

CONGREGATIONAL RELIGIOUS PRAYERS AMID COVID-19 AND PANDEMIC SPREAD – EVIDENCE FROM SOUTHERN PUNJAB, PAKISTAN

Madeeha Gohar Qureshi¹, Muhammad Shahid², Farooq Ahmed³, Shakeela Rafiq⁴, Najma Iqbal Malik^{5*}

^{1,2}Pakistan Institute of Development Economics (PIDE), Islamabad, Pakistan; ³Department of Anthropology, Quaid-i-Azam University Islamabad, Pakistan; ⁴Iran-Pakistan Institute of Persian Studies, Rawalpindi, Pakistan; ⁵Department of Psychology, University of Sargodha, Pakistan.

Email: ¹madeeha.qureshi@pide.org.pk, ²Muhammadshahid_15@pide.edu.pk, ³jamfarooq@hotmail.com, ⁴shakeelarafiq.pk@gmail.com, ^{5*}najmamalik@gmail.com

Article History: Received on 5th June 2021, Revised on 17th June 2021, Published on 26th June 2021

Abstract

Purpose of the study: This study explored how opening up mosques amid the COVID-19 pandemic may have increased the spread chances of disease and estimated how many individuals, attending mosques post-pandemic had experienced COVID-19 related symptoms in the study area. Furthermore, it evaluated how successful were the governmental Standard Operating Procedures (SOPs) for attending congregational prayers in protecting masses against the pandemic in its three dimensions 1) citizens' following SOPs themselves in mosques, 2) implementation of mosque and prayer guidelines by mosques committee and 3) imams' contribution in mobilizing the society against the pandemic.

Methodology: Data were collected from 800 respondents between the ages of 18 to 50 years who were going to the mosques regularly during the lockdown using a purposive sampling technique. Descriptive statistics like frequencies and percentages were calculated. The 15 items self-constructed, a piloted questionnaire related to COVID-19 SOPs was used in the current study.

Main Findings: The study's findings revealed that religious gatherings played a vital role in COVID-19 spread as 66.25% sample that was attending communal prayers at mosques felt that they may have contracted COVID-19 symptoms because of offering prayers in the mosque. Further, evaluation of anti-COVID-19 policy measures namely degree of implementation for citizen SOPs in the mosque by people themselves, degree of implementation for prayers' SOPs as per governmental announcement by the mosque committee, and imam's mobilization against the pandemic as per the perception of the sample of people going to mosque post-pandemic were also found to be of the medium level at best.

Applications of this study: The study gave an idea of whether the allowance of communal religious gathering with some anti-COVID guidelines as in the case of Pakistan a useful policy. It provided a useful framework for the evaluation of governmental covid-19 policies (SOPs). Finally, this study could also be useful to know the public response to SOPs and need of community stakeholders like Islamic Mosque imams in policy implementation on the grass-root level during the covid-19 pandemic.

Novelty/Originality of this study: The study's uniqueness is evaluation of success or failure of anti-COVID measures announced by the government to implement and monitor by the mosque committee. It measures how effective were local mosque imams in mobilizing people against the pandemic– an indeed missed out institutional means in policy debate of fight against the pandemic and creating awareness.

Keywords: COVID-19, Citizen SOPs in Mosques, Mosque and Prayers SOPs, Imam's Mobilization, Mosque Committee.

INTRODUCTION

From the very start, the government of Pakistan had recognized the COVID-19 pandemic as an important adverse economic shock in addition to a public health emergency. It was the result of this recognition that they quickly moved from a policy stance of complete to a smart lockdown strategy ([PIDE COVID Bulletin no 2](#)). This move was mainly for economic reasons, yet there also existed a cultural background to this policy shift given the majority of a mosque going population, as well as important religious leaders and clerics, had not accepted the closure of communal prayers at the mosque ([Mohsin, 2020](#); [Hadid & Sattar, 2020](#)).

Further, not only religious sentiments for congregational prayers amid COVID first wave had shortened the period of complete lockdown to few weeks from mid-march to May 9th, 2020 within Pakistan but besides that as per Bloomberg report (2020), Islamic communal gatherings had also been reported as the prime cause of initial COVID-19 outbreak. The report findings showed that not only the initiation of COVID-19 first wave in Pakistan could be traced to infected pilgrims that had returned from Iran but that 27% of infected cases were also found to be in attendance of Islamic gatherings at Raiwind Ijtima ([Mangi, 2020](#)).

Hence religious practices and religious institutions may have an important role in the spread of the COVID-19 pandemic, which is a well-recognized proposition – yet a hypothesis that needs validation. From the observable correlations, the spread of epidemic post inflow of affected pilgrims from Iran or having 27% initial reported affectees

with a history of being present in Raiwand Religious Ijtima does suggest that such gatherings may have promoted the epidemic spread by compromising social distancing of COVID-19 carriers with others.

Similarly, a case to the point, comparable correlations were developed with Tabligh-e-Jamaat religious gatherings in India and its first corona spike and more recently in form of Hindu Kumbh festival as a trigger for uncontrollable pandemic spread ([Mangi, 2020](#); [Pandey, 2021](#)). Hence the link of religious communal gatherings resulting in the corona spread has been a widely recognized reason for epidemic initiations and/or transmissions within media discussion, yet to date, not much research has come up to show conclusive evidence to authenticate this puzzle. The current research is a step forward in this direction where an attempt has been made to assess how opening up of mosques on 18th April 2020 amid Pakistan's first corona wave for five-time congregational prayers as well as Ramadan Taraweeh prayers may have affected the corona incidence.

BACKGROUND OF MOSQUES' PLAUSIBLE INSTITUTIONAL ROLE FOR PANDEMIC CONTROL

Lockdown policy had been widely practised across the globe to limit COVID-19 pandemic transmission after the successful control in China ([PIDE COVID Bulletin no. 2](#)). However, in Pakistan, the complete lockdown was imposed for only a few weeks in the first COVID wave. The reasons for this policy decision were not just economic but also cultural, given people resisted to complete lockdown by gathering in mosques for prayers especially for Jumma Prayers ([Mohsin, 2020](#)).

The robust public support against closures of mosques within Pakistan was evident not just in the clashes of public with authorities at Friday prayer during the lockdown in different cities but in mounting lobbying for opening up of congregational five times prayers on regular basis along with Ramadan and Taraweeh prayers by senior religious leaders and Islamic clerics as the holy month of Ramadan neared in the first COVID-19 wave ([Rehman, 2020](#); [Abi-Habib & Rehman 2020](#); [Ali, 2020](#)). Consequently, due to its religious sensitivity, the government of Pakistan was forced to open mosques for Ramadan and onwards on 18 April 2020, however with clearly defined 20 Standard Operation Procedures (SOPs) as set by National Command Operation Centre ([NCOC Guidelines, 2020](#)). This decision, though was not welcomed positively by doctors' associations who urged the government to stop communal gathering for prayers at mosques to avoid a surge in covid-19 cases, yet to no avail ([Gandhara, 2020](#); [Hussain, 2020](#)).

