

Perceptions of the Phenomena of Quarantine as Experienced by Saudi Arabian COVID-19 Patients

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Abstract

Background: During the early stages of the COVID-19 pandemic, which affected Saudi Arabia, vacated hotels were employed to provide care for positive-testing patients and their contacts. Contact tracing and quarantine of positive and suspected cases were employed to limit community spread of COVID-19 infections. Each patient was isolated separately in a hotel room until they were deemed non-contagious. The present study aimed to gain insights into personal perceptions of the quarantine experience and was undertaken with the hope of providing illumination to health care providers concerning this experience.

Methods: Semi-structured interviews with these patients via telephone were used to extract themes and concepts related to their quarantine experience.

Results: Results were conceptual themes that fell into two broad categories – positive and negative beliefs and experiences. Positive aspects were: commitment to serving society, safety derived through faith, social support from families, and desire to learn ways to gain access to media for information and family interaction. Negative impact categories were: psychological stress, financial and social stress, physical effects, and fear.

Conclusions: Difficulties with media use for communication with loved ones and access to entertainment were considered important concerns among patients.

Key words: Quarantine; Saudi Arabia; social interaction; digital communication; COVID-19; patients

Background

The COVID-19 (Covid) pandemic, caused by a novel virus, has spread to nearly every locale in the world since its outbreak. The World Health Organization indicated that as of October 3, 2020, the incidence of COVID-19 virus and deaths were 34,161,721 recorded cases and 1,016,986 deaths worldwide and 335,097 cases and 4,794 deaths in Saudi Arabia, respectively(1). While the origins of this pandemic are undetermined, its effects on a world in individuals, societies, and economies are highly connected and continue to be manifested.

Nations and regions of the world have approached control of infection in a variety of ways. Among modalities employed in attempts to control contagions are quarantine and isolation of infected patients and their contacts. Quantitative data from the present COVID-19, SARS, and MERS, H1N1, and other viral epidemics and pandemics of the early 21st century have assessed the impact of quarantine on populations in a variety of locales(2). The present study employs qualitative data to illuminate perceptions, concepts, and felt needs of those patients and their contacts who were confined to quarantine during the early stages of the COVID-19 pandemic in Saudi Arabia.

Effects of quarantine and lockdown

Quarantine and lockdown conditions have been historically identified as being mentally stressful for participants. Depression, fear, denial, anxiety, irritability, stress, suicidal thoughts, panic attacks, post-traumatic syndrome, dysthymia, anger, Post-traumatic Stress Syndrome (PTSS), stigma, and forced re-location of living arrangements have been identified in various locales as a result of Covid. In other pandemics studied (3,4,5,6,7,8,9,10) an end-of-the-world mentality and panic was reported among Wuhan residents during the onset phase of the Covid-19 pandemic lockdown (11,12).

During the early phases of the pandemic, various studies were conducted using the Impact of Event Scale-Revised and Depression, Anxiety, and Stress Scale to assess depression, anxiety, and stress feelings (28.3, 24, and 22.3% respectively) among community-dwelling residents of Saudi Arabia (9,13,14). This rate of depression may be compared with rates of depression in Saudi Arabia, which has an overall rate of 20% and 39%, respectively, with the lowest rates among adults aged 45 -65 years of age at 7.1%(15,16). These data contrast with rates of 55.5%, 40.5%, and 55.5% for depression, anxiety, and stress feelings, respectively, in a cross-sectional study of Saudi quarantine residents(17).

To assess factors during the initial stage in China, the study found that during severe lockdown, 16.5, 28.8, and 8.1% of residents during early days of the Wuhan outbreak experienced moderate to severe depression, anxiety, or stress symptoms respectively compared with Spanish residents of Covid residential lockdown who experienced 25, 41, and 41% anxiety, depression, and stress respectively suggesting that the lockdown experience or perception of

it may vary in different locales(2). Satisfaction with the information provided concerning COVID, self-perception of good health, and pursuit of leisure activities such as physical activity, reading, or use of digital media was negatively associated with anxiety ($r=-.11$), depression ($r=0.14$), and stress ($r=-.011$) in Spain(18).

