



ADVERSE EFFECTS OF QUARANTINE / ISOLATION DURING COVID-19 PANDEMIC ON PSYCHO-SOCIAL BEHAVIOR OF PATIENTS

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ABSTRACT

The Covid-19 disease caused by SARS CoV-2 virus was first reported in Wuhan, China in December 2019. Modern globally connected world made the virus to quickly spread across multiple countries. In India the first case was reported on Jan 31, 2020. Initially people who had come in contact with infected Covid-19 patients were isolated at home or in a dedicated quarantine facility. Decisions on how to apply quarantine was based on the best available evidences. We did a study of psychological impact of the quarantined patients/people. Most of the previous studies reported negative psychological effects including post-traumatic stress symptoms, confusion and anger. Stress included was due to longer quarantine period, infection fears, frustration, boredom, inadequate information, financial loss and stigma of covid-19. Some studies suggested long-lasting effects also. In situations where quarantine is deemed necessary it should not be longer than required. The quarantine should have clear rationale and information about the protocols and ensured sufficient supplies of daily needs. Appeals to altruism by reminding the public about the benefits of quarantine to society should be favorable. Guidelines for setting up quarantine facilities and provision for vital information should be provided at district level hospital. The behavior of the patients/people and health care worker & other staff should also be taken care of.

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INTRODUCTION

The Covid-19 disease caused by the infection from SARS CoV-2 was first reported in Wuhan, China in December 2019. Modern globally connected world made the virus spread quickly across multiple countries. In India the first case was reported on Jan 31, 2020. We did a survey of psychological behavior of the people in quarantine. Most of the studies reported negative psychological effects including post-traumatic stress symptoms, confusion and anger. The stressors included longer quarantine period, fear of infection, frustration, boredom, inadequate supplies, inadequate information, financial loss and stigma of corona virus disease. Some researchers have also suggested the long lasting effects. In situations where quarantine is deemed necessary officials should quarantine individuals for no longer than required period. And should provide clear rationale for quarantine. The Quarantine centers should be supported with the following facilities.

While-During Quarantine & Isolation

Cleaning of Indoor and Out Door articles

High Contact Surfaces: Table tops, handrails, intercom system, public counters, handle of chairs, security locks, door handles, keys, mobile phones, shared equipments, key boards, computers, remotes of T.V. cables/disk, AC, music system etc. must be cleaned properly.

Clean office spaces every morning before rooms are occupied and while leaving, Wear triple layer mask. Clean surface with soap & water before disinfecting it.

Sanitizing Toilets

While sanitizing toilets different parts of the toilet should be cleaned with different cleaning methods and equipments i.e. pot and commode should be cleaned with long angular brush and suggested cleaning agents. Use scrubber while cleaning commode lid. Toilet floor should be cleaned with nylon broom and soap powder.

Do'S & Don'ts of Cleaning

Do's

Discard cleaning material made of cloth (mop and wiping cloth) in appropriate bags after cleaning and disinfecting. Disinfect buckets by soaking in bleaching solution or rinse in hot water.

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Don'ts

Use disinfectants spray on potentially highly contaminated areas such as toilet bowls or surrounding surfaces.

Using Personal Protective Equipments (PPE)- PPE'S, triple layer masks and gloves and sanitizers

Mask:

Unfold the pleats, make sure that they are facing down and placed over nose, mouth and chin.

Fit flexible nose piece over nose-bridge.

Secure the mask with tie strings

- Upper string to be tied on top of head above the ears
- Lower string at the back of the neck.

Type of PPE & How to Handle Them

Change the mask after six hours or as soon as they become wet. Mask should not hang around neck.

- To remove mask first untying the string below
- Then the string above.
- Handle the mask using the upper strings.
- Mask should not hang around neck.
- Do not reuse disposable masks and touch only the outer surface of mask.

With its high infectivity and fatality rates, the COVID-19 has caused universal psychosocial impact by causing mass hysteria, economic burden and financial losses. Mass fear of COVID-19 is termed as "Corona Phobia", has generated a plethora of psychiatric manifestations across of the society. COVID-19 restrictions applied nationwide produced panic, anxiety, obsessive behavior, paranoia, depression and post-traumatic stress disorder (PTSD). These have been fuelled by an "infomania" spread by social and print media. Outbursts of racism, stigmatization and xenophobia against particular communities was also widely reported.

Corona Positivity "A Stigma" and Psychosocial Burden of Quarantine/ Isolation

Disease associated stigmatization among the sufferers from 2003 SARS outbreak was remarkably evident even after years of exposure, making it difficult for many people when restarting the usual customs of day. (12c). Healthcare providers (HCP) particularly general practitioners involved in SARS-affected patient care were found to be more prone to stigmatization (15). Similarly the COVID-19 outbreak may also give rise to stigmatizing factors like fear of isolation, racism, discrimination, and marginalization with all its social and economic ramifications (14). A stigmatized community tends to seek medical care late and hide important medical history particularly of travel. This behavior in turn will increase the risk of community transmission. The WHO has also issued specific psychosocial considerations for abating the growing stigma of COVID-19 (16). Health crime originated out of the fear of being corona positive has also been reported from India (17,18).

