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Fasting while on antipsychotics: an exploration of the decision-making process of Muslim patients during Ramadan

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ABSTRACT

Fasting during the holy month of Ramadan is one of the five pillars of Islam. Adherents to the Muslim faith are expected to abstain from drinking or eating during daylight hours. Exclusions to fasting apply, including for medical reasons. There is no consensus on the specific implications for psychiatric conditions. This qualitative study explores the decision-making process of Muslim patients on antipsychotic treatment with regard to fasting during Ramadan. The sample consisted of eleven outpatients actively treated at three psychiatric clinics in Lebanon. They were asked about the different factors that influence their decision to fast or not. Most participants prioritized their personal interpretation of the religious dogma. The opinion of the psychiatrist was important but not always readily available. The wider community, including religious figures, had the least influence. The findings highlight an important role for psychiatrists in proactively supporting patients in their decision on fasting in Ramadan.

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Muslim; psychotropic medication; mental health care; psychosis; Ramadan

Background

Ramadan is the ninth month in the Islamic calendar, which consists of 12 lunar months in a year of 354 or 355 days. Complete abstinence from eating or drinking from dawn to dusk during this month is a Qur'anic religious obligation for Muslims. In Muslim majority countries, social, professional, and family life adjust around a fasting Muslim's meal pattern. There are usually two main daily meals: *Suhoor* at predawn and *Iftar* just after sunset. The duration of fasting can vary across populations, ranging from 11 to 22 h depending on season and location (Alkandari et al., 2012).

For those receiving any type of medication orally, adjusting treatment is often needed, and is done in coordination with healthcare providers. The most common strategies utilised with patients, in general, are to change the daily timing of the medication or to shift to long-acting formulations (Grindrod & Alsabbagh, 2017). A Muslim is exempted from fasting in Islamic jurisprudence for a variety of reasons, one of which includes suffering from an illness. Women who are on their menstrual period, pre-pubertal children, and

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travellers are also exempted from fasting during Ramadan (Al-Munajjid, 2018). From a religious standpoint, whether a person is exempt from fasting is decided on a case-by-case basis. However, there is little clinical evidence to recommend fasting, or not fasting, to people suffering from bipolar or schizophrenia disorders and as such, Muslims are advised to consult a reliable doctor to help them make this judgment (Eddahby et al., 2014; Younas, 2016). A Muslim person is asked to refrain from fasting when they have a rational fear of falling ill as a result of fasting (Khamenei, 2014). In cases where there is an expectation of recovery and a change in the situation, Muslims are usually asked to make up for the days of fasting that were missed. This condition is apparent in the following Qur'anic verse:

> "And whoever is ill or on a journey, the same number [of days which one did not observe Sawm (fasts) must be made up] from other days" [al-Baqarah 2:185]

> "And as for those who can fast with difficulty, (e.g., an old man), they have (a choice either to fast or) to feed a Miskeen (poor person) (for every day)" [al-Baqarah 2:184]

There is no consensus on the best course of action for patients wishing to fast but who are treated for psychiatric morbidities. A small number of studies have examined specific aspects of psychiatric care during Ramadan. The impact of fasting on the serum level of Lithium in bipolar disorder is one example. In a study conducted by Farooq et al. (2010), no major alteration in mental states and no significant variation were noted in Lithium levels among participants fasting in the holy month of Ramadan. In contrast, in other studies, high rates of relapse were observed although Lithium levels remained stable (Eddahby et al., 2014; Kadri et al., 2000). Other statements on the risks of fasting for patients on psychiatric medications have included that caution is required for people fasting while diagnosed with schizophrenia or bipolar disorder (Heun, 2018).

Anti-psychotropic drugs are known to exhibit some relevant side effects such as dry mouth, also known as xerostomia, which is one of the most common complaints from patients (Swager & Morgan, 2011). The Food and Drug Administration (FDA) advises patients, who take medications such as aripiprazole, to consume large amounts of water and stay hydrated, as anti-psychotics can alter the quantity and composition of saliva, which can lead to health implications for the patient (Swager & Morgan, 2011). Moreover, there is a lack of data on the effect of prolonged fasting on patients with psychotic disorder, whether directly or through changes in medication regimen, reduced compliance, or side effects.