Chronic loneliness and boredom have been identified as detrimental to physical and mental well-being (19). Longer periods of quarantine have been associated with higher levels of PTSS (Post-Traumatic Stress Symptoms), avoidance behaviours, and anger, especially among patients confined for periods of more than ten days. Other stressors identified are the history of psychiatric illness, fear of infection, frustration, boredom, lack of available authoritative information, anticipated social stigma, and concern about disruption of personal financial status (20). Certain vulnerable groups may experience anxiety or changes in health status at higher rates than the general population in response to an epidemic or pandemic. In a sample gathered from 1,156 non-quarantined Saudi outpatients under treatment for inflammatory bowel disease, 48.4 % had scores consistent with anxiety in their responses to the Hospital Anxiety and Depression Scale at the time of the Covid-19 lockdown (21). Changes in lifestyle, including exercise and diet, have also been discussed as potential threats to patients' well-being confined to quarantine in who suffer from chronic conditions such as obesity, diabetes, and cardiovascular disease (22,23).

Effect on Social Interaction and Lifestyles during Periods of Quarantine:

Changes in the way people interact with each other in reaction to mass communicable infections have been observed. Patterns of interaction are mediated by norms and therefore are expected to vary between populations, thus making it necessary to be aware of the social perspectives in a particular society(24).

Interpersonal relationships may have been affected by social interaction changes, which have resulted from quarantine and lockdown. Dynamics between persons who necessarily interact, such as children and parents and married couples, may undergo changes based on altered family functioning as an outcome of quarantine and lockdown (25). These changes may cause or exacerbate family conflict and failure of communication (19,26).

In public interaction, avoidance behaviors and fear of becoming ill have been observed to vary between locales. Shoppers in Jeddah, Saudi Arabia, during the MERS-CoV epidemic expressed anxiety regarding that epidemic 57% of the time. Participants' probability of becoming infected was perceived to be 58.6, 27.2, and 13.8, as unlikely, likely, and very likely, respectively (27).

Similar data from Pakistan showed daily pandemic-related anxiety reported among 62.5% of Pakistanis studied, resulting in a reduction in physical contact and increased frequency of hand washing in 85.5 and 87%, respectively.

Fear of going out of the home and increased vigilance of family members' health was reported among 88.8% and 94.5% of this group, respectively (28).

Self-perception of health may also be altered during quarantine and lockdown. Hospitals in Wuhan experienced surges of low-risk patients clamouring for testing, suggesting deterioration of residents' self-confidence in their health (8). Fragility of self-perceived health may be vulnerable to threats based on rumours, loss of control, and a sense of being trapped (8,14). Appropriate communication may ameliorate similar problems as illustrated by an inquiry which found that Spanish community-dwelling elderly participating in television-based health education during lockdown reported overall self-rated good health and sleep quality of 61 and 70% respectively. However, 18 % of the sample who had been forced by COVID lockdown measures to change their living arrangements and participants who lived alone reported more negative feelings and lower sleep quality (8,4).

Saudi Arabian Measures in Addressing the Covid Pandemic:

Practice in epidemic control is not new to Saudi Arabia (29). The Coronaviruses - SARS (Severe Acute Respiratory Syndrome) and MERS (Middle East Respiratory Syndrome), have been addressed in Saudi Arabia during the earlier years of this century, thereby giving healthcare professionals experience in dealing with the control of viral epidemics and establishment of protocols for dealing with this type of emergency. Consequently, at the onset of Covid, these protocols developed and used during the previous viral epidemics were available for use in addressing the new threat. A complete lockdown of daily activities throughout Saudi Arabia was instituted very early in order to limit contagion (29,30).

Starting in February, travel from China and all Covid affected countries was stopped, but on March 2, the first case of the virus was detected in a Saudi who had traveled from Iran via Bahrain. Within a week, the complete lockdown of all non-essential activities, including the stay at home order for all residents, was implemented (30). All patients who presented for care based on Covid symptoms, their traced contacts, and all incoming travelers were quarantined for 14 days in hotels that had been prepared for this purpose in an attempt to stem the spread (29). Contact tracing was considered extremely important in limiting the virus based on the expectation that the presence of asymptomatic individuals and those in a prodromal period might be vehicles for further contagion.

