INDIVIDUALS' RELIGIOUS BELIEFS RELATED TO HEALTH AMID COVID-19 PANDEMIC: A CROSS-SECTIONAL STUDY IN RAWALPINDI, PAKISTAN

(Kepercayaan Agama Individu Berkaitan Kesihatan di Tengah Pandemik COVID-19: Satu Kajian Keratan Lintang di Rawalpindi, Pakistan)

MARIA SAIF*
UNAIZA REHMAN
MANAAR ADIL SIDDIQUI
FAIZA JALIL
ZAINAB SABIR

National University of Medical Sciences, Rawalpindi, 46000, Pakistan

ABSTRACT

A disease affects everyone differently, a person's belief system and behaviours shape their way of coping with the disease. COVID-19 has been declared a pandemic by WHO as it has spread all over the world rapidly causing deaths and severe illness. In the time of COVID-19, people developed certain coping strategies according to their understanding of the disease itself and their belief system. Religious beliefs regarding COVID-19 stood out as coping strategies. The main objective of this study is to get to know the individual's beliefs amid COVID-19 and the role of religion in shaping these beliefs. Religion itself grounded people in this tumultuous era of COVID-19 by providing comfort. These religious beliefs are subjective and relative in nature to an individual. In order to understand and analyse this, a cross-sectional study was conducted in the district of Rawalpindi located in Punjab province. In this study, our primary focus would be on behavioural changes that an individual experienced during the onset of disease by using the health belief model and bio-psycho-social

model. The district Rawalpindi was selected for this study because it is one of the largest cities in Pakistan and has a diverse population. In this study, we conducted interviews and surveys to grasp individual perspectives by using a mixed methods approach. The data was analysed by using standard deviation and t-test. This kind of study is important for health decisions and policy making because every individual sees health differently and behaves accordingly.

ABSTRAK

Penyakit memberi kesan kepada setiap orang secara berbeza, sistem kepercayaan dan tingkah laku seseorang membentuk cara mereka menghadapi penyakit itu. COVID-19 telah diisytiharkan sebagai pandemik oleh WHO kerana ia telah merebak ke seluruh dunia dengan cepat menyebabkan kematian dan penyakit yang teruk. Semasa COVID-19, orang ramai telah membangunkan strategi mengatasi yang tertentu mengikut pemahaman mereka tentang penyakit itu sendiri dan sistem kepercayaan mereka. Kepercayaan agama mengenai COVID-19 telah menonjol sebagai strategi mengatasi. Objektif utama kajian ini adalah untuk mengetahui kepercayaan individu di tengah-tengah COVID-19 dan peranan agama dalam membentuk kepercayaan tersebut. Agama itu sendiri memberi kesan kepada orang ramai dalam era COVID-19 yang bergolak ini dengan memberikan keselesaan. Kepercayaan agama ini bersifat subjektif dan relatif kepada seseorang individu. Bagi memahami dan menganalisis perkara ini, satu kajian keratan lintang telah dijalankan di daerah Rawalpindi yang terletak di wilayah Punjab. Dalam kajian ini, tumpuan utama kami adalah pada perubahan tingkah laku yang dialami oleh individu semasa permulaan penyakit dengan menggunakan model kepercayaan kesihatan dan model bio-psiko-sosial. Daerah Rawalpindi telah dipilih untuk kajian ini kerana ia merupakan salah satu bandar terbesar di Pakistan dan mempunyai populasi yang pelbagai. Dalam kajian ini, kami telah menjalankan temu bual dan tinjauan untuk memahami perspektif individu dengan menggunakan pendekatan kaedah campuran. Data telah dianalisis dengan menggunakan sisihan piawai dan ujian-t. Kajian seperti ini adalah penting untuk membuat keputusan kesihatan dan penggubalan dasar kerana setiap individu melihat kesihatan secara berbeza dan berkelakuan sewajarnya.