Anti-psychotic drugs are the cornerstone of treatment for patients with psychotic disorders. Psychosis is a general term that describes symptoms of certain mental problems in which one's contact with reality is disrupted and there is an interference in the way the brain processes information. Psychosis spectrum disorders is an umbrella diagnosis that entails conditions of different origins and aetiologies such as schizophrenia and delusional disorder. Each individual with a psychotic disorder has a unique set of symptoms, but the main clinical features are hallucinations, delusions, and having confused thoughts (Gaebel & Zielasek, 2015).

Accommodating religious beliefs in counselling and treatment generates similar if not better results as compared to the mainstream approaches (Koenig et al., 2016). Indeed, positive religious coping, such as connecting with a religious community and seeking

guidance from a compassionate God, improves the quality of life outcomes among patients with bipolar and schizophrenic disorders (Nolan et al., 2012; Stroppa et al., 2018). For example, in a randomised control trial, the large effect (Cohen's d of .85) of listening to the Holy Qur'an being recited, demonstrated lower depressive symptoms among haemodialysis patients, revealing the practical importance of positive religious coping (Babamohamadi et al., 2017). Thus, religiousness is a factor that contributes to positive wellbeing through different pathways, including promoting socialisation among members of the same faith and providing a sense of optimism and hope to worshippers (O'Brien, 2013).

To our knowledge, this is the first qualitative study to examine fasting during the month of Ramadan from the perspective of Muslim patients being treated for a psychotic disorder. Directly interviewing patients by a neutral third party allowed them to voice social, religious, and spiritual concerns that are not often prioritised (Stein & Mankowski, 2004). The aim of this study is: to better understand the implications of fasting on the mental health of patients treated for psychotic disorders. Additionally, this study will investigate the psychosocial process that influences the decision to fast or not. The results of this research can inform clinical practice guidelines for health professionals who treat this population, including family doctors and psychiatrists.

Method

Given the high sensitivity to the field of our interest, especially in Lebanon, a qualitative approach was adopted to explore the determinants of deciding whether to fast or not among Muslim patients with psychotic disorders. The study was approved by the Institutional Review Board (IRB) at the American University of Beirut.

Patients were recruited through their psychiatrists, and we used the purposeful sampling method. Three psychiatrists practising in different settings and of a different faith, Shiite Muslim, Sunni Muslim, and Christian, assisted in the recruitment. The importance of this diversity is to reduce any potential bias resulting from the clinician's religious background. Recruitment took place via digital and actual flyers posted in clinical areas presenting the study. Potential participants that were identified would then be contacted by our research assistant for scheduling purposes. Besides confirming initial eligibility for the study, the treating physician would have no further involvement beyond asking for the consent of the potential participant to be contacted by the research team.

The target population was all Muslim patients with an established diagnosis of a psychotic disorder by their treating physician, above the age of 18, who had fasted or at least attempted to fast at least one day in Ramadan 2020. Only individuals who have experienced a psychotic episode at least once in their lives and have been on maintenance antipsychotic drugs for more than a year were asked to be referred. This criterion was set to ensure that all participants have experienced fasting while under treatment for a psychotic disorder. Patients with active substance abuse or confirmed brain damage were excluded from the study. Some participants exhibited communication difficulties compared to average neurotypical individuals, yet they were able to express their thoughts and opinions for the purpose of the study.

After a second confirmation that the patients met the inclusion criteria of the study, interviews were conducted at a mutually convenient pre-agreed time. Due to the data

collection taking place between October 2020 and March 2021 during the COVID-19 pandemic, we performed semi-structured telephone interviews that lasted on average 35 min. The researcher conducted the interviews in a private area provided by the Department of Psychiatry to protect the privacy of participants and the confidentiality of data. All interviews were preceded by the completion of a consent form in Arabic and were audio-recorded with the participant's knowledge and agreement. Participants were also reassured that they could leave the study at any time and that their decision would not affect their relationship with their psychiatrists or other mental health professionals.

Based on the review of the literature, questions about the experience of fasting and the factors that affected the decision processes were developed. The first few questions were simple and structured to understand participants' socio-economic characteristics and self-understanding of the diagnosis. The interview guide included open-ended questions that allowed the participants to reflect on their fasting experience, the factors that influenced their decision to fast, and their perceptions regarding when they feel fasting is permissible. Participants were also asked about whether the consultations with their psychiatrists included any content related to Ramadan fasting and on the perceived influence of other factors such as social network, close community, and religious clerks. Questions were used to guide and focus the discussion and the language used was simple to allow an insider's view of the experience. Because many were unaware of the concept of psychosis, the researcher started by explaining to the participants the reason why they are eligible to participate and provided a short explanation about psychosis. Based on their understanding of their mental health struggles, participants were then asked to reflect on the fasting experience and factors that affected their decision. The interviewer tried to establish rapport with the participants at the beginning of the interview. The Islamic background of the interviewer, as well as the familiarity with the Lebanese context, made it easier to build trust relationships and to engage with the participants. Internal discussions and reflections among the research team, which is composed of members from different faith and disciplines, aimed to identify and avoid bias in all stages of the research. Interviews were conducted on a rolling basis until reaching data saturation.