Saudi Arabia began implementing its pandemic disaster plan to blunt the rise of disease incidence by mid-March 2020. A lockdown of all institutions except for grocery stores and pharmacies was applied. Residents were required to remain at home except for emergent situations subject to permission from the authorities. Transportation was halted between towns and cities, including international departures and arrivals. Children were instructed to begin online education in their homes after a 2-day

weekend hiatus. Health care facilities began structuring their operations to address preparation for the anticipated wave of critically ill patients. Non-critical healthcare services were converted to Covid care.

During the ensuing months, the total lockdown has been gradually eased until the first week in July when life returned to normal functioning, except for international travel. Social distancing and mandatory use of masks in all public venues are enforced with robust fines, and large gatherings are prohibited.

Testing for Covid active cases continues with the quarantine of positive or suspected cases in special centers replaced by voluntary self-isolation at home for 14 days with retest after that period. Residents who require care for complications of infection or other medical emergencies receive it through the healthcare system. Segments of the population which have conditions suggesting that they may be at high risk for complications such as advanced age, hypertension, diabetes, obesity, compromised immunity, cancer, and poor general health have been advised to remain within their living arrangements as much as possible or are provided with the hotel or hospital-based quarantine care (9,17).

Theoretical Outlooks:

Stuart proposed a model for analysis and delivery of care while moving through the crisis, acute, maintenance, and health promotion stages of care (31). It was proposed for use in psychiatric settings but seems particularly appropriate for quarantine care. In approaching clients in quarantine, the assessment and appraisal of coping resources and coping responses enable the nurse to identify a nursing diagnosis from which a care plan may be formulated. Identification of cognitive, affective, physiological, behavioural, and social stressors are employed. Subsequently, resources are drawn from personal abilities, social support, material assets, and positive beliefs to address the quarantine experience's challenge (32).

Pyszczynski et al., employing the Terror Management Theory (TMT), proposed that the Covid pandemic has brought an awareness of death into sharper focus for many, thereby influencing attitudes and behavior (33). When death is brought into consciousness, as in the Covid pandemic, the individual's defences tend to focus on faith, self-esteem, and maintenance of an optimistic worldview. Therefore, the quarantine environment needs to consider the presence of these emotions and how they may influence attitudes, behaviour, and care of patients confined to quarantine.

Pender's Health Promotion Model may be appropriate for developing positive beliefs, personal abilities, and self-help capabilities when a care plan has been formulated (34). Modification of cognitions about disease states, prevention, and treatment is a key concept of this theory.

Pender proposes that cognitions and attitudes through reflective self-awareness and change toward desired behaviour are best achieved when persons are not

distracted by competing interests, which may have a stronger appeal (32). While loneliness and boredom are dominant emotions during quarantine, opportunities for participants' access to activities that are usually overshadowed by demands of daily living may make quarantine a constructive point of access for health-education related activities(20).

Research Gap and Aim of the Study: Evidence-based description of the quarantine experience and its various implications for those confined has not been undertaken for the Saudi population. Data gathered from this inquiry may be useful in the organization and implementation of best practices in ongoing and future quarantines in Saudi Arabia and perhaps other locales.

Method

A descriptive phenomenological method was employed to illuminate the pattern and structure of quarantine experience among Saudi Arabian Covid patients. The true meaning of this phenomenon is rooted in the life of these patients as they experience it. The process of phenomenological descriptive inquiry is conducted by formulating questions which capture the essence of the experience being investigated, collecting and analysis of transcripts for significant statements, and extracting meaning from these statements(35). Statements are then grouped and defined into evolving themes, employing member checking in the final stage to validate content.

Setting: The Saudi Arabian Ministry of Health organized quarantine facilities in large hotels that were vacated to accommodate large numbers of citizens, residents, and visitors who were either Covid positive, awaiting test results, or contacts of individuals who had tested positive or who were already ill. Positive cases were housed in separate hotels from those awaiting test results, unaffected family members, and other contacts.

Telephone-based interviews were used by the principal investigator to gain data.

Sample: The sample consisted of 28 adult male and female patients ranging from 15 to 63 years in the positive quarantine section.

Ethical Considerations: The study plan was reviewed and approved by the central IRB-MOH (Institutional Review Board - Ministry of Health – Kingdom of Saudi Arabia) with log No.20-73M. Informed consent was obtained at the time of admission, including the study's purpose, statement of confidentiality of data, and the ability to withdraw from the study at any time. Data were anonymized before transcription.

