings of loneliness and rejection can increase the risk of mental disorders, such as depression, anxiety and stress. Additionally, social isolation can also worsen physical conditions, as individuals may be reluctant to seek medical care or help when they need it. Thus, it is important to realize that COVID-19 stigma not only has a social impact but also a significant impact on the mental health and psychological well-being of affected individuals. Efforts to overcome this stigma must include educating the public about the virus, promoting empathy and social support, and creating an inclusive and supportive environment for all individuals, regardless of their status regarding COVID-19 (Dabholkar et al., 2020).

### **The multifaceted impacts**

The impacts resulting from the formation of stigma about COVID-19 in Asia are becoming increasingly diverse. We found that there were several groups of impacts, and we divided them into four large groups: psychological impacts, spiritual impacts, economic impacts, and health impacts. Coping methods are used during hospitalization to adapt to



negative situations and emotions, namely remembering God, talking to friends and family members on the telephone and praying to God; there are also listening to music or religious discourse and watching films to overcome negative emotional states. Coping mechanisms like sleep, eating, and vocal expression are employed less often and yield minimal relief when utilized. When asked about changes in perspective on life after surviving the COVID-19 infection, there was an increase in “faith in God”, “faith in human relationships”, “respect for doctors and health professionals”, “respect for police and security personnel”, “there was a decline in confidence in the 'power of money'”. When asked about anticipated stigma, overall, the level of anticipated stigma related to self and family was lower than anticipated in the form of reactions from neighbours and society.

There is also the risk of COVID-19 and the risk of transmission from one community to another through the movement of humanitarian workers and others, real-life situations in refugee camps, lack of awareness, inadequate knowledge about symptoms and hygiene practices, apathy towards receiving information, distrust or Negative perceptions about health care, belief in superstition and traditional medicine, fear of reporting symptoms, panic, phobias, shame and stigma, fatalism and gathering for prayer and other purposes can increase the risk of community transmission, thereby challenging the outcomes of services and actions. It is needed by health workers during the COVID-19 pandemic (Sahoo et al., 2020).

The stigma of COVID-19 also has an impact on the spiritual realm, with people tending to blame infected individuals or their families, considering it as punishment for certain sins. This view is often linked to religious beliefs, in which illness is seen as a consequence of immoral behaviour or as a test from God, giving rise to inner suffering and disturbing spiritual questions. The impact can harm spiritual well-being, triggering feelings of guilt, shame, and questions about divine justice. Inner suffering can lead to a spiritual crisis, where individuals doubt their beliefs and values, may feel alienated from their religious community and lose the meaning of life. Therefore, it is important to understand that negative spiritual views towards COVID-19 can significantly impact an individual's spiritual well-being. Society needs to encourage a more empathetic and inclusive attitude towards those affected by COVID-19 and avoid blaming individuals based on their spiritual views. Education about empathy, tolerance and respect for diversity of beliefs needs to be strengthened to overcome this stigma in the spiritual realm.

The stigma associated with COVID-19 has a significant impact on the spiritual realm, especially in areas where the disease is often associated with divine punishment or moral consequences. This view is based on a particular religious COVID-19 stigma that significantly affects spirituality, especially where the disease is linked to divine punishment or moral failings, triggering guilt, shame, and questions about divine justice that harm spiritual well-being. Beliefs can trigger feelings of guilt, shame, and profound questions about divine justice, which ultimately affect the spiritual well-being of individuals. As a result, those affected not only experience a spiritual crisis in the form of doubts about religious values but also the risk of alienation from the religious community. Research shows that this misconception exacerbates psychological and social suffering and hinders the holistic healing process. Therefore, efforts to reduce spiritual stigma must include an approach that instills the values of empathy, acceptance, and community support based on spirituality to encourage sustainable recovery and social cohesion (Marshall, 2022; Rura, 2022). To mitigate the spiritual impact of COVID-19 stigma, efforts should focus on promoting awareness and understanding of spiritual diversity while addressing misconceptions linking illness to moral failings or divine retribution. Community education programs can foster acceptance and empathy, encouraging inclusive attitudes. Furthermore, religious leaders are crucial in spreading messages of unity and offering spiritual guidance to those affected, helping them find resilience and a renewed sense of

connection. In addition, spirituality-based health services, such as access to spiritual counselors or priests, can be an integral part of a holistic health service approach. Previous studies have shown that addressing spirituality in healthcare can improve patients' quality of life and strengthen their sense of connection with their community (Rura, 2022).