Interviews were transcribed verbatim and subjected to thematic analysis to examine recurrent patterns or themes within the data set (Clarke & Braun, 2014). Thematic analysis is an approach to qualitative research analysis, whereby the research team familiarises themselves with the data, engages in coding, then generates and reviews common themes (Scharp & Sanders, 2019). Codes were developed on the margins of the written transcripts and each code highlighted a section in the text and described a certain idea. These codes were then sorted into categories and themes based on the patterns among them. Finally, using the codes and categories that were created from the data, the researchers were able to conduct the analysis.

Results

A total of eleven participants were enrolled in this study with an age range of 26–60 years old. The majority were married (n = 6) and unemployed (n = 7). The participants' gender was disaggregated as four females and seven males. According to their treating psychiatrists, eight were diagnosed with schizophrenia, three with bipolar disorder, and one with

bipolar schizoaffective disorder. At the time of the interview, all participants were on antipsychotic medications. This included first and second-generation antipsychotics such as haloperidol, aripiprazole, clozapine, olanzapine, and paliperidone (a three monthly injectable version).

Participants' understanding of their illness experience

The majority of participants had low health literacy concerning their conditions. Consistent with the information provided by the treating, only four were aware of their psychiatric diagnosis psychiatrist. Some participants were able to report specific symptoms, such as obsessions, depression, paranoia, or anxiety rather than a global diagnosis.

> "Honestly, I do not know my diagnosis exactly. I do not know; the physician once told me it is fear/anxiety and at other time, he told me it is related to having trust issues [with others]". (P03, male with schizophrenia)

Two participants knew they had a psychiatric illness but were not aware of their differential diagnosis. One of these two interviewees was able to list all their psychotropic and non-psychotropic medications.

> "I take mediations for psychiatric illness. They say those are psychotropic medications and that someone with damaged nerves should take them". (P08, female with schizophrenia)

Three participants believed that they have a diagnosis of obsessive-compulsive disorder, anxiety, and schizoaffective disorder rather than a schizophrenic disorder.

> "My diagnosis is an obsessive-compulsive disorder. It is a combination of thoughts that makes the person lose control. Those intrusive thoughts lower one's sense of control". (P10, participant with schizophrenia)

Most participants did not understand the medical terminology related to "psychosis" and "psychotic episode". Those who seem to have some health literacy on the topic were university students or graduates. Some acknowledged having symptoms that involved changes in perception. The participants expressed that those symptoms are better explained through family members.

> "I have schizophrenia so I cannot provide you with this type of information [about symptoms]. You can get them from my mother or the physician. I am a patient; I do not know what is happening". (P05, male with schizophrenia)

The experience of fasting

All participants, except one, considered themselves to be practising Muslims and had several previous fasting experiences. Affiliation to Islam and the sacred relationship between the worshippers and God were expressed to be a source of comfort for the participants. Being religious and practising the religion helped them cope with their illness.

> "After having my first psychotic episode, I started to become more religious and resorted to Him to help me get through this difficult period". (P01, male with schizophrenia)

One participant with bipolar disorder reported that the act of fasting for a few days was not intentional, but rather could have happened due to increased religiosity during a manic episode. This participant, a non-practising Muslim, brought up the argument regarding whether one's choices are controlled by God or made by His creatures. With that being said, the participant criticised the need for practising religious rituals and doubted the destination day.

> "I am telling you that fasting happened because of mania … Perhaps, mania changed my psychological status and I decided to fast". (P06, male with bipolar disorder)

One-third of the participants had previously fasted throughout the length of the month of Ramadan, excluding the days where female participants were exempt from fasting due to menstruation. The number of days fasted by the rest of the participants ranged between one and 26 days. Although the COVID-19 Pandemic restricted social gatherings in general, the majority of participants felt that it had not directly impacted their fasting experience. It is possible that the Covid pandemic had a smaller impact on our target populations given an already limited social life involving mostly close family members. Only one participant stated it had been easier to fast during the pandemic due to lockdown measures, which lessened exposure to external daily stressors.