The role of community religious institutions and community religious leaders or to be specific in the context of Pakistan – local mosques and their imams is well documented in the literature ([Aghaee, 2015](#); [Ahmed, 2017](#); [Badru, & Kanmodi, 2017](#); [Bentley et al., 2020](#); [Corpuz, 2021](#); [Greene, T. et al 2020](#); [Mohamed & Marican, 2014](#); [McMullin, 2015](#); [Raguram et al. 2002](#); [Riwajanti, 2017](#); [Spellman 2004](#)). However, such channels of impacts have not been systematically assessed in the case of COVID. The case of Pakistan is unique in this context. Not only economic policy for COVID-19 control in Pakistan deviated from the norm across the world by following a smart rather than complete lockdown approach for imposing social distancing but the governmental permission for communal prayers with strict guidelines or SOPs for mosques administration, for mosque visitors as well for mosque imams had created a unique institutional role of local mosques and their imams (mosques heads) in impacting COVID incidence.

Hence keeping in perspective the above literature gaps, the current study distinguishes itself in many important ways from general research done on the issue. Besides seeing how the COVID-19 incidence may have evolved post opening of mosques for communal prayers, it evaluates the effect of public awareness to governmental anti-COVID-19 guidelines for communal prayers as well as the role of the Mosque's imam and administration as a Community Centre for influencing public behaviour against COVID-19 – a line which is not much seen in the literature on the COVID-19 pandemic control measures. Further, by focusing on mosques, it highlights the importance of community centres and the people leading them as a missed-out institutional means for the fight against the pandemic within Pakistan. Keeping in view the importance of the phenomenon and research purpose following objectives were specified:

- Firstly, how opening up mosques amid the pandemic may have increased the chances of catching the COVID disease. To estimate how many individuals that were attending mosques post-pandemic had to experience COVID-related symptoms in the study area.
- Secondly, how effectively mosques' Committees implemented governmental Mosques and Prayers SOPs in mosques and how the responsive public were in following general citizen's anti-COVID-19 guidelines on their own in mosques during communal prayers.
- Thirdly, what role the local mosques' imams may have played in creating awareness against the pandemic and for following governmental defined SOPs for protection against the COVID-19 disease.

METHODOLOGY

a. Study Area

The study survey was conducted in major cities of four districts of Southern Punjab namely; Rahimyar Khan, Bahawalnagar, Rajan Pur, and D.G. Khan. These districts of Southern Punjab are considered as one of the most deprived districts of Punjab with high poverty and illiteracy rates (MICS, 2014). The choice of these districts is important for two

reasons: firstly, the formal institutional role in curbing COVID-19 via smart look down strategy may seem less operational here given these districts being placed in interior areas and also had less COVID-19 incidence, to begin with, and secondly, because this is one of the poor areas of Punjab, hence not only people may have less access to awareness via institutional means like internet, television, mobile phone, etc. but the institutional enforcement mechanism via targeting of incidence through mobile phone or reporting of COVID-19 cases can be considered to be weak here. Hence it is safe to consider that role of informal institutional means via the role of imam masjid (local mosque's head) in the community may be more effective, so in this context, the choice of these districts seems plausible.

b. Study Design, Duration, and Sampling

The current study cross-sectional in nature was conducted between August 5, 2020, to October 1, 2020. The questionnaire consisted majorly of 4 parts; 1) socio-economic information of respondents; 2) practices of participants on governmental SOPs in the mosque; 3) Participant's opinion regarding mosque imam's contribution to mobilizing society against pandemic; and 4) Participant's opinion regarding the level of implementation of Pakistan's National Command Operation Centre (NCOC) SOP in the mosque. Around 800 participants were selected based on purposive sampling. From major cities of four districts in southern Punjab, responses with an equal share of around 200 were gathered from each district. The sample distribution in each district is given below in Table 1:

Table 1: Distribution of the sample (n=800) in four districts of Southern Punjab

Districts	Allocated Sample
Rahimyar khan	200 respondents
Bahawalnagar	200 respondents
Rajan Pur	200 respondents
D.G. Khan	200 respondents

Source: Authors

c. Inclusion and Exclusion Criteria:

Inclusion: The respondents of the study were the only males between the age of 18 to 50 years and were going to the mosque regularly during the lockdown.

Exclusion: National Command Operation Centre (NCOC), Pakistan restricted children, below age 18 and above 50 years to go into the mosque for offering prayers Taraweeh and other mosques' prayer SOPs guidelines.

d. Questionnaire Composition

The authors developed a self-constructed questionnaire by carefully reviewing all the COVID-19 SOPs for Ramzan, Taraweeh, and other mosque prayers, as well as general citizen guidelines by National Command Operation Centre (NCOC), Pakistan, and validated on participants through their response. The questionnaire had 15 questions in all four sections with binary form (yes or no) response format.

e. Data Collection

The study used primary data. The responses of mosque-going individuals were taken through a structured questionnaire along with a specified demographic information sheet (name, age, education, marital status, number of family members, etc.) from 800 respondents based on purposive sampling technique. Only male respondents were chosen for the survey who were visiting mosques five times a day during the lockdown. The informal willingness of imams for conducting surveys was taken two weeks before when the actual survey was conducted. Further before initiating the survey, help was taken by mosque imams to request the individuals' participation in the survey.

During the survey, we explained the nature of the study to each individual after their willingness. The questions within the questionnaire were also thoroughly explained to each respondent before recording their response to ensure that each participant may record their answer with clear, logical, and independent thinking of their own without any external influence. Finally, each respondent was separately surveyed keeping distance and following SOPs. Hence all the ethical protocols of scientific human-based research i.e., debriefing, informed consent (for anonymous voluntary participation and publication of research data), assurance of confidentiality along with no deception, and absence of any physical, psychological or financial harm were incorporated.

f. Measures

The current study constructed three indexes to assess from the mosque going participants' responses the level of the overall implementation of NCOC's policies against COVID-19 through government's announced mosques and prayers SOPs as well as in the context of governmental anti-COVID general citizen guidelines and the role of imam's effectiveness in creating awareness against the pandemic. These indexes are as follows:

1. Practices of participants on citizen SOPs in the mosque (Responses on Practices in Mosque on Citizen SOPs Index, RPMI).

2. Respondent's opinions on the level of implementation of NCOC's mosque and prayer SOPs by mosques committee in mosques (Index NCOCMI).
3. Participant's opinions regarding mosque imam's contribution in mobilizing society against Covid-19 (Mosques Imam's Mobilization Index, MIMI).

All the questions that had materialized into three indexes were in the binary form whereby if the respondent answered the question "Yes" it was assigned a value equal to 1, otherwise 0. Further, the indexes were categorized into three groups; Poor, medium, and Full/high implementation on SOPs in mosques. The range value for the poor RPMI/NCOCMI/ MIMI group are from 0-5, for medium RPMI/NCOCMI/ MIMI category, is 6-10, and for full or high RPMI/NCOCMI/MIMI category range is 11-15.