The stigma against COVID-19 also has a social and spiritual impact and a significant economic impact. People tend to avoid businesses or public places that are thought to be associated with the virus, such as restaurants and shopping malls, leading to a drastic drop in their income. Small and medium-sized businesses suffer the brunt of the impact, with the possibility of layoffs, reduced hours, or even permanent business closures. This stigma impacts business owners, workers, and their families who depend on that income. The stigma of COVID-19 can create financial uncertainty for many people because they are reluctant to spend their money, even on daily necessities, due to feeling threatened by the spread of the virus. This condition can reduce purchasing power and hinder overall economic growth. Therefore, dealing with this stigma requires a comprehensive approach that includes increasing public awareness about the facts of the virus, providing economic support to affected businesses, and providing education about the importance of continuing economic activities safely and responsibly.

Fear that caused by stigma reduces consumer spending, leading to lost revenue and potential business closures. A comprehensive strategy is needed to address the economic and social impacts of COVID-19 stigma. This strategy increases public awareness and economic support for small and medium enterprises (SMEs). Studies have shown that SMEs, despite being more resilient than larger corporations in some respects, still face significant challenges, including decreased consumer spending due to stigma-induced fear, leading to income losses and even business closures (Adian et al., 2020; Wood, 2023).

Public education should also focus on correcting misconceptions about the transmission of the COVID-19 virus and promoting safe practices that allow businesses to operate without risking public health. In addition, economic measures such as direct financial assistance, tax relief, and public loan guarantees are essential to help community businesses affected by the crisis (Adian et al., 2020). This multifaceted approach is expected to address the financial instability caused by the stigma surrounding COVID-19. This approach is critical to the overall economic recovery of society as it helps maintain consumer confidence. Combining public awareness and practical economic support can reduce the negative impact of stigma on businesses, workers, and their families while ensuring economic stability during and after the pandemic.

Health effects are also a serious concern, with stigma hampering prevention and treatment efforts. People who feel stigmatized may be reluctant to seek medical care or disclose symptoms, which in turn could exacerbate the spread of the virus and threaten overall public health. The health effects of stigma against COVID-19 are also an aspect that needs to be taken seriously. Stigma can be a significant barrier to preventing and treating this virus. People who feel stigmatized or shunned by their environment may be reluctant to seek medical treatment or disclose the symptoms they are experiencing. They may feel afraid or embarrassed about being diagnosed or identified as a COVID-19 case for fear of the stigma and discrimination they may experience as a result. The impact can be devastating, both for the individual who refuses medical treatment and for society as a whole. Individuals who do not receive appropriate and timely medical care are at higher risk of experiencing serious complications from COVID-19, including pneumonia, organ failure, or even death. They can also be a greater source of infection for others around them because they are not properly isolated or treated.

Therefore, it is important to tackle the stigma against COVID-19 seriously, both on an individual and societal scale. Public education and awareness efforts regarding seeking appropriate medical care and not stigmatizing infected individuals are essential. In addition, it is also important to provide easy and safe access to health services and ensure that there are no



barriers preventing individuals from seeking the medical care they need. Only then can we overcome the stigma that threatens the health of individuals and society as a whole.

The COVID-19 pandemic provides a unique opportunity to assess psychosocial influences on various groups and socio-cultural situations, providing valuable insights that can be used to respond to future disasters (Généreux et al., 2022). This research highlights the importance of holistically addressing COVID-19 stigma in Asia, which requires educational and public awareness measures and efforts to reduce discrimination against affected individuals. Comprehensive public education is needed to provide an accurate understanding of COVID-19, while social support and protection of individual rights must also be strengthened. Educating the public about correct medical facts and increasing access to reliable information are important steps in reducing the negative impact of this stigma and building public trust in the pandemic response. In addition, social support, mental health services and spiritual support must also be improved, while international and cross-border cooperation is urgently needed in addressing this stigma as a global challenge. With cooperation and increased awareness, we can build a more inclusive and caring society in the face of the COVID-19 pandemic.

#### 4. CONCLUSION

This research concludes that the stigma against COVID-19 in Asia is having a significant impact, reflected in global fear and discrimination against infected individuals, survivors, health workers and other groups at risk. The impact covers various psychological, spiritual, and economic aspects of health effects. Therefore, handling this stigma requires joint efforts through education, public awareness, social support, and cross-border cooperation to build a more inclusive and resilient society facing the COVID-19 pandemic. As a recommendation, future research should explore the long-term effects of COVID-19 stigma on mental health and socioeconomic conditions. Additionally, policymakers and health institutions should implement evidence-based interventions, such as targeted awareness campaigns and community engagement programs, to mitigate stigma and promote equitable access to healthcare and social services.