> "Fasting is less difficult during the pandemic. I don't have to be concerned about being trapped in traffic on my way to campus. As a result, I don't see people eating or drinking around me. When I'm with my family and everything is online, it's a lot easier". (P07, student, male with schizophrenia)

The participants expressed how the holy month of Ramadan brings certain changes to their personal, professional, and social lives. Two reported how work hours in their institutions changed in Ramadan to accommodate the needs of Muslims. Having more time to relax, five stated sleeping for extra hours in Ramadan to deal with the hardships of thirst, hunger, and fatigue. The extent of oversleeping varied with one participant resorting to excessive daytime sleeping.

> "I will tell you this once and for all. I cannot fast while being awake. I stay up late until I witness the morning light. I wake up just before the sunset by one hour". (P03, male with schizophrenia)

The perceived effect of fasting on mood

The rituals of Ramadan and the spirituality surrounding it acted like a mood booster or a source of joy for some participants. Three participants expressed that family gatherings over *iftar* brought them joy. Practising Islamic rituals, such as praying and fasting, was not only seen as religious requirements but also as activities that allowed the participants to feel closer to God. A schoolteacher described how she usually looks forward to the month of Ramadan. She reported that the routine activities of reading the Quranic scripts and performing prayers during Ramadan month increased her capacity to monitor her symptoms and to become more alert to any suspicious changes.

> "Concentrating during prayer and *tasbih* [meaning glorification of God] allows me to recognize when the racing thoughts start or when I hit the 'up-phase' [referring to mania] … if I am

not being able to concentrate for two to three days during those activities, I know that this is an alert sign and I need to call the doctor". (P02, female with bipolar disorder).

Several participants raised certain concerns around fasting and described their struggles during the month of Ramadan. One patient with schizophrenia claimed that fasting, which mandates abstinence from cigarette smoking, triggered him to withdraw from social interactions with his family members, increased his anxiety, and worsened his disorganised thinking. Cigarette smoking was described as a coping mechanism that allowed him to manage his low functionality, especially when sitting still doing nothing for prolonged hours. The participant reflected how the worsened symptoms made him vulnerable to self-harm and affected his relationship with family members and others in his network.

"Usually, I hear from others that fasting makes people relaxed and spiritual. In my case, it is the opposite. I can work it out as long as nothing happens to me. If I went outside, I cannot connect with people. Something happens to me [repeating the phrase], I start smashing things. Too many pieces of stuff are broken and then fixed by me to the extent where it leads to me to self-harm. The problem is sometimes due to unimportant matters". (P03, participant with schizophrenia)

Two participants reported that fasting made them more agitated and unable to tolerate simple disagreements or conflicts. One female participant in her early 60s described how she had to break her fasting during Ramadan due to the deterioration of her physical health. She mentioned trying to tolerate the pain and the fatigue in the beginning despite feeling a partial loss of conscience.

"My head started to hurt, and my body felt like sagging. Even my teeth and gums were giving me an unpleasant feeling. As the afternoon was approaching, I felt that I lost the ability to communicate with others. They say that this Hajji [referring to someone who completed a Muslim pilgrimage] is exaggerating in her description, but I thought I was going to have facial palsy. Fasting became extremely difficult and I started groaning, but I did not break my fasting. I tried to tolerate the symptoms as long as I can. I felt chest pain and even smelled some alcohol, not to lost conscience". (P08, female in her 60s with schizophrenia)

"Even if I took the pills before dawn [during Ramadan month] and then slept, I woke up with nausea, anxiety, paranoia, and worse in terms of schizophrenia". (P07, student, male with schizophrenia)

On the other hand, according to numerous participants, fasting does not influence one's psychiatric disease symptoms that differ from what occurs on regular days. It was stated that relapses or psychotic episodes can happen irrespective of whether someone fasts or not. Apart from being fatigued, those respondents stated that they believed they were capable of fasting like others in their community.

"Not just during Ramadan, but all year, I have no control over my illness". (P06, male with bipolar disorder)

"Everything is normal, and I am not experiencing any difficulties [when fasting in Ramadan]. This could be because I get up at 2 or 3 pm". (P11, male with schizoaffective disorder)

Decision-making processes

Most participants reported that they decided on whether to fast or not. The participant's parents had either a supportive or discouraging opinion, which in either case did not

influence the ultimate decision to fast. Major factors that affected the decision of fasting were one's religiosity and spirituality, physician's advice, and the participants' health status during the month of Ramadan. The community and religious clerks were the least influential determinants for decision-making among our sample.

