Psychological crisis intervention protocol for isolated coronavirus disease 2019 patients

Mohamed R. Soltan, Mariam E. Dawoud

Department of Psychiatry, Faculty of Medicine, Fayoum University, Fayoum, Egypt

Correspondence to Mohamed R. Soltan, MD, Department of Psychiatry, Faculty of Medicine, Fayoum University, El-Fayoum, –P.O. Box 63514, Fayoum, Postal Code: 63514, Egypt. Tel: +20 101 072 3636/20 122 156 2006; fax: 0842160180; e-mail: dr.mohamedsoltan1979@gmail.com

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The WHO declared the current outbreak of coronavirus disease 2019 (COVID-19) a pandemic on March 11, 2020. The COVID-19 pandemic shook the entire world on January 2020 last year and is still posing a major threat to the entire humanity. In order to manage the urgent psychological need for support in response to the anticipated reaction of the population to the COVID-19 pandemic, the authors, who are members of Psychiatry Department, Fayoum University, Egypt, developed a new psychological crisis intervention model by implementing a psychological support system. The idea came to light at the time of the first wave of COVID-19 in Egypt, at the mid of May 2020 when the negative psychological impact of the virus was observed and constituted a great demand on the outcome of the virus. It will make a sound basis for developing a more effective psychological crisis intervention response system.

Keywords:
coronavirus disease 2019, crisis intervention, early psychological intervention, mental health, psychological interventions

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Introduction

This crisis intervention refers to the methods used to offer immediate, short-term help to individuals who experience coronavirus disease 2019 (COVID-19) that produces emotional, mental, physical, and behavioral distress, or problems. In Egypt, COVID-19 cases showed a rapid rise from less than 1000 cases by March 1, 2020 to more than 25 000 cases by the end of May 2020 (WHO, 2020; Zgueb *et al*., 2020) (https://en.wikipedia.org/wiki/COVID-19_pandemic_in_Egypt#March).

It is well known that COVID-19 has a negative psychological impact with the increased prevalence of cases met with great affection of the global mental health. A comparative Egyptian and Saudian epidemiological study by Boshra *et al*. (2020) indicated that the level of psychological problems increased with the increased prevalence of COVID-19 cases, which emphasized the importance of prevention and treatment of these problems (Boshra *et al*., 2020). In response to COVID-19 outbreak, profound psychological distress rapidly occurred worldwide in terms of mental health, including stress, anxiety, obsession, depression, somatization, sleep disturbances, suicide, frustration, and uncertainty (Thakur and Jain, 2020; Serafini *et al*., 2020; Zhai and Du, 2020).

Who will receive psychological care?

(1) Patients with confirmed and suspected COVID-19 infections.
(2) Medical care and related personnel.
(3) Those who had close contacts with patients (e.g. family members, colleagues, and friends).

Who will provide psychological care?

(1) Ideally, clinicians who specialize in human behavior (psychiatrists, psychologists, trained physicians in isolation hospitals, trained nurses, trained house officers, or others with similar expertise) can be involved in treatment programs (after receiving training from the staff members of the Psychiatry Department, Fayoum University) for all patients throughout the recovery process, beginning as soon as possible and continuing throughout rehabilitation.

Assessment tools

(1) Structured interviews through phone calls.
(2) Digital electronic questionnaires for assessment of symptoms of anxiety, depression, stress (by depression, anxiety, and stress scale) (Lovibond and Lovibond, 1995), and posttraumatic stress disorder by the impact of event scale (Weiss, 2007). The scales were translated into Arabic by MD and backtranslated by an English expert.

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They were assigned to Google Form where patients can receive them to be assessed through the internet. Patients who have no internet access will be assessed by the clinician through the phone who will help them to fill the form.

(3) The Depression Anxiety Stress Scale-21 (Lovibond and Lovibond, 1995) is a psychometric tool that contains 21 quantitative questions to dimensionally assess depression, anxiety, and stress subscales perceived by the participants over the past week. Each question is graded from 0 to 3 in which 0=did not apply to me at all, while 3=applied to me very much or most of the time. Each subscale is calculated by score summation.

(4) Impact of event scale – revised (Weiss, 2007) is a self-report containing 22 questions that measure the experienced stress after exposure to a traumatic event over the past week. Each question denotes the difficulty experienced from 0 to 4 in which 0=not at all, while 4=extremely. Respondents were asked to denote their response to COVID-19 as a stressful life event. Intrusion, avoidance, and hyperarousal subscales' scores can be calculated separately. Then, the total score of posttraumatic stress disorder can be calculated (Table 1).