#### REFERENCES

- Adian, I., Doumbia, D., Gregory, N., Ragoussis, A., Reddy, A., & Timmis, J. (2020). Small and Medium Enterprises in the Pandemic: Impact, Responses and the Role of Development Finance. *Policy Research Working Paper Series 9414*, pp. 1-33. <https://doi.org/10.1596/1813-9450-9414>
- Alam, M. F., & Pulla, V. (2020). The outbreak of COVID-19, response, and the vulnerabilities of Rohingya refugees in Bangladesh. *International Journal of Innovation, Creativity and Change*, 14(6), 259-284. Retrieved from: <https://researchoutput.csu.edu.au/en/publications/the-outbreak-of-covid-19-response-and-the-vulnerabilities-of-rohi>
- Ahmed, N. J., Alrawili, A. S., & Alkhawaja, F. Z. (2020). The Anxiety and Stress of the Public during the Spread of Novel Coronavirus (COVID-19). *Journal of Pharmaceutical Research International*, 32(7), 54–59. <https://doi.org/10.9734/jpri/2020/v32i730460>
- Bagcchi, S. (2020). Stigma during the COVID-19 pandemic. *The Lancet. Infectious Diseases*, 20(7), 782. [https://doi.org/10.1016/S1473-3099\(20\)30498-9](https://doi.org/10.1016/S1473-3099(20)30498-9)
- Ben-Ezra, M., Sun, S., Hou, W. K., & Goodwin, R. (2020). The association of being in quarantine and related COVID-19 recommended and non-recommended behaviors with psychological distress in Chinese population. *Journal of affective disorders*, 275, 66-68. <https://doi.org/10.1016/j.jad.2020.06.026>

- Bezerra, C. B., Saintrain, M. V. de L., Braga, D. R. A., Santos, F. da S., Lima, A. O. P., de Brito, E. H. S., & Pontes, C. de B. (2020). Psychosocial impact of COVID-19 self-isolation on the Brazilian population: A preliminary cross-sectional analysis. *Saude e Sociedade*, 29(4), 1–10. <https://doi.org/10.1590/S0104-12902020200412>
- Bhuiyan, A. A. (2021). Seeking an ethical theory for the COVID-19 pandemic outbreak with special reference to Bangladesh's law and policy. *Developing world bioethics*, 21(4), 173–186. <https://doi.org/10.1111/dewb.12287>
- Boden-Albala, B., Ding, X., Ryan, N., Goodman, S., Wing, J., Runnerstrom, M. G., ... & Drum, E. (2023). Anti-Asian racism related stigma, racial discrimination, and protective factors against stigma: a repeated cross-sectional survey among university students during the COVID-19 pandemic. *Frontiers in Public Health*, 11, 958932. <https://doi.org/10.3389/fpubh.2023.958932>
- Bu, F., Mak, H. W., & Fancourt, D. (2021). Rates and predictors of uptake of mental health support during the COVID-19 pandemic: an analysis of 26,720 adults in the UK in lockdown. *Social Psychiatry and Psychiatric Epidemiology*, 56(12), 2287–2297. <https://doi.org/10.1007/s00127-021-02105-w>
- Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & quantity*, 56(3), 1391–1412. <https://doi.org/10.1007/s11135-021-01182-y>
- Centers for Disease Control and Prevention. (2025). *Mental Health Stigma*. Centers for Disease Control and Prevention. Retrieved from: <https://www.cdc.gov/mental-health/stigma/index.html>
- Chang, K. C., Strong, C., Pakpour, A. H., Griffiths, M. D., & Lin, C. Y. (2020). Factors related to preventive COVID-19 infection behaviors among people with mental illness. *Journal of the Formosan Medical Association*, 119(12), 1772–1780. <https://doi.org/10.1016/j.jfma.2020.07.032>
- Chew, Q. H., Chia, F. L. A., Ng, W. K., Lee, W. C. I., Tan, P. L. L., Wong, C. S., ... & Sim, K. (2020). Perceived stress, stigma, traumatic stress levels and coping responses amongst residents in training across multiple specialties during COVID-19 pandemic—A longitudinal study. *International Journal of Environmental Research and Public Health*, 17(18), 6572. <https://doi.org/10.3390/ijerph17186572>
- Chow, S. K., Francis, B., Ng, Y. H., Naim, N., Beh, H. C., Ariffin, M. A. A., Yusuf, M. H. M., Lee, J. W., & Sulaiman, A. H. (2021). Religious Coping, Depression and Anxiety among Healthcare Workers during the COVID-19 Pandemic: A Malaysian Perspective. *Healthcare*, 9(1), 79. <https://doi.org/10.3390/healthcare9010079>
- Dabholkar, Y. G., Sagane, B. A., Dabholkar, T. Y., & Divity, S. (2020). COVID19 Infection in Health Care Professionals: Risks, Work-Safety and Psychological Issues. *Indian Journal of Otolaryngology and Head and Neck Surgery*, 72(4), 468–473. <https://doi.org/10.1007/s12070-020-01928-4>
- Do Duy, C., Nong, V. M., Ngo Van, A., Doan Thu, T., Do Thu, N., & Nguyen Quang, T. (2020). COVID-19-related stigma and its association with mental health of health-care workers after quarantine in Vietnam. *Psychiatry and Clinical Neurosciences*, 74(10), 566–568. <https://doi.org/10.1111/pcn.13120>
- Généreux, M., Roy, M., David, M. D., Carignan, M. È., Blouin-Genest, G., Qadar, S. M. Z., & Champagne-Poirier, O. (2022). Psychological response to the COVID-19 pandemic in Canada: main stressors and assets. *Global Health Promotion*, 29(1), 23–32. <https://doi.org/10.1177/17579759211023671>
- Généreux, M., Schluter, P. J., Hung, K. K., Wong, C. S., Pui Yin Mok, C., O'sullivan, T., ... & Roy, M. (2020). One virus, four continents, eight countries: an interdisciplinary and international study on the psychosocial impacts of the COVID-19 pandemic among adults. *International journal of environmental research and public health*, 17(22), 8390.