Religiosity and the decision of fasting Ramadan month

Participants reported fasting during the month of Ramadan primarily to fulfil a religious duty. One participant perceived that schizophrenia is a form of suffering created by God and referred to a saying from the Prophet Mohammad (SAW) on the greatness of patience (*Sabr)*. Tolerance and patience were thus perceived to be great values for Muslims, especially during Ramadan as it is thought to help people during hardships.

Nevertheless, the majority were eager to fast and claimed that fasting made them feel closer to the sick and poor. Few people remarked that fasting is said to have medicinal properties in Islam. Fasting was something that all, except one, of the participants wanted to do, and they looked forward to it every year.

> "I truly wanted to fast so I went and asked my physician and he replied that fasting would not be a problem to me. I was delighted because I wanted to fast even if I would be a little bit uncomfortable". (P01, male with schizophrenia)

> "I care a lot about fasting, and I'm frustrated that I haven't been able to do so in the last few years. I only fast for 3–4 days at most". (P07, male with schizophrenia)

The role of the physician's consultation

Physicians' recommendation against fasting was perceived as enough to provide a legitimate excuse and a plausible reason not to fast. Participants believed that abstaining from fasting throughout Ramadan, based on the doctor's advice, relieved them from the perception of having committed a sin and defied God. Nevertheless, it was important to the participants that the treating psychiatrists understood the importance of fasting while making their recommendations on their eligibility to fast or not in addition to the mode and timing of the medication intake.

> "I can trust the doctor and his conclusion as long as he is a Muslim or is well-informed about the importance of Islamic fasting in general. This is because I should not be the one to determine whether or not I am capable of fasting. I shouldn't push myself too hard or struggle. As a result, I'll put my faith in the doctor's judgment. My decision would be easy to make if this type of doctor was present in the hospital". (P02, female with bipolar disorder)

> "Patients are not blamed when they are unable to fast, according to the doctor, which makes me feel more at ease". (P03, male with schizophrenia)

Only five participants received a piece of advice from their treating psychiatrists related to Islamic fasting before Ramadan 2020. One of the participants sought confirmation from two psychiatrists, who both assured him that taking his mediations before the morning would not be a problem. Despite this recommendation, the patient only fasted for a few days because it exacerbated his anxiousness and caused him to vomit in the morning and feel dehydrated during the day. The participants' patient-doctor

relationships and forms of communication differed. While one participant mentioned that her psychiatrist was reachable via WhatsApp, others mentioned that their physicians' consultations were short, that their doctors did not explain possible fasting complications. In one case, the patient's wife had to visit the physician for a consultation as he was busy with work obligations. In four cases, the patients seemed to be the ones initiating the discussion during the consultation.

> "I am the one who initiated the discussion in the past two years. Earlier, I do not remember who used to bring the discussion on fasting". (P08, female with schizophrenia)

In regards to fasting in Ramadan 2020 or earlier fasting experiences, psychiatrists' most common answer was to suggest the patient to try and fast and report back if any problems arose. However, physicians also acknowledged that patients who feel unable to fast are exempted from doing so in Islamic law.

> "The psychiatrist told me to try fasting and to monitor my mood change. He assured me that I should not be afraid [from breaking the fast] because I am exempt [according to the Islamic law]". (P03, male with schizophrenia).

Health reasons to discontinue fasting

Four participants raised some warning signs related to their psychological well-being status that may influence their decision to continue fasting or not. They reported that the deterioration in their mental health is a legitimate excuse for not fasting when they passed through unfamiliar, confusing, or unordinary symptoms. Two of four participants discontinued fasting out of feeling psychologically unwell.

> "There are some warning symptoms that do not always come about. How can I explain it to you? People with schizophrenia are sometimes upset and have negative symptoms; hunger and thirst affect them in a way where they start to look negatively into everything". (P07, student, male with schizophrenia, student)

One participant consulted a cardiologist for advice on whether fasting may lead to negative repercussions on her health. She conveyed a belief that abstaining from fasting due to diabetes was a more legitimate reason as compared to psychiatric illness.