Kata Kunci: *Kepercayaan agama; model kepercayaan kesihatan; tingkah laku individu; pandemik COVID-19*

INTRODUCTION

A disease affects everyone differently, a person's belief system and behaviours shape their way of coping with the disease. Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) has been declared a pandemic by the World Health Organization (WHO) as it has spread all over the world rapidly causing deaths and severe illness. During the time of COVID-19, individuals developed certain coping strategies according to their understanding of the disease itself and their belief system. Religious beliefs regarding COVID-19 stood out as coping strategies. The main objective of this study is to get to know the individuals' beliefs amid COVID-19 and the role of religion in shaping these beliefs. Religion itself grounded people in this tumultuous era of COVID-19 by providing comfort. These religious beliefs are subjective and relative to an individual. To understand and analyse this, a Cross-Sectional study was conducted in the districts of Rawalpindi located in the Punjab province. In this study, our primary focus was on the behavioural changes that an individual experiences during the onset of disease by using the Health Belief Model (HBM) and Biopsychosocial Model (BPS). The HBM predicts an individual's behaviour related to a particular belief and the effects of these beliefs on their health. These particular behaviours can be changed through health education. The HBM focuses on perceived susceptibility, perceived risks, and disease severity. The perceived risk, susceptibility, and severity can be evaluated through the adoption of health behaviours, which according to them, act as barriers and benefit them in coping with the disease (Alagili & Bamashmous 2021). The BPS describes that health is not only a medical condition, but social and psychological factors influence an individual's health in different ways. The Biopsychosocial Model (BPS) views health holistically, given that all three parameters such as mental, social, and physical factors are taken into consideration when assessing the health of an individual; not merely the absence of disease.

BACKGROUND SITUATION

In China by the end of 2019, medical institutions had seen patients with unknown etiology. The Wuhan Municipal Health Commission issued the treatment of pneumonia on an urgent basis due to an unknown cause. On January 8, 2020, the China Health Commission determined the causes of the outbreak as a novel coronavirus that was identified through the sequence of the gene, then named COVID-19. It is an infectious disease that is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) This virus is transmitted from human to human and by respiratory droplets with an estimated incubation period of 2 –14 days. Coronavirus has a similar transmission route to the Severe Acute Respiratory Syndrome (SARS) virus. On January 30, 2020, WHO declared an international public

health emergency because of this infectious virus. Later on, the novel coronavirus (SARS-CoV-2) expanded from Wuhan, China across the globe (CDC 2021). On February 26, 2020, the virus was confirmed to have reached Pakistan. Two cases were reported a student in Karachi who had just returned from Iran and another person in Islamabad (the capital of Pakistan).

By the end of March 2020, cases had been registered in all provinces and territories of Pakistan. Pakistan also adopted the same strategy as all other countries for ruling the distribution of highly infectious diseases by enforcing lockdowns, social distancing, limited face-to-face interaction, and travel restrictions. The Government of Pakistan has established a COVID-19 Relief Fund to receive donations for the welfare of the public. The government of Pakistan also launched a social network helpline in seven local languages. Due to the lockdown, people did not mobilize. This disease caused stress, anxiety, and mental health issues. Pakistan is an Islamic country where the majority of people are Muslims and have strong religious beliefs. This was an alarming situation for a country that is underdeveloped and lacks the medical resources to cater to such a health problem. They practised the religion strictly and sought help from God. They offered prayers and kept faith in praying. Religion plays a significant role in improving mental health, depression, anxiety, stress, etc. HBM is a framework with the help of which we can investigate health behaviours and identify key health beliefs and also help us in predicting and changing a range of health behaviours. The health belief model was introduced by social psychologists Irwin M.Rosentock, Godfrey M. Hochbaum, S. Stephen Kegeles, and Howard Leventhalin in 1950 to predict health behaviour in terms of certain belief patterns. The main strength of the HBM lies in the fact that it was developed by researchers directly working with health behaviours and so many of the concepts possess face validity to those working in this area (Conner & Paul 2021). We can investigate health-related behaviour in terms of different belief patterns. Individual perceptions, perceived severity, perceived thread, cues to action, and the likelihood of action are some of the factors that help in undertaking health behaviour (Mckellar & Elizabeth 2020).

HBM proposes that if the perceived threat of health risk is high, people will take more preventive measures. Therefore, the core aspect of HBM is that behaviour change interventions are more effective if we talk about an individual's perception of benefits, barriers, self-efficacy, and susceptibility (Laranjo 2016). Health behaviour is defined by Gochman as the apparent behaviour of individuals and their behavioural patterns, habits, and actions to restore and maintain their health and improve it (Gochman 1997). According to various studies, health behaviour plays an important role in improving the health of individuals. Various studies used HBM to measure health behaviours. A study conducted in Sri Lanka stated that

by informing the public about the prevention benefits through encouraging and health motivation, precautionary measures against COVID-19 can be effectively promoted (Mahindarathne 2021). Another study in Saudi Arabia concluded that perceived benefits, perceived barriers, and cues to action are associated with the preventive behaviour of COVID-19 by applying HBM. This study also suggested that HBM is important for developing effective health strategies and policies (Alagili & Bamashmous 2021). A cross-sectional study conducted in Iran suggested that designing an educational intervention based on HBM can help in the correction of beliefs and tolerance of COVID-19 behaviour. Health-related campaigns, reminders on social media, and emphasizing on the benefits of preventive behaviour need to be emphasized especially among men (Karimy et al. 2021).