Forcefully imposed mass quarantine by nationwide lockdown programme can produce mass hysteria, anxiety, distress and sense of getting cornered. This can be intensified by uncertainty of disease progression, insufficient supply of basic essentials and financial losses (19). Previous outbreaks have

reported that psychological impact of quarantine can vary from immediate effects like irritability, fear of contracting and spreading infection to family members to extreme consequences including suicidal tendency (20). Suspected isolated cases may suffer from anxiety due to uncertainty about their health status and develop obsessive-compulsive symptoms such as repeated temperature checks and sterilization (18). Posttraumatic stress disorder (PTSD) have also been reported with the duration of quarantine (20). Post quarantine psychological effects may include significant *socio-economic* distress and psychological symptoms due to financial losses (16). Another very important aspect is stigmatization and societal rejection, discrimination and avoidance by neighbours.

Psychosocial Impact on Health Care Providers and Other Frontline Workers

The psychosocial response of frontline workers during a pandemic was complex and incompletely understood. Studies regarding the 2003 SARS outbreak from Canada, Taiwan, and Hong Kong was discussed how the battle against SARS led to huge psychological morbidity amongst frontline HCPs (20,18). During the 2003 SARS outbreak in Taiwan, nurses working in the SARS unit suffered from more depressive symptoms and insomnia compared to those from non SARS units. The occurrence of psychiatric symptoms was associated with direct exposure to SARS patients (20). Even after three years of SARS outbreak in 2003, a significant number of the related hospital workers in Beijing, China had some PTSD (14,13).

Similarly unavoidable stress, fear and anxiety about a poorly known contagious disease outbreaks like COVID-19 could be profound among the higher-risk groups such as Health Care Professionals and other frontline workers like bankers, policemen and armed forces. Death or illness of a relative or friend from COVID-19 can all negatively impact the mental well-being of health workers [18,17]. Medical Professionals from heavily COVID infected countries like China experienced big performance pressure. [11,12]. Various types of psychological stressful events amongst the nursing staffs have been reported during the spread and control of the COVID-19 pandemic in China [20]. In the developing countries like India where the health care system is already overburdened surges of COVID-19 case are likely to provoke acute anxiety, irritation and stress among doctors and nurses. This might be compounded by the inadequate hospital supply of required hand hygiene tools [13] and significant shortage of the personal protective equipment (PPE) [10].

Effects on People with Pre-Existing Psychiatric Illness

Mentally challenged patients are more prone to develop infectious diseases such as pneumonia (12) and are at considerable risk of experiencing more negative physical as well as psychological outcomes during a potentially fatal epidemic. Cognitive decline, poor awareness level, impaired risk perception and reduced concern about personal hygiene can increase the chances of acquiring infection in these individuals (11). Psychiatric patients are also prone to develop recurrences or deterioration of the pre-existing signs and symptoms. For example individuals with known obsessive compulsive disorders (OCD) may practice frequent self-monitoring of temperature to check for fever or may make several attempts to swallow saliva to check for throat pain as a symptom of COVID-19. Hand-washing being another

precaution to prevent COVID-19 transmission adds further to the misery of a known washer OCD patient. On the other hand nationwide strict regulations regarding transport and quarantine can abruptly discontinue the therapeutic counseling schedules of psychiatric patients. {11} OCD are more likely to misinterpret harmless bodily symptoms and feelings as the evidence of acquiring COVID-19). This burden to public health care {12} might face newer challenges in this period due to breakdown of vital family support systems.

Psychosocial Issues of Health Care Workers

Psychosocial and its remedy of different populations during this COVID-19 should be developed with application of internet and appropriate technologies [10,13]. In this, integration of all the health organizations, mental health authorities, tertiary care medical institutions and hospitals should be included. Respective authorities must identify the high-risk groups screening and in-time referral. Specific attention needs to be paid for more vulnerable groups such as quarantined people.

It might be appealing to allocate adequate mental health professional to work in this area to help the crucial manpower issues. [12]. Frontline HCPs involved in care of patients with COVID-19 cannot well address the psychological distress and related remedies of these patients because of factors like immense workloads and lack of standardized training for providing mental health care. Most of the time clinical psychiatrists, psychologists, and mental health social workers are not allowed to enter isolation wards. Therefore a professional team comprising mental health physicians should be provisionally arranged on emergency basis for proper guidance. Healthcare institutions may consider psychiatric care sessions for mentally exhausted HCPs and the recovered patients from the COVID-19 disease

FUTURE DIRECTIONS AND CONCLUSIONS

Besides COVID-19, the 21st century is also the era of emerging pandemic of mental illnesses [20]. Thus psychological and social preparedness of this pandemic carries global importance. The government and stakeholders must appreciate the psychosocial morbidities of the pandemic and assess the burden. Stigma and blame targeted at communities affected by the outbreak may hinder international trade, finance and relationships. Due care needs to be taken for the stigma associated with disease, racism, religious propaganda and psychosocial impact.

Setting up mental health organizations specific for future pandemics with branches in many nations and institutions for research, mental healthcare delivery and arranging awareness program at both personal and community levels is much needed. Structured websites and toll free helpline numbers may be launched for alleviating psychological distress among the general public regarding this ongoing pandemic. Social media is to be used in good sense, to educate people on transmission dynamics, symptoms of disease and time when exact medical consultations are needed. To protect social media from devaluations strict government laws and legislation are to be implemented regarding fake news, social media rumours and misinformation. The COVID-19 pandemic has clearly shown us how a "virus" can negatively impact our lives even in the 21st Century and made us realize that the greatest assets of mankind are health, peace, love and solidarity.

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