Data Collection: Semi-structured interviews of approximately 30 minutes were conducted over the in-house telephone system of the hotel. Digital recording was used to preserve data for transcription. The interviews were initiated with subjective probes related to

the concerns and experiences of the participants. Initial probes included but were not limited to:

1. How did you feel when you received your positive result?
2. How is your family coping in your absence? How do they feel? How do you communicate with them?
3. If you could have prepared for this experience, what would you have done?
4. Are you worried about anything?
5. Is this disease and quarantine affecting you economically? Socially?
6. Do you have any previous experience in meeting a similar problem?
7. Have you received enough information about your present situation? When will it end? What to do when the quarantine is finished?
8. What would you tell those who are running this quarantine? Would you suggest any changes?

Analysis of Data: These data were used to formulate themes and illumination of experiences and concerns of the participants during their quarantine. Digitally recorded narratives were gathered from each subject, transcribed, and saved as Word documents stored on the principal investigator's laptop and a flash memory drive. Hard copies were stored in a locked facility.

Transcripts were reviewed independently by the principal and co-investigator to extract inductive themes. To enhance rigour Colizzi's descriptive phenomenological method was employed. The investigators engaged participants in automatic validation of the meaning of their input during the termination phase of the interviews (36). All data were examined with no limitations. NVivo software was employed to extract axial themes. This analysis's output was further reviewed and organized by the investigators into major themes and sub-themes, which were used to illuminate concepts extracted from the narratives about the lived quarantine experience.

Personal opinion and normative standards were not implied to the participants in order to prevent bias. Questions were non-directive and open-ended, and neutrality of language was carefully maintained. Credibility and trustworthiness were enhanced by member checking during data collection and peer review.

Results

In an analysis of the Covid quarantine experience in Saudi Arabia, several aspects of the phenomenon emerged from guided interviews. Results were divided into conceptual themes that fell into two broad categories – positive and negative beliefs and experiences that impact the client quarantine. The positive impact categories were: faith and duty, social support, and cognitive changes. Negative impact categories were: psychic, financial, social stress, physical, and fear.

Themes which described the nature of the Covid quarantine experience from the viewpoint of participants were extracted from the data and reviewed:

Faith and National Duty: Saudi Arabia is a theocracy. As such, many aspects of the society are viewed through the lens of Islam supplemented by humanitarian utilitarianism when rationalizing the need for participation in the quarantine.

Subject 4 said: "We are all in this together (referring to the pandemic), there is no escape...We have to do what is good for everyone."

Subject 7 said: "Thank Allah that our government was aware and locked down everything before it got too bad... Look at some of the other countries! Most people won't be careful unless they are forced to."

Subject 22: "I am happy to serve everybody in this simple way even though it's difficult for me."

Subject 26: "Everything is in Allah's hands. We have to be trustful of this wisdom and accept it... may all of us be healed with Allah's permission."

Social support: Participants confirmed strongly that they were missing their families critically. Many of the participants were parents and others were children or grandparents. The abrupt rupture in the family constellation was sorely felt by them.

Subject 17: "I miss them so much. It's like my arm has been cut off."

Subject 19: "My only consolation in being away from my family is that Lord willing I will see them soon and we're protecting them."

Subject 11: "We are able to talk to them and see them on Zoom. That's the only thing that makes it bearable."

Cognitive factors: At the time of the quarantine information concerning the nature of the source of infection and ways to address it was limited. Participants desired to know more about modes of transmission, length of infection, and appropriate methods of prevention and safety precautions required. These concerns were tempered by participants' level of education but addressed prevention with an empirical attitude:

Subject 22: "I just would like to know how I got it!"

Subject 13: "Before we go to our families we have to be sure we're safe. Allah forbid I would pass it on to somebody."

Subject 2: "We need to know how it travels around so we can avoid it. Some people are washing their groceries... Do you think that helps? Maybe it's like that camel flu thing."

Subject 5: "I need help in using this electronic media. My kids always helped me to get tuned in right but now it's the only contact I have with them and I'm not doing so well with it."