METHODOLOGY

Study Design and Area of Study

A cross-sectional study was conducted from November 1 to November 20 among people who are living in the district of Rawalpindi. The district of Rawalpindi is located in the Punjab province of Pakistan. Two Tehsils (sub-divisions within the district) were selected from the Rawalpindi district, which were Tehsil Kallar Syedan and Tehsil Rawalpindi. The district of Rawalpindi was selected for this study due to its diverse population and availability of healthcare services. The population of Rawalpindi was 2,2881,000 as of 2017 (the latest census of Pakistan in 2017). 96.8% of Rawalpindi's population is Muslim, 2.47% is Christian, and 0.73% belongs to other religious groups. It is the second-most urbanized district in Punjab, thus health facilities are available relatively easier than in other areas.

Sampling Design

A random sampling technique was used to collect the data from people who were living in Tehsil Rawalpindi and Tehsil Kallar Syedan.

Instruments

Socio-demographic Characteristics

Socio-demographic variables included: gender, age, level of education, employment status, profession, marital status, and the total number of people living in the house. The last three variables were used as potential measures of social support. These

variables make the distinction between active and non-active members of the community. The employment status was categorized into two broad categories: employed and unemployed. As for marital status, married and unmarried were included.

Physical Health

Physical health status was measured by general health indicators and specific health indicators. The general health indicator includes the assessment of general health status in the last six months and the existence of a chronic disease. As a specific health indicator, a list of some of the most frequent medical conditions was given, i.e. asthma, cardiovascular diseases, and COVID-19.

Use of Health Services

Utilization was measured by visits to the doctor during a COVID-19 outbreak and hospitalisation during a pandemic. The respondent had to give a "of visits" as an answer.

Coping Strategy

This was open-ended. The respondent had to give detailed information on how he/she dealt with the situation during the COVID-19 pandemic when the lockdown was imposed by the government of Pakistan.

Procedure

The data was collected with the consent of the respondents and by briefing them about the purpose of the study. The questionnaire was translated into Pakistan's national language, Urdu.

STUDY DESIGN

This study aimed to assess individual religious beliefs amid the COVID-19 pandemic by using the Health Belief Model (HBM) and the Biopsychosocial Model. In this study, HBM was used as the theoretical framework of the study as it identifies the individual's beliefs, perceptions, perceived benefits, and cues to action. Whereas the Biopsychosocial model was proposed by George Engel and Jon Romano of the University of Rochester in 1977. The Biopsychosocial (BPS) emphasizes the

interconnection between biological, psychological, and socio-environmental factors. The BPS model demonstrates the importance of maintaining wellness in all aspects of our lives. It explains how some seemingly healthy people can get some illnesses and why some are more prone to mental illness than others.

DATA COLLECTION

A structured questionnaire was constructed based on the literature on COVID-19 attitudes, perceptions, and behaviour recommended by the WHO (World Health Organization) and other public health organizations. For the socio-demographics and household characteristics, we developed questions suitable for the local context. The questionnaire was translated into Pakistan's national language, Urdu. The collected demographic data consisted of sex, age, education level, type of health system used, annual income, marital status, and coping strategies used for reducing stress and chronic diseases. The participants were asked to complete the questionnaire in a face-to-face setting and also by online distribution of the questionnaire. We generated an online questionnaire through Google Forms and shared the link through social media. After each questionnaire was completed, the participants were asked about their understanding of the questions. Participants were consulted about their beliefs and knowledge regarding the COVID-19 spread. The questionnaire consisted of 17 questions. Perceived susceptibility corresponded to knowledge and belief about coronavirus infection probability (e.g., "based on my overall health"). Perceived severity investigated the personal belief regarding the individual suffering from the disease process and the intensity of symptoms (e.g., "if I caught coronavirus disease, the chance of getting too impaired to do my daily activities would be..."). Perceived benefits concerned the effectiveness of the behavioural mechanisms adopted to prevent the infection (e.g., "they followed the SOP regarding COVID-19 and used religion as a coping strategy"). The data collection was done using the mixed-methods approach in which surveys were done. The data was collected with the consent of the respondents and by briefing them about the purpose of the study. A total of 99 respondents took part in the study, both males and females. 78.8% of the respondents were female, and the age of the participants lied between 15 and 56 years of age. The maximum education level of the respondents was graduation.