- <https://doi.org/10.3390/ijerph17228390>
- Grover, S., Mehra, A., Sahoo, S., Avasthi, A., Tripathi, A., D'Souza, A., Saha, G., Jagadhisha, A., Gowda, M., Vaishnav, M., Singh, O., Dalal, P. K., & Kumar, P. (2020). State of mental health services in various training centers in India during the lockdown and COVID-19 pandemic. *Indian journal of psychiatry*, 62(4), 363–369. [https://doi.org/10.4103/psychiatry.IndianJPsychiatry\\_567\\_20](https://doi.org/10.4103/psychiatry.IndianJPsychiatry_567_20)
- Guo, Q., Zheng, Y., Shi, J., Wang, J., Li, G., Li, C., ... & Yang, Z. (2020). Immediate psychological distress in quarantined patients with COVID-19 and its association with peripheral inflammation: a mixed-method study. *Brain, behavior, and immunity*, 88, 17-27. <https://doi.org/10.1016/j.bbi.2020.05.038>
- Heriyanto, H. (2018). Thematic analysis sebagai metode menganalisa data untuk penelitian kualitatif. *Anuva: Jurnal Kajian Budaya, Perpustakaan, dan Informasi*, 2(3), 317-324. <https://doi.org/10.14710/anuva.2.3.317-324>
- Lee, S., & Waters, S. F. (2021). Asians and Asian Americans' experiences of racial discrimination during the COVID-19 pandemic: Impacts on health outcomes and the buffering role of social support. *Stigma and Health*, 6(1), 70–78. <https://doi.org/10.1037/sah0000275>
- Mahmud, M. S., Talukder, M. U., & Rahman, S. M. (2021). Does 'Fear of COVID-19' trigger future career anxiety? An empirical investigation considering depression from COVID-19 as a mediator. *International Journal of Social Psychiatry*, 67(1), 35–45. <https://doi.org/10.1177/0020764020935488>
- Marshall, K. (2022). COVID-19 and Religion: Pandemic Lessons and Legacies. *The Review of Faith and International Affairs*, 20(4), 80–90. <https://doi.org/10.1080/15570274.2022.2139523>
- Miconi, D., Li, Z. Y., Frounfelker, R. L., Santavicca, T., Cénat, J. M., Venkatesh, V., & Rousseau, C. (2021). Ethno-cultural disparities in mental health during the COVID-19 pandemic: a cross-sectional study on the impact of exposure to the virus and COVID-19-related discrimination and stigma on mental health across ethno-cultural groups in Quebec (Canada). *BJPsych open*, 7(1), e14. <https://doi.org/10.1192/bjo.2020.146>
- Mostafa, A., Sabry, W., & Mostafa, N. S. (2020). COVID-19-related stigmatization among a sample of Egyptian healthcare workers. *PloS one*, 15(12), e0244172. <https://doi.org/10.1371/journal.pone.0244172>
- Nicomedes, C. J. C., & Avila, R. M. A. (2020). An analysis on the panic during COVID-19 pandemic through an online form. *Journal of affective disorders*, 276, 14-22. <https://doi.org/10.1016/j.jad.2020.06.046>
- Nochaiwong, S., Ruengorn, C., Thavorn, K., Hutton, B., Awiphan, R., Phosuya, C., ... & Wongpakaran, T. (2021). Global prevalence of mental health issues among the general population during the coronavirus disease-2019 pandemic: a systematic review and meta-analysis. *Scientific reports*, 11(1), 10173. <https://doi.org/10.1038/s41598-021-89700-8>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, 372. <https://doi.org/10.1136/bmj.n71>
- Puhl, R. M., Lessard, L. M., Larson, N., Eisenberg, M. E., & Neumark-Stzainer, D. (2020). Weight stigma as a predictor of distress and maladaptive eating behaviors during covid-19: Longitudinal findings from the eat study. *Annals of Behavioral Medicine*, 54(10), 738–746. <https://doi.org/10.1093/ABM/KAAA077>
- Ransing, R., Ramalho, R., de Filippis, R., Ojeahere, M. I., Karaliuniene, R., Orsolini, L., ... & Adiukwu, F. (2020). Infectious disease outbreak related stigma and discrimination during the COVID-19 pandemic: Drivers, facilitators, manifestations, and outcomes across the