Psychological implications: Participants uniformly expressed feelings of low mood, anxiety, boredom, loneliness, and stress since each was restricted to a single room with parents, older children, and spouses housed

in separate rooms. Only young children who also tested positive were permitted to remain with the infected parent. The only direct human contact during the confinement was from nurses in personal protective equipment (PPE) who entered rooms to assess patients and provide for all physical needs.

Subject 4: "I know this is to protect everyone but it's so boring and lonely...I really need to know how many days are left."

Subject 6: "If we could just go for a walk! We could stay away from each other!"

Subject 10: "I'm afraid I won't test negative and have to do it all over again...what if I have to be on a ventilator? I don't want to die."

Subject 3: "Outside of TV and social media, eating is the only entertainmentI'll probably gain 10 kilos!"

Financial concerns: The lockdown of all sectors of the economy except major hospitals, grocery stores, and pharmacies was instituted overnight. Small business owners and their employees, those providing services such as barbers, hairdressers, sales personnel, dentists, travel industry employees, taxi drivers, and so many others were out of work and wondering how long the lay-off would last. While food was plentifully available those who were out of work worried how they would be able to pay daily necessities.

Subject 1: "This is a hard time for us. Our families can't go to work and we have very little money saved for emergencies."

Subject 18: "We had just moved here from another town and now this. Our family is far away and are in the same shape as us."

Subject 3: "We're from a village so there's nobody to help us out. My husband and I are both in quarantine. He needs to get back to work too."

Stressful social circumstances: Participants reported that they were concerned with the situation of their families while in quarantine. These problems were especially common with families which were headed by divorced or separated parents, living in areas away from their extended families, caring for a disabled or elderly relative, and parents of teenagers. They were concerned about how their leadership role was being carried out in their absence.

Subject 12: "My mom lives with me and needs constant care. There's a helper who's supposed to take care of her but I'm afraid she won't get her medicines right or on time. I tried to supervise on the telephone but the helper just says "ok mama" and I'm not satisfied. I have to be there!"

Subject 14: "It's good there's a lockdown or my son would be out with his friends in the car getting into trouble with no one to check on him."

Physical Symptoms: Physical symptoms were reported as fever, myalgia, bone pain, headache, and tightness of the chest. Medical care was available including a medical clinic on site which was equipped to handle most emergent conditions and stood ready to transfer patients

to critical care healthcare units as needed.

Subject 12: The worst part of this thing is the cough. I can't get much rest and it feels tight in my airways.

Subject 13: I have asthma and this cough makes me feel like I'm choking. I hope they don't put me on one of those machines in the hospital.

Subject 4: This really isn't any worse than the regular flu.

Fear and anger: Participants expressed anger toward the necessity for being confined in quarantine and were fearful of the uncertain outcome. There were also rumours of uncontrolled contagion being spread intentionally by certain sectors of society. Anger was also expressed at the supposed source of the original infection.

Subject 3: "These outdoor markets they say caused this disease have to be stopped. And it came all the way here to us? How can people eat all of those strange animals? It's forbidden and unnatural anyway to eat them. The people who do it are being punished by Allah for their habits."

Subject 27: "We heard people who know they have it are spreading it on purpose by spitting on things so more people will get sick."

Discussion

The present study endeavoured to better understand participants' quarantine experiences that may not have been discovered or discussed previously. Emotional reactions and effects on social interactions during confinement are essential factors in the quarantine experience's quality of participants.

Use of the qualitative inquiry method may have conferred a potential to extract highly useful insights into the phenomenon of quarantine by providing participants with the opportunity to freely express a wide variety of concerns, some of which may not have emerged when inquiries were conducted in a quantitative manner which necessarily quantifies concepts which have already been identified rather than expose new aspects. The provision of this perspective may be useful to the healthcare community in successfully approaching the planning and execution of quarantines by better addressing participants' psychological, emotional, social, and physical needs and their reference group.

Discussion is structured on review and analysis of the themes which have emerged from the data provided by the participants.

Religion and Sense of Duty:

There is wide general support for medical care, including quarantine. This support is partially supported by religious tenets, which provide broad social support of health care. This concept is reflected in a Hadith saying: "Yes, you should seek medical treatment, because Allah, the Exalted, has let no disease exist without providing for its cure, except for one ailment, namely, old age" (4,37).