ANALYSIS

A mixed-methods approach to the research was used. Frequency and percentage were used to describe the sample characteristics.

RESULTS

Table 1 shows that 78.8% of the participants were female. The age distribution of the participants revealed that more than 60% of the respondents were between 15 and 25 years of age, 22.2% were between 26 and 36 years, and about 10.1% were from 37 to 56 years of age. The educational qualifications of the respondents showed that many of the respondents were highly qualified as the majority were graduates. Another fact was that 61.6% of the respondents were unemployed, and more than 75.8% were unmarried.

TABLE 1 Demographics of the Research Data

Serial. No.	Demographic Factors	Frequency	Percentage
1	Male	21	21.2%
2	Female	78	78.8%
3	Age group (15-56)		
	15-25 years	67	67.7%
	26-36 years	22	22.2%
	37-56	10	10.1%
4	Primary Education	9	9.1%
5	Graduated	46	46.5%
6	Post Graduated	10	10.1%
7	Higher Education	34	34.3%
8	Employed	38	38.4%
9	Unemployed	61	61.6%
10	Married	24	24.2%
11	Unmarried	75	75.8%

Table 2 shows that a total of 99 respondents participated in this survey, out of which 34.4% of respondents spent their time during the COVID-19 period praying and reciting the Quran, while 65.6% of respondents kept themselves busy with different activities.

TABLE 2 Religious Coping Strategies among respondents: A brief analysis

S No	Questions	No of Respondent	Percentage
1	Praying and Reciting the Quran	34	34.4 %
2	Other Activities	65	65.6 %
3	Total	99	100 %

Table 3 shows the health impact of COVID-19 on individuals and their health-related behaviour. 84.8% of our respondents got vaccinated as they believed in the existence of the COVID-19 pandemic, while 15.2% were not vaccinated. The table also shows that 90.9% of the respondents were stressed due to COVID-19, while 9.1% were not. 70.7% of the respondents were affected financially by COVID-19, while 29.3% were not affected. Being financially affected could be one reason for being stressed.

TABLE 3 Percentage responses of the impact of COVID-19 on individual health

Serial No.	Questions	Yes %	No%
1	Are you vaccinated?	84.8	15.2
2	Did the idea of COVID-19 cause stress?	90.9	9.1
3	Did COVID-19 affect you financially?	70.7	29.3

DISCUSSION

The core aspect of the HBM is that behaviour change interventions are more effective in the context of an individual's perception of benefits, losses, barriers, etc. 84.8% of respondents got themselves vaccinated because they believed that the COVID-19 pandemic existed and feared they could get affected by it. HBM helped us predict a range of changing health behaviours and we can investigate health-related behaviours in terms of different belief patterns, individual perceptions, perceived severity and threat, and the likelihood of their actions. From our data, we came to a point where 90.9% of respondents were stressed due to the severity of this illness, and this showed their belief in the existence of the pandemic. During this period, individuals' behaviours changed, as 70.7% of respondents were affected financially and 90.9% were under stress due to the pandemic. The BPS model suggests that the stress affecting the psychological health of individuals remains a prominent factor in the time of the pandemic, as 90% of the individuals believe that they were stressed out during COVID-19 and financial loss can ultimately lead to stress.

Our respondents faced an immense amount of stress due to this disease. A wave of panic was observed all across the globe. This was the first time people felt traumatized because there was nothing that could be done to prevent it from spreading. Pakistan, being a third-world country has economic issues. Lower-class income people make ends meet from their day-to-day income, which is why imposing a complete lockdown resulted in increasing their financial burden. Another thing that was alarming was that there was no solution yet available for immunity from the virus.