The poor RPMI/NCOCMI/MIMI categories depicted that respondent is following few citizens' SOPs in the mosque/ low implementation on mosque and prayers SOPs by committee/ low mobilization by imams. The medium RPMI/NCOCMI/MIMI shows that respondent is following more than few citizens' SOPs in the mosque/mosques are following on more than few NCOC's mosque and prayers SOPs/imams mobilization is medium. While full or high RPMI/NCOCMI/MIMI categories show that respondent is following maximum and full citizens' SOPs in the mosque/mosques are fully adopting all the mosques and offering prayers' SOPs in mosques/imams are fully mobilizing against the pandemic.

g. Data Analysis

A database was established by entering data into an MS Excel spreadsheet. Further, descriptive statistics: frequencies and percentages were calculated on STATA 15, and pivot and line graphs were taken on Excel 13.

RESULTS/FINDINGS

Results in Table 2 shows that around 37% of respondents have higher education and graduated from universities and colleges. Around 47% of respondents who were regularly offering prayers at mosques during lockdown belonged to the age group 31 to 40 years and 91% were having marital status married. In the lockdown period, the respondents who were regularly offering prayers in mosques 76% were unemployed and 42% respondents were daily wagers while only 9% were having a government job. 55% of respondents reported that their household size comprises 6 to 10 members. Among the respondents, 46% replied that around 3 to 4 while 22% answered 5 to 6 members were living in one room. Around 36% of respondents' income was between 10000-20000 whereas 27% replied their income was between 20000-40000 Pakistani Rupees before covid-19. While during the covid-19, 38% reported that their income was less than 10000 Pakistani Rupees and 27% responded 10000-20000 Pakistani Rupees. Around 66.25% of respondents felt COVID-19 symptoms during the lockdown period due to going into the mosque for offering prayers.

Table 2: Socio-Demographic information of the respondents

Indicators	Characteristics	Frequency	Percentage
Age of Respondents	18-30	210	26.25
	31-40	380	47.50
	41-50	210	26.25
Education	Illiterate	120	15
	Primary	180	22.50
	Secondary	200	25
	College and University	300	37.50
Marital Status	Married	730	91.25
	Single	70	8.75
Working Status	Employed	190	23.75
	Un-Employed	610	76.25
Occupation	daily wager	340	42.50
	shop keeper	180	22.50
	private job	190	23.75
	government job	90	11.25
Household Size	<=5	340	42.50
	6-10	440	55
	greater than 10	20	2.50
Household Members living in One Room	<=2	150	18.75
	3-4	370	46.25
	5-6	180	22.50
	Greater than 6	100	12.50
Monthly Family Income Before COVID-19 in PKR	<=10000	140	17.50
	10000-20000	290	36.25

	20000-40000	220	27.50
	40000-70000	110	13.75
	Greater than 70000	40	5
Monthly Family Income During COVID-19 in PKR	<=10000	310	38.75
	10000-20000	220	27.50
	20000-40000	150	18.75
	40000-70000	100	12.50
	Greater than 70000	20	2.50
Do you have or feel any Symptoms during the covid-19 period due to going into the mosque? (i.e. Shortness of breath, Sore throat, Cough, Headache/joint or body pains, Runny nose, Fever/Fatigue, Loss of taste/smell, Dental issues, or Any others?)	Not feel any Symptoms	270	33.75
	Feel any Symptoms	530	66.25

Source: Author's Survey. (note: Monthly income and expenditure taken in Pakistani Rupees)

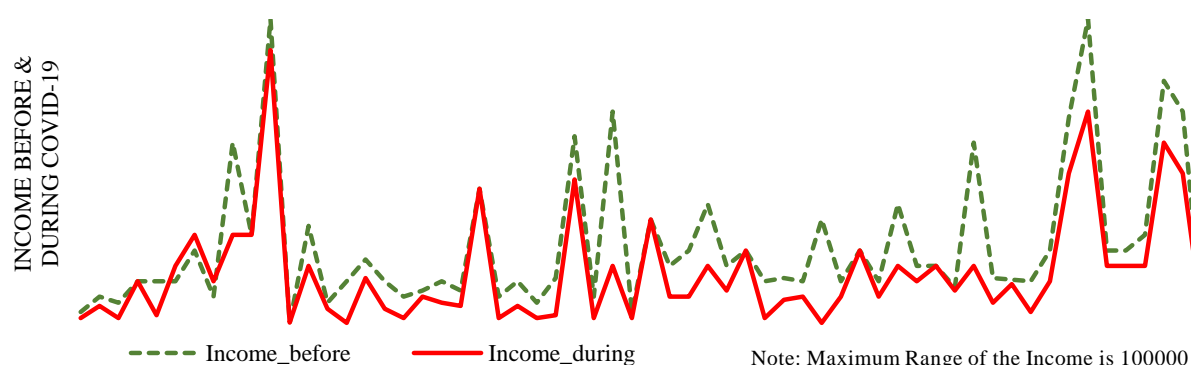


Figure 1: Income Before and During COVID-19 Pandemic

Source: Author's Estimations

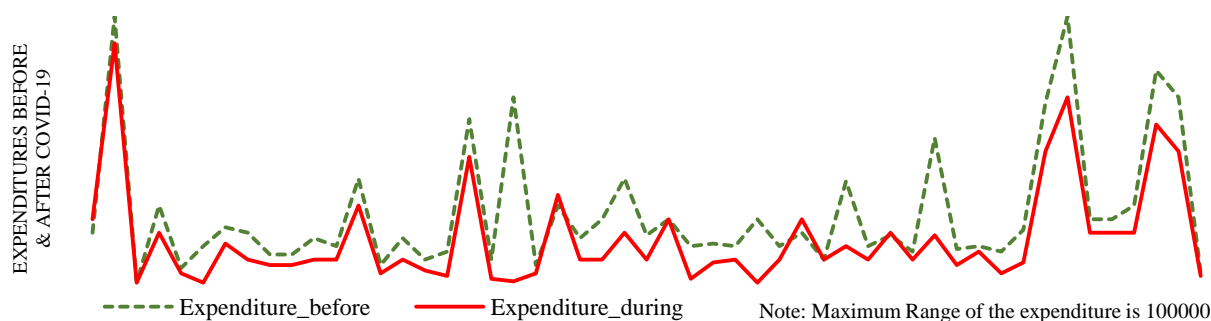


Figure 2: Expenditure Before and During Covid-19 Pandemic

Source: Author's Estimations

In Figure 1, the dotted line for income before COVID-19 is above the plane line for income of respondents during COVID-19 which shows that respondents 'income were higher but as the COVID-19 shock hit the economy, their incomes fell during the shock period. This evidence is quite reasonable given in the given sample 42.50% of the respondent were daily wagers, and hence were quite vulnerable to the fall of income was because of lockdown.

In Figure 2, the dotted line for expenditure before COVID-19 is above the plane line for the expenditure of respondents during COVID-19. The graph shows a fall in expenditure during the epidemic shock period. This fall in expenditure post-COVID-19 shock could be reflective of the fact that because of lockdown most of the downtrodden class and daily wagers had lost their jobs.