An important theme that emerged from the data was the altruistic motive of participants about their role in the quarantine. Desire to serve the community by sacrificing personal comfort coupled with faith in the wisdom of Allah, belief in divine design which orders individual, and society's destiny was expressed.

This readiness to participate in quarantine was also supported among participants based on the concept of expiation of sin. This concept is stated in the Hadith of Prophet Mohammed (peace to him) as: "No fatigue, nor disease, nor sorrow, nor sadness, nor hurt, nor distress befalls a Muslim, even if it were the prick he receives from a thorn, but that Allah expiates some of his sins for that" (4). Thus, based on this worldview, the quarantined person feels that they have personally gained from the experience.

The first principle of Islamic medical ethic percept's is: "Whosoever saves a human life, saves the life of the whole of mankind (Holy Quran, Chapter 5, verse 32). This is followed by Prophet Mohammad (peace to him) who said in Sayings Related to Faith: "Seek treatment, for God the Exalted did not create a disease for which He did not create a treatment, except senility (4,37). Use of these instruments and others have led to the formulation of the following Islamic medical ethics rules: 1. Necessity overrides prohibition. 2. Harm has to be removed at every cost if possible. 3. Accept the less of the two harms if both cannot be avoided. 4. Public interest overrides the individual interest. (37)

Alternatively, the Biblical model supplies a complete guide to ethical questions for the researcher. Leviticus, Chapter 19, verse 18, requires each person to "love your neighbor as yourself." In Matthew, Chapter 7, verse 12, Jesus (peace to him) stated: "So in everything, do to others what you would have them do to you, for this sums up the Law and the prophets." (38) Similar outlooks based on humanistic ways of viewing quarantine are Utilitarian, Rights, Fairness, Common Good, and Virtue Approaches(39). Among the models which use these approaches are the Philosophical, Laura Nash, Mary Guy, Rion, Langenderfer, and Rockness Models (39).

Implications for healthcare providers are the application of non-judgmental caring accompanied by acceptable knowledge levels about religious beliefs and practices, self-awareness, and empathy. Nurses need to be aware of their comfort level in providing spiritual care and understand the patient and caregiver's spiritual needs. This individualization enables the nurse to plan for the delivery of routine spiritual care from various sources within and outside the healthcare community (8,26).

Social Support: Participants shared their concerns about how restriction during quarantine has affected their social interactions. Multi-generational living arrangements are the norm in Saudi Arabia. This pattern of living may confer an aspect of quarantine not found elsewhere. Participants referred to the support they received from siblings,

children, spouses, and parents during their confinement. They expressed a longing to be with family members and concern over the adequacy of the care of members of their intimate family group who might need their special care, including elderly parents, infants, the handicapped, and young children who are traditionally cared for within the family setting (40).

Data related to social support in other locales have not yet been well reported. However, rates of anxiety, depression, and stress observed may need to be further explored through the lens of the effect of social support on quarantined residents.

For example, data from the first week of lockdown in Spain found mild to severe anxiety, depression, and stress to be 25, 41, and 41%, respectively. Stress, anxiety, and depression experienced during the Covid pandemic in Iran were reported in a meta-analysis at rates of 26.9, 31.9, and 33.5, respectively (9). Rate of depression in the United States of America unrelated to the Covid pandemic was found to be 14.8, 4.52, 1.8, and 0.6 % mild, moderate, moderately severe, and severe, respectively (41).

Cognitive Aspects:

Discussion with residents of Saudi Covid quarantines under study showed that the pandemic information was essential to residents. These concerns are shared among various populations studied who expressed infection fears, anxiety, depression, frustration, boredom, inadequate access to reliable information, financial worries, and fear of stigma (20)

Among the Saudi quarantine, residents were especially concerned with the disease's characteristics and modes of contagion. Several studies found that inaccurate information or lack of transparency exacerbates negative emotions (9,20,28).

Residents of lockdown in Spain have well received positive efforts at education. Goodman-Casanova found that telehealth services offering information about the Covid pandemic were requested and well-accepted 30 and 39 % of the time, respectively (4).

Participants in the present study expressed dissatisfaction about their ability to communicate with loved ones, access to pandemic-related information, and entertainment such as television and social media. Other studies expressed similar concerns, all of whom suggested that digital platforms should be available for residents to provide health promotion, online mental health services, and social connectedness, emphasizing that compliance is enhanced by appropriate information (4,7,8,20, 42,43).