Recruitment of those who will receive the intervention

At the time of the protocol, all cases of COVID-19 were isolated in the isolation hospital all over Egypt. As a part of the hospital policy and registry, all cases of COVID-19 were recorded with their personal information as phone number and address were included. Residents of the Psychiatry Department were informed day by day with the new cases so that they could assess the mental status and provide the patients with psychological support by phone.

Goals of crisis intervention

(1) To decrease emotional stress and protect the patients with COVID-19 from additional stress.
(2) To assist patients in organizing and mobilizing their resources to deal with the hard time of experiencing COVID-19 infection.

Aims

(1) To assist the individual with COVID-19 in achieving rapid recovery and to prevent serious long-term psychological problems.
(2) To reduce the intensity of an individual's emotional, mental, physical, and behavioral reaction to a crisis.
(3) To help the individuals return to their level of functioning before the crisis.
(4) To avoid maladaptive coping strategies, for example, self-harm.
(5) To improve problem-solving strategies.

Table 1 Phases of recovery with expected psychosocial symptoms and suggested treatments

Phases	Expected symptoms	Recommended treatments
Admission	Anxiety, terror	Psychological support
	Pain	Reassurance
	Sadness, grief	Relaxation techniques
		Antianxiety medication
		Analgesic medication
Critical-care phase	As at admission	Continued psychological support
	Acute stress disorder	Antianxiety medication
		Analgesics
		Medication targeting acute stress disorder symptoms
In-hospital recovery	Increased pain with exercise	Psychotherapy (cognitive–behavioral and family therapy)
	Anger, rage	Targeted administration of analgesics
	Grief	Pharmacological treatment of anxiety and depression
	Depressive episodes, rapid	
	Emotional shifting	
Rehabilitation and reintegration	Adjustment difficulties	Psychotherapy (cognitive–behavioral and family therapy, social skills)
	Posttraumatic stress disorder	Medication targeting posttraumatic stress disorder
	Anxiety (including phobic response)	Anxiolytics tapered off over time
	Depression	Antidepressant medication

Requisites for the effective crisis intervention

General requirements

(1) Contact with patients through mobile.
(2) Good internet connections and good mobile connections.
(3) Cooperation of all staff members of other specialties in isolation hospital, for example, chest, tropical, intensive care physicians, nurses, and other healthcare providers as consultation liasion for all patients and facilitate the services to patients.

Specific requirements for crisis workers

In addition to being nonjudgmental, flexible, objective, empowering, and supportive, the following are essential requisites for service providers:

(1) Ability to create trust via confidentially and honesty.
(2) Ability to listen in an attentive manner.
(3) Providing the individual with the opportunity to communicate by talking less.
(4) Being attentive to verbal and nonverbal cues.
(5) Pleasant, interested, and intonation of voice.
(6) Maintaining good eye contact, posture, and appropriate social distance if in a face-to-face situation.
(7) Remaining undistracted, open, honest, and sincere.
(8) Asking open-ended questions.
(9) Asking permission, never acting on assumptions.
(10) Checking out sensitive cross-cultural factors.

Length of time for crisis intervention

(1) In our protocol, we will do at least seven sessions during the first 2 weeks of admission or more than seven sessions if the patient still has positive PCR after 2 weeks or if the patient is admitted to the ICU.
(2) Fixed days of sessions (day 0, day 2, day 4, day 8, day 11, day 13, and day 15).
(3) Session time may range from 20 to 30 min.

Place of intervention

It can take place in a range of settings such as hospital or counseling rooms through mobile phones.

Key element of management

(1) Crisis therapy includes short-term behavior/cognitive therapy and counseling.
(2) Involvement of family and another key social network is very important.
(3) Therapy should be relatively intense over a short period and discontinued before dependence on the therapist develops.
(4) The risk of suicide and self-harm must be assessed at presentation and each review.
(5) The aims of treatment are to:
    (a) Reduce distress.
    (b) Help to solve problems.
    (c) Avoid maladaptive coping strategies, for example, self-harm.
    (d) Improve problem-solving strategies.

Types of interventions

(1) Crisis interventions.
(2) Psychopharmacological treatments if needed in a moderate-to-severe psychologically disturbed patient.

Techniques of crisis intervention

(1) Catharsis: the release of feelings that takes place as the patient talks about emotionally charged areas.
(2) Clarification: encouraging the patient to express more clearly the relationship between certain events.
(3) Suggestion: influencing a person to accept an idea or belief, particularly the belief that the nurse can help and that person will in time feel better.
(4) Reinforcement of behavior: giving the patient a positive response to adaptive behavior.
(5) Support of defenses: encouraging the use of healthy, adaptive defenses, and discouraging those that are unhealthy or maladaptive.
(6) Rising self-esteem: helping the patient regain feelings of self-worth, for example, you are a very strong person to be able to manage the COVID-19 infection.
(7) Exploration of solution: examining alternative ways of solving the immediate problem.