> "There is a difference because psychiatric illness is not apparent to others. If glucose levels fluctuate, it shows some signs on the person. In the case of a psychiatric illness, they say 'lay down, 'rest', or 'maybe you could feel better if you slept' … In case of diabetes, only God knows what can happen in case of hyperglycemia or hypoglycemia!". (P08, participant with schizophrenia)

Community minimal influence on patient's decision-making

The community seemed to be the least influential determinant on whether participants would fast or not. Participants reported that they hid their diagnosis from people within their networks because of the absence of the community's mental health literacy and the prevalent stigma that is connected to mental illness. They explained that the community had a negative attitude about mental illness, with some interpreting it as a sort of insanity. One participant believed that he would have been asked to quit medical school in Syria if he disclosed his bipolar diagnosis. Others simply did not

communicate about their psychiatric disease because their extra-familial relationships were limited. Two expressed that it is their perceived responsibility not to show others that they did not fast. One of the two interviewees considered it a religious obligation not to publicise that they were not fasting.

> "It [referring to fasting] is a personal matter. If you want to stop fasting, you keep your decision to yourself. If you want to fast, you do that together with others in your community". (P01, male with schizophrenia, student)

There was a common perception among half of the participants that fasting helps them feel less different than others. Family members had different attitudes towards their decision to fast with some being indifferent, some supportive, and some being worried about any possible health consequences. Nevertheless, the family was not reported to be influential on one's decision to fast or not to fast. Exceptionally, one participant reported fasting during the month of Ramadan because he did not want his daughter to feel that he was different but to be proud of him as she grows up. Fasting was thought of as a ritual that helped participants integrate with their societies and live the experience with other communities or family members.

> "If I do not fast, I feel different than others. They would say that I have a legitimate reason not to fast, but at the same time this means that I am not the same as them". (P01, male with schizophrenia, student)

Religious clerks

Only one participant asked for advice from a religious clerk on whether he can be considered as someone who had a legitimate excuse not to fast. The scholar referred to a verse from the Qur'an while replying, specifically to Surah Al Baqarah, stating that "Allah does not charge a soul except its capacity". The participant was asked to try to fast a couple of days to assess his capacity and whether he can tolerate abstinence from food and water.

> "He told me the same thing as my psychiatrist and he added that he cannot provide me with a diagnosis. He told me that I should know better and that it is okay whether I had to capacity to fast and did so or whether I could not". (P03, male with schizophrenia)

Discussion

There is no evidence that religious practices can buffer the effect of psychosis, and data from cross-national studies showed no significant association between lifeline prevalence of psychotic experience and religious affiliation (Lilja et al., 2016). Our study demonstrated that fasting could act as a mood booster to some and can cause distress and relapse to others. This finding is consistent with the study done by Koenig and Al Shohaib (2019) that demonstrated an inverse effect of spirituality on the symptoms of depression, a less consistent effect on anxiety, and contradictory effects on conditions associated with psychotic symptoms.

Ahead of every Ramadan, Muslim patients on antipsychotics are faced with the decision on whether to join their community and families in the ritual of fasting through the hours of the day. This is a dilemma faced by thousands living in

predominantly Muslim countries or diverse societies. This qualitative study revealed that several factors influence their decision in one way or another. Most participants were eager to fast and experience the month of Ramadan as fully as possible due to its spiritual, social, and religious value. As such, based on their interpretation of the relevant Islamic religious texts or sermons, the majority seemed to decide for themselves. A second group openly consulted their doctors for their opinions. There was little evidence that the subject was specifically brought up during a consultation, despite Lebanon being a Muslim majority country where Ramadan is widely observed. An even more surprising finding was that Sheikhs or religious clerks were rarely involved, if at all, in this matter. The opinion of the immediate community on fasting, which included family and peers, was the least pertinent to our group. Despite the level of trust shown in their doctors, many participants acknowledged having not raised the matter of fasting with them or another mental health professional. In parallel, doctors also did not often bring up the subject during consultations. There may be several explanations for this, such as brief consultation times, a tendency to focus exclusively on psychiatric and medical complaints, or the perceived sensitivity of the subject. Our findings support widening the scope of psychiatric consultation to the matter of fasting during Ramadan, as it appears to be acceptable, if not desirable, for patients on antipsychotics. There is a broader call for doctors and medical professionals to play a more proactive role in addressing their patients' cultural and religious concerns (Rassool, 2015).