Table 3: Descriptive results of citizen, imam's mobilization, Mosque and offering prayers SOPs implementation indexes

Indicators	Characteristics	Frequency	Percentage
1. Participants' Opinion on Their Practices on Citizen's COVID-19 SOPs in Mosque (Index)	Poor implementation by citizens	130	16.25
	Average implementation by citizens	510	63.75
	Full implementation by citizens	160	20

2. Participants' Opinion on imam's contribution to Mobilizing Society on Pandemic (Index)	Low mobilization by imam	200	25
	Medium mobilization by imam	370	46.25
	High mobilization by imam	230	28.75
3. Participants' opinion on the level of NCOC's mosque SOPs implementation by Mosque Committee (Index)	Low implementation by Mosques	220	27.50
	Medium implementation by Mosques	530	66.25
	High/full implementation by Mosques	50	6.25

Source: Author's estimations

The results in Table 3 depict that around 20% of respondents adopted or practised full NCOC's citizen SOPs in mosques. Nearly 16% of individuals informed that almost no or very few components of citizen SOPs were adopted in the mosque by them. While 63% of respondents stated that their adoption of citizen SOPs in the mosque was medium.

Almost 6% of respondents reported that the mosque committee had fully implemented NCOC's mosque and other prayers SOPs in mosques. Nearly 27% of individuals informed that almost not or very few components of NCOC's mosque and other prayers' SOPs were implemented by the mosque committee in mosques. While 66% of respondents stated that SOPs adoption by mosque committee was medium.

Exactly 28% of respondents reported that mosque imam fully mobilized against the pandemic and advised for adopting governmental SOPs in mosques. Nearly 25% of individuals informed that mosque imam almost not or mobilized on very few components of SOPs against the pandemic in mosques. While 46% of respondents stated that mosque imam's mobilization was medium as explained in Table 3.

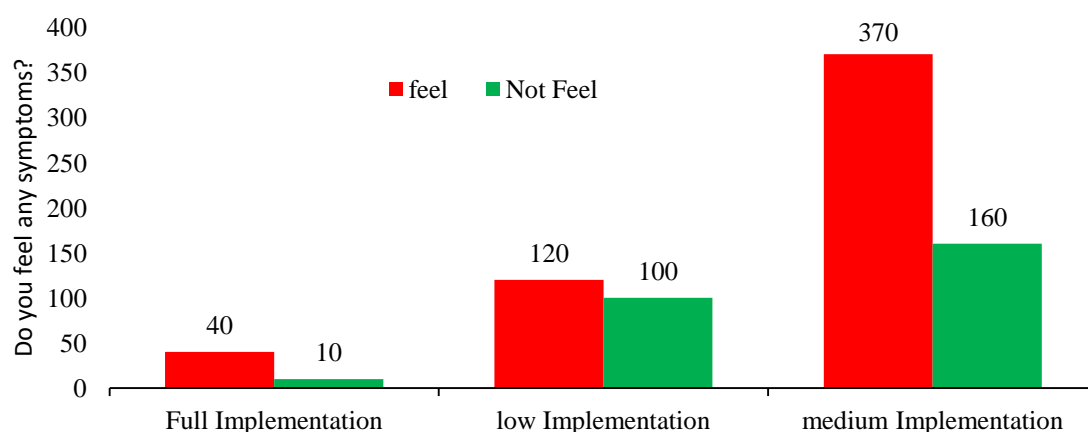


Figure 3: Responses on NCOC Mosques' SOPs Implementation by Mosque Committee Index by COVID-19 Symptoms After Going Mosque for Prayers

Source: Author's Estimations

Figure 3 portrays that among those individuals who had felt COVID-19 symptoms after going to mosques during the lockdown, 5% (40 individuals, believed that the mosque committee had fully implemented COVID-19 SOPs, whereas 15% (120 individual) believed that almost no or very few anti-COVID-19 SOPs were implemented in the mosques by the mosque administration. Hence among this sample of epidemic-affected people, the majority (46.25%; 370 individuals) was of those who recognized that the mosque committee's implementation on mosque SOPs was medium.

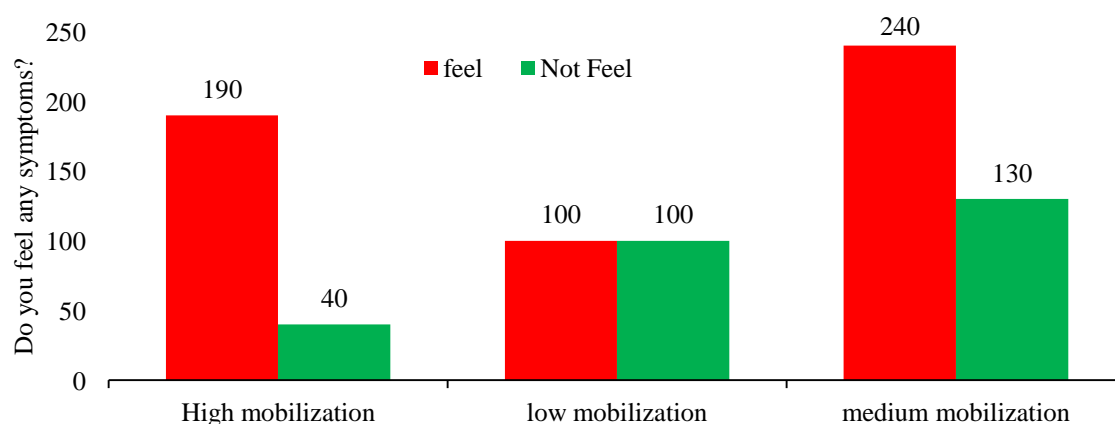


Figure 4: Responses on Mosques Imam's Mobilization Index by COVID-19 Symptoms After Going Mosque for Prayers

Source: Author's Estimations

Figure 4 depicts that among those individuals who reported to have felt COVID-19 symptoms after going to mosques during lockdown 23% (190 individuals) responded that mosque imam fully mobilized against pandemic and advised for adopting governmental SOPs whereas 12% of such responded (100 men) retorted that mosque imam's mobilization against epidemic was almost none or if mobilized then on very few components of SOPs against the pandemic. While 30% (240 of such respondents) that had felt COVID-19 symptoms after going to the mosque during lockdown stated that mosque imam's mobilization was medium.