Training of quarantine residents in social media mechanics such as WhatsApp, Snap Chat, Zoom, and SMS plus ways to access streaming entertainment may seem a frivolous use of resources. However, a desire to acquire this skill was expressed by a large portion of the sample. It would seem to be a priority to meet their felt needs,

thereby assisting them and providing comfort during the quarantine process.

Psychological elements – fear, anger, depression, anxiety, and stress:

These factors have been discussed by previous quantitative method inquiries, although suggestions for amelioration have been noticeably absent. Data from various locales reflect a constellation of similar emotions and concerns of residents and caregivers, echoed in the present study.

Banerjee and Rai contrast solitude with loneliness(19). They found that prolonged isolation is incredibly difficult for individuals who are not familiar with living in isolation and suggest that emotional preparedness for solitude is a learned skill. Therefore, to achieve relief from boredom and loneliness necessitates efforts to provide experiences for quarantined patients, which are individualized to meet their needs. This awareness among healthcare providers is essential, although the application may not be a practical possibility in all settings.

Also, Brooks et al. review 24 inquiries related to the psychological impact of quarantine(20). They identified two groups of factors that predisposed quarantined patients to experience high amounts of fear, anger, depression, anxiety, and stress. Two groups of patients with exceptionally high severe reactions to quarantine were persons with a history of psychiatric illness and healthcare workers. These data may require consideration in decisions related to the quarantine of these two groups of patients.

The other factor identified by Brooks et al. was the nature of stressors found to mediate psychological impact(20). These were duration, fears of transmitting or acquiring infection, frustration and boredom, inadequate supplies, and inadequate information from public health authorities. Awareness among the healthcare community of the contributory factor of positive and negative emotions when conducting a quarantine may auger for better operations (2,20).

Financial Stressors:

Several studies found that stress was positively related to low patient income (9, 17,20). Financial stressors of the type encountered in locales where participants did not express a depressed state of the economy or heavy dependence on unofficial employment in the present study are perhaps based on confidence in government programs to meet their needs. However, concern was expressed about the anticipated length of the lockdown among the patients.

Permitting employees to work online, providing meaningful tasks that can be addressed, keeping them informed about the expected length of time expected before they are discharged, and making the quarantine as short as practicable was found to reduce related financial concerns (17,20).

Social Stressors:

Confinement to quarantine is likely to disrupt patterns of social interaction within the family and community. The concern of this nature was expressed by many of the residents. Parents were especially concerned about their leadership role in the family structure, separate from providing their dependents' basic needs. More studies discussed the importance of differentiating between spatial and social distancing, emphasizing that participants, while isolated, desired to continue to meet their obligations to their group (17, 19). This is a particular concern when quarantined residents are responsible for caring for vulnerable persons in their group, such as elderly parents, infants, small children, and the disabled. These data agree with participants' concerns in the present study who felt that the care of these group members was put at risk through possible neglect during their confinement.

Limitations

This inquiry was conducted in Saudi Arabia. The qualitative approach of the investigation was employed to provide a broad representation of participants' thoughts and emotions and does not attempt to quantify the incidence with which they occur. Generalization of participants' data may require modification in other locales and cultures where quarantine conditions, financial conditions, and social structure may be different.

Conclusion and Recommendations

Exploration of quarantine in Saudi Arabia has illuminated important aspects of perceptions of this type of care. Awareness of the participants' concerns may provide a lens through which to provide this care based on empirical data.

For the community at large, emphasis is on quarantine as a powerful tool for preserving the common good. Moreover, full disclosure of the factors which drive the need to isolate contagious persons, initiation of some type of reward for satisfactory completion of quarantine, the formation of support groups for patients, avoidance of the growth of misinformation, and rumours, provision of accurate and easy to digest information. Additionally, emphasis on group goals and fostering the community's inter-connected nature may enhance acceptance of quarantine as a treatment measure.

Individuals quarantined have communicated the ability to establish timely, high quality, two-way communication with their loved ones. Also, preserving their financial status, and adequate, accurate information about the duration of their quarantine, and ways to protect their families from infection held the highest priority in their lives while they were confined.

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