- world. *Brain, behavior, and immunity*, 89, 555–558. <https://doi.org/10.1016/j.bbi.2020.07.033>
- Roelen, K., Ackley, C., Boyce, P., Farina, N., & Ripoll, S. (2020). COVID-19 in LMICs: The Need to Place Stigma Front and Centre to Its Response. *European Journal of Development Research*, 32(5), 1592–1612. <https://doi.org/10.1057/s41287-020-00316-6>
- Rura, N. (2022). *Spirituality linked with better health outcomes, patient care*. The Harvard Gazette. Retrieved from: <https://news.harvard.edu/gazette/story/2022/07/spirituality-linked-with-better-health-outcomes-patient-care/>
- Sahoo, S., Mehra, A., Dua, D., Suri, V., Malhotra, P., Yaddanapudi, L. N., ... & Grover, S. (2020). Psychological experience of patients admitted with SARS-CoV-2 infection. *Asian journal of psychiatry*, 54, 102355. <https://doi.org/10.1016/j.ajp.2020.102355>
- Sahoo, S., Mehra, A., Suri, V., Malhotra, P., Yaddanapudi, L. N., Puri, G. D., & Grover, S. (2020). Lived experiences of the corona survivors (patients admitted in COVID wards): A narrative real-life documented summaries of internalized guilt, shame, stigma, anger. *Asian journal of psychiatry*, 53, 102187. <https://doi.org/10.1016/j.ajp.2020.102187>
- Sahoo, S., Mehra, A., Dua, D., Suri, V., Malhotra, P., Yaddanapudi, L. N., ... & Grover, S. (2020). Psychological experience of patients admitted with SARS-CoV-2 infection. *Asian journal of psychiatry*, 54, 102355. <https://doi.org/10.1016/j.ajp.2020.102355>
- Satici, B., Gocet-Tekin, E., Deniz, M. E., & Satici, S. A. (2021). Adaptation of the Fear of COVID-19 Scale: Its association with psychological distress and life satisfaction in Turkey. *International journal of mental health and addiction*, 19, 1980-1988. <https://doi.org/10.1007/s11469-020-00294-0>
- Turner-Musa, J., Ajayi, O., & Kemp, L. (2020). Examining social determinants of health, stigma, and covid-19 disparities. *Healthcare (Switzerland)*, 8(2), 1–7. <https://doi.org/10.3390/healthcare8020168>
- Wood, J. (2023). Europe's small business proved resilient to COVID-19 pandemic disruption. Here's what that means for SMEs. *World Economic Forum* Retrieved from: <https://www.weforum.org/stories/2023/01/europe-smes-business-resilience-covid-19/>
- Yadav, K., Laskar, A. R., & Rasania, S. K. (2020). A study on stigma and apprehensions related to COVID-19 among healthcare professionals in Delhi. *International Journal Of Community Medicine And Public Health*, 7(11), 4547. <https://doi.org/10.18203/2394-6040.ijcmph20204760>
- Zhou, S., Banawa, R., & Oh, H. (2021). The mental health impact of COVID-19 racial and ethnic discrimination against Asian American and Pacific Islanders. *Frontiers in Psychiatry*, 12, 708426. <https://doi.org/10.3389/fpsy.2021.708426>