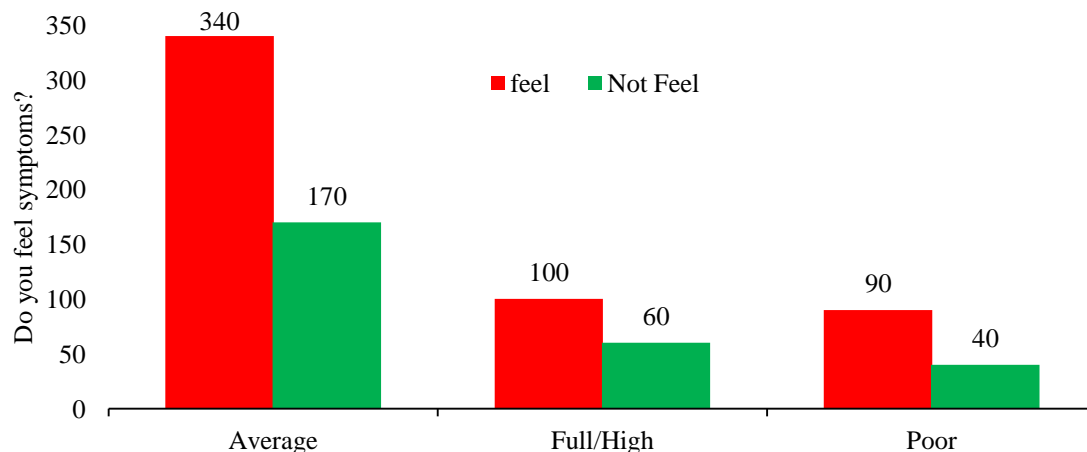


Figure 5: Responses on Practices in Mosque on Citizen SOPs Index by COVID-19 Symptoms After Going Mosque for Prayers

Source: Author's Estimations

Figure 5 shows that among the respondent who had reported to have observed COVID-19 symptoms after going to mosques during lockdown 12% (100 individuals) responded that they adopted or practised full or all NCOC citizen SOPs in the mosque. It additionally describes that 11% of the sample that had felt symptoms of the corona disease (90 men) retorted that they followed almost no or very few components of governmental announced citizen SOPs while visiting a mosque. While the remaining 42% of such respondents had reported having undergone COVID-19 symptoms (340 individuals) stated that in mosque their citizen SOPs adoption was medium/average.

DISCUSSION

COVID-19 has affected communal religious practices all over the world. Such an effect has appeared both in form of cancellation of communal religious prayers in churches, mosques and temples as well condemnation of community gatherings for religious celebrations, festivals considering the risk of widespread pandemic spread via compromised distancing in such ceremonies (Jaja et al., 2020). Algeria, Jordan, Egypt, Syria, Iran, Turkey, Tunisia, Iraq, Saudi Arabia, Palestine, and the United Arab Emirates all cancelled regular and weekly congregational prayers after the Supreme Mufti of Jamiah Al-Azhar within Egypt released a fatwa stating that the government has the authority to suspend congregational praying practices in face of the ongoing pandemic (Mohsin, 2020).

Initially, in Pakistan, collective prayers were stopped in mosques by governmental orders for the public to offer prayers at home. But the strong negative reaction by the majority of a mosque-going population as well as some prominent religious leaders and clerics despite the Fatwa against communal prayers in times of pandemic made the government of Pakistan rethink their policy of mosque closure. Moreover, it has been widely documented that most of the religious leaders had considered pandemic as a punishment for sins by God and advised believers to pray from God to end COVID-19 (Abbasi et al., 2021). As a result, congregational prayers especially Friday communal prayer for Muslims namely Jumma Namaz remained intact not only in Pakistan but across the globe within Muslim communities to pray from God to prevent people from getting a deadly virus (Abbasi et al., 2021).

Moreover, it has been reported that post epidemic many people have turned to religious beliefs for peace and salvation, indicating the importance of religion as an institution for example., a poll by Pew Research Centre (2020) revealed that about 55% of United States citizens prayed that the COVID-19 should end and that in the poll sample the one's praying also included those who had no religious beliefs about 24% and those who had seldom or never prayed before the corona epidemic about 15%. Hence COVID-19 shock did bring people close to the religious notion of prayers to fight against the pandemic – a belief system that also involved communal prayers - a practice that by its very structure is against the policy of social distancing.

The finding in many health research studies has shown that religious values and behaviours can very well be linked to a variety of health outcomes, including the capacity to deal with illness, rehabilitation from hospitalization, a healthy mood in a stressful environment, and hence overall health (Fincher & Thornhill 2008; Albers et al., 2010; Phelps et al., 2009; Puchalski et al., 2009, Tomkins, et al. 2015, Lim, 2019). In this context some studies have discovered that

religious practice may very well lead to lower infection rates along with creating spirituality that may help people calm their minds during moments of emergency and serious illnesses, emphasizing the role of religion in clinical practice (Best et al., 2015; Chen & Vander-Weele, 2018; Kagimu et al., 2012; Krause, 2020; Merchant et al., 2003; Watson et al., 2019). Hence through the findings of the above-cited research works, it is evident that the spiritual strengthening that one gets through one's faith in religion has not just positive effects on mental health but also a person's physical health in normal times as well during sickness.

The above link of spiritual strengthening via religious faith and positive health outcomes has been found both in the case of some viral infectious diseases in general and in the case of COVID-19 infection to be specific as well. For example, McCain et al. (2008) claimed that spiritual therapies enhanced immune mechanisms in people with viral infections and Oman and Riley (2018) claimed that there are effects of spiritual or religious participation on immune capacity, infectious disease activity, infection rates, adherence to infection therapies, and infection prevention and care services.

Studies linking spiritual and religious practices as a coping strategy to alleviate stress in pandemic COVID-19 include (Awang et al. 2020; Fardin, 2020; Koenig 2020). Fardin (2020) stressed that how acting on some Islamic principles, such as hygiene and the prohibition of consuming wild animals (Forbidden or Haram) like bats, which has been thought to be the primary explanation for COVID-19 initiation and transfer, Muslim countries may have shielded their humans from communicable disease outbreaks. On the other hand, Koenig (2020) emphasized religious, spiritual, emotional, social, and physical practices that may play a role in ensuring that people do not get infected with the coronavirus such as to reinforce one's religion, love one's neighbour a one loves oneself, realistic care and love for the neighbourhood, need to not be irresponsible and giving heed to one's mental well-being to name a few.

Similarly, Wibisono et al. (2021) depicted threats imposed by coronavirus outbreaks that can still be mitigated by religious ideologies. A case to point Wibisono et al. (2021) builds on the view that Muslim people in an Indonesian village improved their sanitation and safety practices due to the availability of medical guidelines from the state and councils as a kind of religious doctrine. Further according to the findings of a survey, 64% of young people conclude that religion can shield them from coronavirus disease because faith provides a sense of protection (Kowalczyk et al., 2020). And not only, but the coronavirus battle in Uganda also showed the effectiveness of spirituality and its structures in mobilizing people to support social welfare programs, particularly health care programs. Hence, link to religion can indeed help people in not just getting a disease like COVID but may as well help in recovering as well

Although religious practices proved effective in coping humans from health hazards. But in coronavirus, a principal preventive strategy is to practice social distancing as recommended by World Health Organization and all the governments across the globe. In this context gathering of a large number of people as observed in religious communal prayers is believed to be fertile ground for the spread of COVID-19. In this context, implementing this thought process had led to the cancellation of a religious communal gathering given they could potentially prove a leading cause of COVID-19 spread. However, because people are so connected with religion the common reaction to ban on communal prayers such as that of Jummah prayers for Muslims and Sunday ceremonies for Christians was as considered by many as a restriction on the liberty of spirituality. Hence for the practical success of preventive policy for COVID-19 via social distancing measure, it has become important that professionals must clarify through their research findings that social restriction does not mean a restriction against one's religious freedom and that spirituality and religious beliefs are creating conflicts and come up with innovative ways to express opposing opinions (Wildman et al., 2020).