Islam looks into suffering, such as the experience of illness, death, loss of property, and hunger, as a test initiated by God to repurpose life and promises paradise to those who are patient and grateful (Pieper, 2020). Similar to other studies, religiosity had a generally positive effect on the participant's wellbeing as it provided a source of strength and comfort as well as a meaning to the illness (Cohen & Koenig, 2003). The causality of religion to health cannot be reduced to mundane mediators as it involves a sacred relationship between the individual and the creator (Cohen & Koenig, 2003; Hill & Pargament, 2003).

Fasting during the month of Ramadan is considered to be a special spiritual duty for Muslims around the world. As such, there is a need to adapt the psychiatric approach to meet the cultural and spiritual considerations for psychiatric patients. While for an external observer such matters can seem relatively trivial and to be left to the patient, from a religious dogma perspective the implications can be significant. According to some scholars, there are serious consequences if a person was to break their fast unlawfully while being fully conscious that it is their religious duty to fast. Acceptable redeeming acts included freeing a slave, fasting 60 consecutive days, paying a penalty or *Kaffara* equivalent to feeding sixty poor people for each day missed, or providing each one of those poor, a *Mudd* equivalent to 750 grams of food (Ismail et al., 2020; Al-Husaini Seestani, 2007). Shaykh Ibn 'Uthaymeen asserts that breaking a fast intentionally without a valid excuse is a major sin and the person should make up the day that they did not fast (Al-Sulayman, 2004).

Doctors expected to guide patients on fasting also face the challenge of having to consider the religious implications in addition to the medical dimension. The religious aspect may be completely alien to them, given that it is often the case that doctor and patient are not of the same faith. Even sharing the same belief system does not guarantee the clinician's familiarity with the context that is specific to each patient. The medical effect of fasting on those on antipsychotic medication is also not well understood. Scientifically

speaking, fasting for prolonged periods has been shown to impact the mental state. It is known to stimulate the hypothalamic–pituitary–adrenal axis which triggers certain biological mechanisms that decrease glucose, insulin, and leptin. Leptin is a protein hormone that plays a significant regulatory role in the central nervous system and has been associated with mood disorders (Zarouna et al., 2015). Despite the decrease of the leptin levels during fasting, some studies have reported mood improvement among persons with chronic pain (Fond et al., 2013) and in the general public (Heun, 2018). This study showed that the influence of fasting during Ramadan on the psychiatric participants is not consistent, which is a finding that is in line with other studies (Adil & Sloan, 2007; Heun, 2018).

Knowledge about the pathomechanisms and physiological models related to psychosis is quite recent (Tost et al., 2010). There are no studies that predict whether Ramadan fasting, which typically extends beyond 11 h, would by itself influence the stability of psychotic symptoms. Nevertheless, modified or therapeutic fasting, which is limited in time as compared to Ramadan fasting, is contraindicated in anyone suffering from psychosis (Fond et al., 2013). Antipsychotics affect the dietary intake of people with mental illness (Teasdale et al., 2019) and the population attributable risk for all-cause death among people experiencing psychosis is 2.22 times the general public (Walker et al., 2015). Psychotropic medications cause a range of adverse side effects from unpleasant tolerability issues such as dry mouth, constipation, tardive dyskinesia, to life-threatening symptoms (Stroup & Gray, 2018). Few participants in this study described an unbearable deterioration in their health which led them to discontinue their fasting. This shows the need to shed light on the possible implications of fasting while taking into consideration several variables, which have been shown to predict relapse: previous fasting experiences, the severity of mental illness, other co-morbidity, and the person's functionality.

Our sample did not show major interest in consulting religious clerks. This finding does not support prior recommendations on involving religious clerks in joint meetings with patients to support them in taking an enlightened decision regarding fasting (Mohiuddin & Maroof, 2012; Rassool, 2015). On the other hand, participants did state that people in their social network were not aware of their diagnosis or the nature of their mental illness. This revelation complements a body of literature that demonstrates the stigma and lack of knowledge around psychotic and psychiatric disorders among the general public (González-Torres et al., 2007). Some religious clerks themselves, whether Muslim or Christians, associate mental illness with spiritual poverty rather than biological disturbances (Youssef & Deane, 2013). Therefore, increasing community knowledge may not, in and of itself, contribute to changing the patients' decision-making on fasting in Ramadan, but will contribute to their social inclusion and decrease their marginalisation.