Therapeutic techniques for crisis intervention

(1) Display acceptance and concern and attempt to establish a positive relationship.
(2) Encourage the person to discuss present feelings, such as denial, guilt, grief, or anger.
(3) Help the person to confront the reality of the crisis by gaining an intellectual as well as an emotional understanding of the situation.

(4) Explain that the person's emotions are a normal reaction to the crisis.
(5) Avoid giving false reassurance.
(6) Clarify fantasies, contrasting them with facts.
(7) Set limits on destructive behaviors.
(8) Emphasize the person's responsibility for behavior and decisions.
(9) Assist the person in seeking help with everyday activities of daily living until resolute occurs.
(10) Intervention is evaluated and modified as necessary.

Psychological crisis intervention protocol for isolated coronavirus disease 2019 patients during different phases of recovery

We have arbitrarily designated four phases of recovery: admission, critical care, in-hospital recovery, and finally, reintegration and rehabilitation.

Psychological interventions that will be done in each phase are discussed in detail in each phase. At the end of the protocol (Table 2) has been done to summarize the steps.

Admission phase (session day 0 and day 2)

(1) On admission, the primary psychological tasks are to establish therapeutic rapport, diminish anxiety, and assess the psychological strengths and needs of the patient.
(2) The first two tasks are addressed immediately by orienting a patient, by assisting the patient to focus on immediate priorities, and by assuring the patient that the work team is composed of knowledgeable experts who will provide excellent care.
(3) Reassurance statements and relaxation techniques are needed to help patients to feel more comfortable.
(4) Good history taking includes the patient's physical and psychological status, coping skills, strengths and weaknesses, psychosocial and familial support, and economic and premorbid lifestyle is needed.
(5) The psychotherapeutic tasks to be accomplished immediately with a family are similar to those for a patient (i.e. to establish a therapeutic relationship and to diminish anxiety).
(6) Both tasks can often be initiated by assisting them in orienting to the hospital and by providing relevant information about the normal responses to trauma. Explaining, for example, that people in this situation often have difficulty for a few days in eating, sleeping, and concentrating, communicates empathy and validates that their distress is acceptable and temporary.

Table 2 Assessment tools

Depression Anxiety Stress (DAS) scale, DAS scale	Anxiety
DAS Scale	Depression
Impact of event scale – revised	PTSD
DAS scale	Acute stress

PTSD, posttraumatic stress disorder.

Critical-care phase (session day 4 and day 8)

(1) From hospital admission until the majority of signs of infections and inflammation are recovered.
(2) The emphasis in the treatment of a patient is necessarily on intensive medical care to resolve physiologic crises.
(3) This period is psychologically critical as well. A patient experiences great anxiety during much of this time. Fear of death blends into fear of body aches, fever, chest infections, and fear of treatment procedures. A multitude of organic factors stemming from both the inflammation and its treatment, as well as premorbid conditions, can all contribute to psychological symptoms of panic, anxiety, sleep disturbance, and transient psychosis, which may be observed among adolescent and adult patients.
(4) Pharmacological interventions to manage pain and anxiety should be instituted and, along with psychological interventions can diminish anxiety.
(5) Objects that are familiar and comforting can be placed in the patient's view so that the patient can observe them. The patient's environment should be as soothing as possible.
(6) A schedule that approximates a regular wake/sleep cycle helps a patient begin to feel normal.
(7) Staff interacting with patients during this phase must be willing to listen to patients' anxieties and reassure them that the nightmares and vivid memories are normal aspects of recovery.
(8) Staff can help patients to stay mindful, focus on the present time, and not to be withdrawn.
(9) During the critical-care phase, families of patients have to be involved in support process as they may be suffer from acute stress symptoms, which may affect them and the patients negatively.
(10) Staff will schedule psychiatric assessment of symptoms of anxiety, depression, and stress.