Just as it has been documented in Isiko, (2020) that people's faith and confidence in spiritual priests in Africa can become a boon to humanity in the fight against disease outbreaks, so more research on such lines needs to be done in the context of communal religious practices and their impact on COVID spread. The results of the current study depict that 66.25% of respondents in Southern Punjab felt covid-19 symptoms because of going into the mosque for prayers. These findings are in the line of those from Italy whereby also it was seen that people who had COVID-19 infection in their families displayed greater religiousness during the disease outbreak either in terms of participation at religious events or meditation, and individuals who witnessed the worst consequences of the crisis recorded stronger religious activity during the outbreak, but the findings are somewhat less apparent for personal worship (Molteni et al., 2021).

The study results show that people did not adopt full COVID-19 citizen SOPs in mosques in four districts of Southern Punjab. Further, it was also found that neither the mosque committee fully implemented NCOC mosque and prayer SOPs in mosques nor could the mosque's imam could contribute fully in mobilizing the society against the pandemic in Southern Punjab. Hence from our findings as well from the related findings from the literature on the issue it is evident that religious people do find it hard to adhere to retraction on communal prayers and that just as in our study we see people going out for prayers in mosques despite widespread pandemic spread, the results of a study in the United States also illustrated that religious individual had reacted against instructions that restricted religious gatherings (DeFranza, 2020). Similarly, the recent Hindu Kumbh festival that has been linked to a major COVID outbreak in India also emphasizes that given people find faith as a way to cope against the pandemic, it becomes difficult for people to recognize that such gathering may very well lead to a pandemic outbreak.

Further from our study findings, it is evident that the follow-up by mosque-going population as well as mosque administration at best has been medium in times of COVID, and also the role of the imam in mobilizing people for anti-

COVID practices remains average. Hence in light of findings of current research previous researches of [DeFranza \(2020\)](#), [Jaja et al., \(2020\)](#), and [Engineer \(2020\)](#) recommended that governments all over the world should rethink opening religious places for communal prayers and mere setting guidelines for people and religious community centres as in case of mosques prayers in Pakistan is not enough for curtailing COVID spread.

CONCLUSION

The results depict that people in all districts have not fully adopted citizen SOPs in mosques. The mosque committees were found to have not fully implemented NCOC mosques and prayer SOPs in mosques. Finally, the imam's contribution in mobilizing the society was not also up to the mark. The results further depict that 66.25% of respondents felt that they may have contracted COVID-19 symptoms because of going into the mosque for offering prayers. The study, hence concludes that although religious and spiritual healings prove good in restoring human wellbeing and health against national disasters and diseases, especially in case of mental disorders, but in the coronavirus outbreak, it is proved that strong religious sentiments for communal prayers did appear a big cause of the COVID-19 spike rather than a restorative step as believers forced their governments to open their religious sites for prayers.

The study strongly recommends in light of its findings that government should strategize first by closing mosques or any place that have communal prayers gathering to avoid people contacting one another as much as possible and that the governments cannot and should not rely on the public that they will adopt SOPs by themselves. And if it is necessary to open mosques and community centres or places for any sort of communal prayers then it is the job of the government to forcefully implement SOPs by law enforcement along with proper mobilization of the public through mosque imams and influential personalities of the society.

LIMITATION AND STUDY FORWARD

Due to time and social distancing issues, the study could only consider 800 respondents for the survey.

DECLARATION OF INTERESTS

This research was conducted without any potential conflict of interest or related issues.

ETHICAL APPROVAL

This study is approved by the University of Sargodha, Punjab, Pakistan under the Collaborative Research Project (SU/PSY/788-S, 12-06-20). This research is conducted in collaborations with the Department of Psychology, University of Sargodha.

ACKNOWLEDGEMENT

The authors wish to acknowledge the volunteered participation of Mosque imams, individuals who participated in the study with patience. Also, the support and valuable contributions of two well-known NGOs i.e., Dase Development Organization, Multan, and Al-Sadiq Desert Welfare Organization, Bahawalpur was great in terms of data collection. The authors wish to thank Amna Bibi (Ph.D. Scholar, Islamia University, Bahawalpur) for her support in data entry in the excel sheet.

AUTHORS CONTRIBUTION

Mrs. Madeeha Gohar Qureshi conceptualized and designed the study and its questionnaire drafted the manuscript. Mr. Muhammad Shahid helped in data collection, analysis and interpretation of data. Dr. Najma Iqbal Malik and Dr. Farooq Ahmed revised the paper and provided critical revisions of the manuscript for important intellectual content. Mrs. Shakeela Rafiq helped in data collection and provided comments on the manuscript.

REFERENCES

1. Abbasi, M. U. R., Ejaz, T., & Akhtar, S. (2021). Impact of COVID-19 on Social Cohesion and Role of Muslim Communities to Tackle the Challenge. *Humanities and Social Sciences Reviews*, 9(2), 397-404. <https://doi.org/10.18510/hssr.2021.9239>
2. Abi-Habib, M & Rehman, Z. (2020 April 23). *Imams Overrule Pakistan's Coronavirus Lockdown as Ramadan nears*. The New York Times. [cited 2020 December 25]. Available from: <https://www.nytimes.com/2020/04/23/world/asia/pakistan-coronavirus-ramadan.html>
3. Aghaee, M. A., Dehghani, M., Sadeghi, M. A. S. O. U. M. E. H., & Khaleghi, E. (2015). Awareness of religious leaders' fatwa and willingness to donate organ. *International Journal of Organ Transplantation Medicine*, 6(4), 158-164. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4644568/>
4. Ahmed, T. N. I. (2017). *The application of social integration through mosque community centres* (Master's thesis, Kuala Lumpur: International Islamic University Malaysia). <https://studentrepo.iium.edu.my/handle/123456789/2784>
5. Ali, I. (2020 April 15). *Prominent Ulema Says Lockdown Not Applicable to Mosques, Congregational Prayers to Begin*. DAWN News. [cited 2020 December 25]. Available from: <https://www.dawn.com/news/1549171>