Hence, people were having doubts about scientific research and facts. This brought them an inclination toward religious coping strategies, which were proven to be a sense of relief for them. These were a way to connect to their Creator and ask for forgiveness and relief from this crisis. People were fearful that the day of judgment is near as according to the ulama, shutting down of mosques and they were not able to perform hajj is a sign of *'azaab'* (a punishment from God) as a result of the sins they had been doing. Everyone was petrified of what was going to happen next. The uncertainty of how the virus was evolving frequently made it worse. Religious coping strategies were adopted all over the world. Those strategies varied from person to person. Now, this brought forward the question of why people did not reach that stage of contentment when religious coping was available. Religious coping had both positive and negative effects in some cases. Positive in the case when people have a sense of *tawakkal* that is assured that they will not get any disease by following the guidelines given by Allah. On the other hand, people observing religious practices still have this fear of the disease, hence, the negativity is somehow taking over their minds. Health is dependent on both psychological, physical, and social factors. People practising religion must have sound spiritual health to keep themselves psychologically healthy. The study conducted showed that people who observed positive religious coping strategies along with SOPs were better able to deal with the situation. They have a sense of relief. The media was also responsible for encouraging these practices. The media constantly aired shows and short service messages in between news transmissions that read a certain ayah, surah, or eat a particular herb mentioned in the Holy Quran and Hadith. For example, people drank water from bowls engraved with Quranic verses, and prayer calls were heard more than five times a day. However, people were discouraged at this stage from coming to mosques to limit the spread of disease. Still, some people used to come to mosques to pray for mental peace. People had this strong belief that if death is going to come, it will come by the will of God, if we are meant to survive then no worldly power can change that. This strong series of beliefs was held by the few people who were practising positive religious coping strategies. Similar studies have been conducted all around the world and similar results were found. The coping strategies a person has adopted in the presence of disease can be influenced by religious factors, spirituality, and belief systems of the individual. A study conducted in Pakistan illustrated a positive relationship between religious coping and health anxiety that was influenced by the pandemic, they used religiosity as a coping strategy to deal with the ongoing circumstances (Mahmood 2021). Furthermore, religiosity and spirituality could be used together to improve interventions related to pandemic-induced health anxiety (Mahmood 2021). Another study related to religiosity and spirituality was done in Canada which associated improvement in the mental health of caregivers amid COVID-19 through religious coping skills

(Sen 2022). The findings of this study suggested that the beliefs and practices associated with religiosity and spirituality act as contributory factors in the improvement of mental health through positive coping (Sen 2022). A study carried out among the Muslim and Christian residents of the UAE explored the relationship between positive religious coping and mental health during COVID-19 in April 2020 (Thomas 2020). Recent studies suggested that an individual's satisfaction during COVID-19 was increased due to religious commitment which led to decreased depression (Kocak 2021). According to an article published in the Economic Journal, evidence has suggested a linkage connecting natural disasters to increased religiosity (Bentzen 2019). In this pandemic, people sought comfort in prayers amidst the uncertainty of life. Recent research has shown evidence of an increase in prayer activity during the COVID-19 pandemic (Coppen 2020). Google searches for the word 'prayer' intensified in April 2020 and this search has been proliferating twice with every 80,000 new registered cases of COVID-19 (Bentzen 2021). Speculations have linked the COVID-19 pandemic to encouraging religious coping (Bentzen 2019). The Muslim community had different approaches to dealing with COVID-19; these approaches depended on three factors: the religious commitment of the participants, mistrust towards political decisions that interfered with their religious life, and subjective assessment of world events (Piwko 2021). A great sense of mistrust and uncertainty was observed towards any of the governing bodies, whether the health ministry or the policymakers. The Muslim community rejected any of the policies that were a hindrance to their religious practices. Muslims all over the world were taken aback by the ban of Hajj pilgrimage that particular year. Even the observance of religious days was observed by the community with the utmost solemnity. Other than Muslims, even in India and Nigeria, people were more religiously inclined rather than relying on scientists. The reluctance to get vaccinated was one of the biggest barriers they needed to overcome. People did get vaccinated but their belief that the vaccine would protect them from the virus was uncertain. They had themselves surrendered to God whatever happened. In Pakistan, where the cases of COVID-19 were lower considering the population, this was considered to be some kind of a blessing by the people.

CONCLUSION

The research focused on how coping strategies were adopted and how the religiosity of the people increased during COVID-19. According to our research, health belief was majorly responsible for the kinds of coping strategies one should adopt. The onset of the coronavirus unlocked a situation of terror all across the globe. People were not fighting with something they saw, they were dealing with a virus that was changing behaviour and evolving fast. In these kinds of unforeseen circumstances,

their only option was to turn back to God. Their fear of the virus and their strong belief that all things would only happen if Allah willed; were the two reasons they thought that religious strategies were the only way to get them through this pandemic. These turned out to be coping behaviours beneficial for their health as they adjusted to the new normal.

ACKNOWLEDGMENTS

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