In-hospital recovery phase (session day 11)

(1) In this phase, patients are just beginning to recover from symptoms of chest infections and fever and

waiting for the results of PCR to be discharged. Their anxieties now are increasingly about the future and less about the past and present.
(2) Emotional lability and anger are typically observed in patients during this time, especially if the results of investigations were unpredictable.
(3) Help the patient to express his anger in a suitable way and to deal with his guilt, depression, hopelessness, and fears about his family. Staff member must consider the patient's intent of self-harm and assessment to deal with this intent professionally.
(4) Psychotherapeutic work at this phase intensifies and is largely focused on working with the rest of the team to help patients combat feelings of hopelessness and helplessness, especially if the results of PCR are positive. Psychotherapists give honest but hopeful appraisals that emphasize ability and minimize disability.
(5) A psychotherapeutic challenge of this phase is to accept and validate the patient's emotional demonstrations as normal behaviors in the recovery process while also setting limits on the ways in which the emotional disturbance will be expressed.
(6) The staff must demonstrate positive regard and acceptance of the patient while also helping the patient to exercise control over destructive behaviors. At times, they must impose external limits to protect the patient.
(7) Visual images of COVID-19 patients' survivors telling their stories and presenting themselves in daily-life activities on film or video can aid in accomplishing this purpose. Groups of patients and/or families of patients at recovery and rehabilitation have been helpful in providing information, emotional validation, and support, as well as reinforcing the concept that it is possible to survive and live acceptably happy lives.

Reintegration phase (session day 13)

(1) Although plans for a patient's discharge to outpatient status are developed from the time of admission, very specific plans must be made in the final days of hospitalization. A major objective currently is to facilitate a patient's re-entry and reintegration into life at home. Returning home means re-engaging in social interactions with the larger community of extended family, friends, and strangers.
(2) Patients as well as family must prepare for those encounters.
(3) Families and patients alike are often ambivalent about leaving the safe environment of the hospital. Family members may also express concerns about their ability to continue the time-consuming physical care of the patient while resuming their usual responsibilities. Patients may doubt their abilities to resume former activities. As discharge approaches, anxieties intensify, and patients can be expected to evidence some regressive behaviors.
(4) Psychotherapeutic activities of this phase involve preparation of patient and family for the difficulties that can be anticipated at discharge. Issues such as how to respond to people who stare or, recurrence of symptoms of posttraumatic stress, sleep disturbance, and irritability should be discussed during the days prior to discharge.
(5) The patient and family can benefit from the opportunity to rehearse outpatient care while still able to consult with the team for direction and support. Rehearsals are opportunities for all involved to experience difficulties in a safe environment and to plan corrective actions.

Rehabilitation phase, postdischarge (session day 15) discharge from acute inpatient treatment does not signify that a patient is well.

(1) Patients must confront and may experience a delayed grief reaction. Upon leaving the protective hospital environment, symptoms of posttraumatic stress that had remitted in the hospital may recur.
(2) During this time (which may continue for many months), patients need a great deal of support and encouragement. They need to feel that the difficulties involved in rehabilitation will eventually lead to greater comfort and satisfaction.
(3) They must be reminded of the strengths they have already demonstrated in surviving in order to encourage their continued belief in themselves. They need someone to help them appreciate even small successes.

Assisting with death

(1) Treatment plans and programs must be based on an assumption of life beyond the hospital; however, death also occurs, and psychosocial treatment planning includes plans for assisting patients in living to the cessation of life.
(2) As part of such a plan, the patient's family must be aided in preparing for and enduring bereavement. In this event, supporting and enhancing whatever

coping strengths the family manifests is the primary task for psychotherapy.

(3) Most families initially deny the possibility of death, appearing not to hear an unwanted prognosis. Staff can allow the family to maintain hope while subtly preparing them with honest statements that pose death as an outcome, which is possible to accept. Comforting the bereft and helping them to care for themselves, physically and spiritually, are essential elements of a plan that facilitates the family's ability to participate in the process.

(4) Keeping the family informed about changes in the patient's condition and actively supporting, sometimes instructing, them in continuing their relationships with the dying patient, help the patient and family through this difficult event.

(5) At the time of death, the staff can psychologically support the family by assisting them through the necessary paperwork (e.g. signing consents for release of the body) and in allowing them quiet, private time with the deceased loved one before the body is removed. A death occurring in the context of family acceptance is more easily accepted by staff. Nevertheless, death of a patient is always sad and may elicit a wide range of strong emotions among the members of the work team.

(6) Structuring a time for debriefing and validating the feelings of staff members who want to talk about their experience can be helpful in maintaining the morale of the team.

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Authors' contributions

Mohamed R. Soltan designed the main idea of this intervention, and designed the review. Mariam E. Dawoud translated the assessment tools in Arabic, designed the Google Form, reviewed the study protocol, and provided substantial input to the paper. All authors critically reviewed drafts and approved the final paper.

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Conflicts of interest

There are no conflicts of interest.

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