6. Awang, J., Rahman, Ab. Z., Hamjah S. H., Kashim, M.I.A.M., Noor, M. A. Y., Long, A. S., Hasan, A. Z., Farid, M., Ridzuan, A. R., Mohamed, S., Kadir, M. N. A., & Kadir, F. A. A. (2020). Planned problem-solving strategy, resilience and element of religion in coping of covid 19 diseases in Malaysia. *International Journal of Psychosocial Rehabilitation*, 24(1), 5476- 5484.
7. Albers, G., Echteld, M. A., de Vet, H. C., Onwuteaka-Philipsen, B. D., van der Linden, M. H., & Deliens, L. (2010). Content and spiritual items of quality-of-life instruments appropriate for use in palliative care: A review. *Journal of Pain and Symptom Management*, 40(2), 290-300. <https://doi.org/10.1016/j.jpainsymman.2009.12.012>
8. Badru, A. I., & Kanmodi, K. K. (2017). Palliative care awareness amongst religious leaders and seminarians: a Nigerian study. *Pan African Medical Journal*, 28(1). <https://doi.org/10.11604/pamj.2017.28.259.14010>
9. Best, M., Butow, P., & Olver, I. (2015). Do patients want doctors to talk about spirituality? A systematic literature review. *Patient Education and Counselling*, 98(11), 1320-1328. <https://doi.org/10.1016/j.pec.2015.04.017>
10. Bentley, J. A., Mohamed, F., Feeny, N., Ahmed, L. B., Musa, K., Tubeec, A. M., Angula, D., Egeh, M. H., & Zoellner, L. (2020). Local to global: Somali perspectives on faith, community, and resilience in response to COVID-19. *Psychological Trauma: Theory, Research, Practice, and Policy*, 12(S1), S261. <https://doi.org/10.1037/tra0000854>
11. Bureau of Statistics Punjab, Planning & Development Department, Government of the Punjab and UNICEF Punjab (2014). *Multiple Indicator Cluster Survey, Punjab 2014, Final Report*. Lahore, Pakistan. Available at http://bos.gop.pk/system/files/KFR_2014.pdf.
12. Chen, Y., & VanderWeele, T. J. (2018). Associations of religious upbringing with subsequent health and well-being from adolescence to young adulthood: an outcome-wide analysis. *American Journal of Epidemiology*, 187(11), 2355-2364. <https://doi.org/10.1093/aje/kwy142>
13. Corpuz, J. C. G. (2021). Religions in action: the role of interreligious dialogue in the COVID-19 pandemic. *Journal of Public Health*, 43(2), e236-237. <https://doi.org/10.1093/pubmed/fdaa149>
14. DeFranza, D., Lindow, M., Harrison, K., Mishra, A., & Mishra, H. (2020). Religion and reactance to COVID-19 mitigation guidelines. *American Psychologist*, 1-11. <https://doi.org/10.1037/amp0000717>
15. Engineer, A. (2020). Of religion and technology: Karachi's Parsis take a unique approach to COVID-19 limitations. *EnviroLab Asia*, 4(1), 1. <https://doi.org/10.5642/envirolabasia.20200401.01>
16. Fardin, M. A. (2020). COVID-19 epidemic and spirituality: A Review of the benefits of religion in times of crisis. *Jundishapur Journal of Chronic Disease Care*, 9(2). <https://doi.org/10.5812/jjcdc.104260>
17. Fincher, C. L., & Thornhill, R. (2008). Assortative sociality, limited dispersal, infectious disease and the genesis of the global pattern of religious diversity. *Proc Biol Sci*, 275(1651), 2587-2594. <https://doi.org/10.1098/rspb.2008.0688>
18. Gandhara RFE/RL (2020 April 22). *Doctors Urged Pakistani Government to Impose Mosque restrictions to Avoid Surge in coronavirus cases*. [cited 2020 December 25]. Available from: <https://gandhara.rferl.org/a/pakistani-doctors-urge-leaders-to-close-mosques-during-ramadan/30569863.html>
19. Greene, T., Bloomfield, M. A., & Billings, J. (2020). Psychological trauma and moral injury in religious leaders during COVID-19. *Psychological Trauma*, 12(S1), S143-S145. <https://doi.org/10.1037/tra0000641>
20. Hadid, D and Sattar, A. (2020 April 23). *Pakistan Calls Off-Limits on Mosque Attendance in Time for Ramadan*. National Public Radio (NPR.Org), USA. [cited 2020 December 25]. Available from: <https://www.npr.org/sections/goatsandsoda/2020/04/23/841886317/pakistan-calls-off-limits-on-mosque-attendance-in-time-for-ramadan>
21. Hume, T. (2020 April 23). *Doctors Are Begging Pakistan to Close Mosques or Risk a Coronavirus Catastrophe*. Voice News. [cited 2020 December 25]. Available from: <https://www.vic.com/en/article/v7493a/doctors-are-begging-pakistan-to-close-mosques-or-risk-a-coronavirus-catastrophe>
22. Hussain, Z. (2020 April 23). *Pakistan urged to enforce strict lockdown during Ramadan*. Union of Catholic Asian News. [cited 2020 December 25]. Available from: <https://www.ucanews.com/news/pakistan-urged-to-enforce-strict-lockdown-during-ramadan/87803#>
23. Isiko, A. P. (2020). Religious construction of disease: An exploratory appraisal of religious responses to the COVID-19 pandemic in Uganda. *Journal of African Studies and Development*, 12(3), 77-96. <https://doi.org/10.5897/JASD2020.0573>
24. Jaja, I. F., Anyanwu, M. U., & Iwu Jaja, C. J. (2020). Social distancing: How religion, culture and burial ceremony undermine the effort to curb COVID-19 in South Africa. *Emerging Microbes and Infections*, 9(1), 1077-1079. <https://doi.org/10.1080/22221751.2020.1769501>
25. Kagimu, M., Guwatudde, D., Rwabukwali, C., Kaye, S., Walakira, Y., & Ainomugisha, D. (2012). Religiosity for HIV prevention in Uganda: A case study among Christian youth in Wakiso district. *African Health Sciences*, 12(1), 17-25. <https://doi.org/10.4314/ahs.v12i2.7>
26. Kowalczyk, O., Roszkowski, K., Montane, X., Pawliszak, W., Tylkowski, B., & Bajek, A. (2020). Religion and Faith Perception in a Pandemic of COVID-19. *Journal of Religion and Health*, 59(6), 2671-2677. <https://doi.org/10.1007/s10943-020-01088-3>