Limitations

A limitation to the study is that we may not have been able to recruit patients with severe psychotic symptoms due to their inability to give informed consent. Our sample reflects certain Islamic communities in Lebanon, specifically those who accept mental health care from a psychiatrist. We acknowledge that others in the community seek another type of healthcare or even completely refuse healthcare and choose traditional spiritual healing

or religious care. We limited our sample to those visiting psychiatrists and being treated for psychotic disorders to allow the possibility of having a referral pathway in case the interview led to any kind of distress. Following the recommendations posited by research conducted by Graor and Knapik (2013), and while some of our participants had lower levels of functioning, we did not include caregivers or support staff in the interview to protect the autonomy and the privacy of the participants. This approach led to a paucity of data since some of the participants were circumstantial and the researcher's effort to retrieve more details from them was not always successful. However, the interviewer, an experienced qualitative researcher, tried to be mindful and flexible through the interviews to avoid receiving biased answers and to gain trust from the participants.

Implications for further research and practice

Conducting studies on religious beliefs among mentally ill people in less developed countries raises several ethical issues due to the subjects' vulnerability (Nolan et al., 2011). However, in the Arab region, there is a paucity of qualitative studies with people who are treated for schizophrenic disorders, which contributes to the increased marginalisation of this population group. From an ethical and methodological perspective, we advocate for more inclusion of persons with psychotic illness in research. The inclusion of this group in decision-making would not only ensure better patient-centred care but also fulfil basic human rights raised by international mandates, such as the International Convention on the Rights of Persons with Disabilities (United Nations General Assembly, 2007). Based on the results of this study, we propose a list of recommendations for mental health professionals to use in their consultations with Muslim clients who are being treated for psychotic disorders and seeking advice related to Islamic fasting (Table 1).

Table 1. Recommendations for clinicians addressing fasting in Ramadan with patients on antipsychotics.

I. Be proactive in addressing fasting ahead of the month of Ramadan	1. Be aware that often patients rely on you to help them decide on fasting 2. Make it a standard practice to raise the matter of fasting for Ramadan with Muslim patients 3. Schedule an appointment with Muslim patients a few weeks before Ramadan
II. Investigate possible factors that might affect the patient's wellbeing during fasting	1. Check the current state of compliance with treatment and any hurdles to it that may be impacted by fasting 2. Inquire about any possible changes to the patient's daily routine during Ramadan (social gatherings, sleeping pattern, work schedule) 3. Inquire about prior fasting experiences (including any deterioration in physical or mental health) 4. Include the family as much as possible in the decision and justification, with the consent of the patient. This avoids blame or shame that may take place in the home setting.
III. Tailor the discussion to the patient's level of awareness, their values, and needs.	1. Be culturally open to the importance of fasting for your patients. The only advice against fasting is if you genuinely see harm on their wellbeing, other than what would be expected in the general population 2. If the patient's literacy around their mental illness is low, use this opportunity to improve it and involve family and caregivers in the discussion as appropriate and with consent 3. Educate the patient about any possible side effects of the medication and advise on how these can be mitigated

Future research can shed light on practitioners' knowledge, attitudes, and practices towards providing culturally sensitive advice on Islamic fasting.

There is no consistency in compliance of fasting Muslims to medication regimens prescribed for different diagnoses (Ilkilic & Ertin, 2017; Patel et al., 2012; Xia et al., 2020). In one of the studies, some Muslim patients in the United Kingdom were reported not to adhere to topical medication guidance based on a false belief that it can break their fast (Patel et al., 2012). It is therefore crucial for the psychiatrist to negotiate the treatment regime with Muslim patients intending to fast (Amin & Abdelmageed, 2020). Lack of insight into the illness and the benefits of the medication is one of the causes of non-adherence to medications (Xia et al., 2020).

Conclusion

Cultural awareness plays an increasingly important role in psychiatric care, in particular with patients suffering from severe mental disorders (SMIs). Using the religious obligation of fasting in Ramadan observed by millions of Muslims across the globe, as an illustration, our study is an open call for health professionals working in the field of mental health to be mindful of the importance of their role in influencing patients' decisions regarding social and religious rituals that may have implications for their psychiatric condition and its treatment. Cultural sensitivity can be integrated into the standard of care, regardless of the patient and clinician's respective backgrounds. In the absence of clear evidence-based guidelines on the cost–benefit of fasting during Ramadan while on antipsychotics, proactive discussion and intervention can help patients raise these issues safely and bypass the stigma around mental health and religious affiliation. More studies are required to ascertain whether these findings from Lebanon are replicated in other contexts, whether in Muslim majority countries or countries with a significant Muslim immigrant population.

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