27. Koenig, H. G. (2020). Maintaining health and well-being by putting faith into action during the COVID-19 pandemic. *Journal of Religion and Health*, 59, 2205-2214. <https://doi.org/10.1007/s10943-020-01035-2>
28. Krause, N. (2019). Religion and health among Hispanics: Exploring variations by age. *Journal of Religion and Health*, 58(5), 1817-1832. <https://doi.org/10.1007/s10943-019-00866-y>
29. Lim, D. K. (2019). *The spirit of happiness: The relationship between depression and spirituality in the Netherlands* (Doctoral dissertation, Georgetown University). https://repository.library.georgetown.edu/bitstream/handle/10822/1055085/Lim_georgetown_0076M_14241.pdf?sequence=1
30. Mangi, F. (2020). *Religious Group's Mass Gatherings Across Asia Spark Virus Clusters*. Bloomberg report. [cited 2020 December 25]. Available from: <https://www.bloomberg.com/news/articles/2020-04-20/religious-group-s-mass-gatherings-spark-asian-virus-clusters>
31. Mohamed, M., & Marican, S. (2014). Positive outcomes of Cure and Care Community Centres (CCSC): a community-based treatment programme in Malaysia. *International Journal of Prevention and Treatment of Substance Use Disorders*, 1(2). <https://doi.org/10.4038/ijptsud.v1i2.7700>
32. Mohsin, M. (2020). Jummah prayers in Pakistan: An Islamic approach to community welfare during the COVID-19 Pandemic. *PIDE COVID-19 E-BOOK*, pp. 85-86. [cited 2021 April 25]. Retrieved from <https://pide.org.pk/pdf/PIDE-COVID19-EBook.pdf>
33. Molteni, F., Ladini, R., Biolcati, F., Chiesi, A. M., Dotti Sani, G. M., Guglielmi, S., Maraffi, M., Pedrazzani, A., Segatti, P., & Vezzoni, C. (2021). Searching for comfort in religion: insecurity and religious behaviour during the COVID-19 pandemic in Italy. *European Societies*, 23(sup1), S704-S720. <https://doi.org/10.1080/14616696.2020.1836383>
34. McCain, N. L., Gray, D. P., Elswick, R. K., Jr., Robins, J. W., Tuck, I., Walter, J. M., Rausch, S. M., & Ketchum, J. M. (2008). A randomized clinical trial of alternative stress management interventions in persons with HIV infection. *Journal of Consulting and Clinical Psychology*, 76(3), 431-441. <https://doi.org/10.1037/0022-006X.76.3.431>
35. McMullin, S., Nason-Clark, N., Fisher-Townsend, B., & Holtmann, C. (2015). When violence hits the religious home: Raising awareness about domestic violence in seminaries and amongst religious leaders. *Journal of Pastoral Care and Counseling*, 69(2), 113-124. <https://doi.org/10.1177/1542305015586776>
36. Merchant, A. T., Pitiphat, W., Ahmed, B., Kawachi, I., & Joshipura, K. (2003). A prospective study of social support, anger expression and risk of periodontitis in men. *The Journal of the American Dental Association*, 134(12), 1591-1596. <https://doi.org/10.14219/jada.archive.2003.0104>
37. NCOC Guidelines (2020). [cited 2020 June 25]. Available in the Urdu Language from: <https://ncoc.gov.pk/sop/17.%20SOP%20for%20Ramzan%20Taraveeh%20and%20Other%20Prayers.pdf>
38. Oman D., Riley L.W. (2018). Infectious diseases, religion, and spirituality. In: Oman D. (eds) *Why religion and spirituality matter for public health. Religion, Spirituality and Health: A Social Scientific Approach*, vol 2. Springer, Cham. https://doi.org/10.1007/978-3-319-73966-3_8
39. Pandey, G (2021). *India COVID: Kumbh Mela pilgrims turn into super-spreaders*. BBC News, India. [Cited 2021 June 12]. Retrieved from <https://www.bbc.com/news/world-asia-india-57005563>
40. Pew Research Center. (2020, March 30). *Most Americans say the Coronavirus outbreak has impacted their lives*. [cited 2021 April 25]. Retrieved from <https://www.pewresearch.org/social-trends/2020/03/30/most-americans-say-coronavirus-outbreak-has-impacted-their-lives/>
41. PIDE COVID-19 Bulletin no. 2. *Slowdown or Shutdown Pakistan's Dilemma*. [cited 2021 April 29]. Retrieved from <https://www.pide.org.pk/pdf/PIDE-COVID-Bulletin-2.pdf>
42. Phelps, A. C., Maciejewski, P. K., Nilsson, M., Balboni, T. A., Wright, A. A., Paulk, M. E., Trice, E., Schrag, D., Peteet, J. R., Block, S. D., & Prigerson, H. G. (2009). Religious coping and use of intensive life-prolonging care near death in patients with advanced cancer. *Jama*, 301(11), 1140-1147. <https://doi.org/10.1001/jama.2009.341>
43. Puchalski, C., Ferrell, B., Virani, R., Otis-Green, S., Baird, P., Bull, J., Chochinov, H., Handzo, G., Nelson-Becker, H., Prince-Paul, M., Pugliese, K., & Sulmasy, D. (2009). Improving the quality of spiritual care as a dimension of palliative care: The report of the Consensus Conference. *Journal of Palliative Medicine*, 12(10), 885-904. <https://doi.org/10.1089/jpm.2009.0142>
44. Raguram, R., Venkateswaran, A., Ramakrishna, J., & Weiss, M. G. (2002). Traditional community resources for mental health: A report of temple healing from India. *BMJ*, 325(7354), 38-40. <https://doi.org/10.1136/bmj.325.7354.38>
45. Rehman, Z. (2020 April 15). *Lockdown Rejected: Ulema announce congregational prayers, Taraveeh*. The News. [cited 2020 December 25]. Available from: <https://www.thenews.com.pk/print/644708-lockdown-rejected-ulema-announce-congregational-prayers-taraveeh>
46. Riwayatanti, N. I., Muwidha, M., & Candrawati, T. (2017, November 17-18). Mosque And Economic Development. *Annual International Conference on Islam and Civilization: Contribution of Islam Towards the Progress of World Civilization*, 1(1), 124-129. Universitas Muhammadiyah Malang, Indonesia. <http://research-report.umm.ac.id/index.php/AICIC/article/view/1935/2018>
47. Spellman, K. (2004). *Religion and Nation: Iranian Local and transnational networks in Britain*, Vol. 15. Publisher; Berghahn Books. <http://www.berghahnbooks.com/title/spellmanreligion>

48. Tomkins, A., Duff, J., Fitzgibbon, A., Karam, A., Mills, E. J., Munnings, K., Smith S., Seshadri S. R., Steinberg, A., Vitillo, R., & Yugi, P. (2015). Controversies in faith and health care. *The Lancet*, 386(10005), 1776-1785. [https://doi.org/10.1016/S0140-6736\(15\)60252-5](https://doi.org/10.1016/S0140-6736(15)60252-5)
49. Watson, R. J., Allen, A., Pollitt, A. M., & Eaton, L. A. (2019). Risk and protective factors for sexual health outcomes among black bisexual men in the US: Internalized heterosexism, sexual orientation disclosure, and religiosity. *Archives of Sexual Behavior*, 48(1), 243-253. <https://doi.org/10.1007/s10508-018-1216-5>
50. Wibisono, M. Y., Truna, D. S., & Rahman, M. T. (2021). Turning religion from cause to reducer of panic during the COVID-19 pandemic. *HTS Teologiese Studies/Theological Studies*, 77(4), 1-8. <https://doi.org/10.4102/hts.v77i4.6366>
51. Wildman, W. J., Bulbulia, J., Sosis, R., & Schjoedt, U. (2020). Religion and the COVID-19 pandemic. *Religion, Brain and Behavior*, 10(2), 115-117. <https://doi.org/10.1080/2153599X.2020.1749339>