

Impact of Interventional Education to Support Using Cognitive Behavioural Therapy Among Adult Patients During COVID-19 Pandemic on Nursing Practice

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ABSTRACT

Pandemic situations may contribute to the psychological impact on the community. This study was designed to enlighten nursing students at the college level on Cognitive Behavior Therapy (CBT). Students need to practice this therapy to overcome the anxiety, stress, and other psychological shock of the patient admitted to the hospital with the diagnosis of COVID-19. A one-group pre-test and post-test design were selected. In this study 35 nursing students undergoing 4th year of baccalaureate nursing program during an internship period at the College of Applied Medical Sciences, King Khalid University (KKU), Saudi Arabia were chosen as convenience sampling. This study was carried out during the academic year 2020-2021. Pre-test data was assessed using 20 questions about knowledge, and 10 questions associated with an attitude of resolving CBT. Teaching the CBT was carried out after the pre-test, using same question post-test data was collected after a one-week period. The responses got were exposed to statistical analysis using SPSS. The results showed significant differences between pre-test and post-test use on knowledge and attitude, also significant differences were identified in the attitude that "more effective treatment for psychological problem patient". Based on the study data, the results illustrated that nursing students require practice with CBT. If students have knowledge of this therapy and an attitude toward implementing this therapy, they will look at changes. If the patient is admitted to the hospital, healthcare professionals give more importance to physical health, and psychological well-being, these kinds of therapy help the patient overcome the anxiety and stress during hospitalization

Keywords: Interventional education, Cognitive Behavior Therapy (CBT), Nursing practice

INTRODUCTION

In the city of Wuhan, China, in December 2019 rare cases of subjects with pneumonia triggered by the new Coronavirus (COVID-19) were recorded [1], and the blow-out of the virus developed a worldwide health risk [2]. Several viral diseases in the past

20 years including severe acute respiratory syndrome (SARS) in 2003, influenza virus with the H1N1 subtype in 2009, Middle East Respiratory Syndrome (MERS) in 2012, and Ebola virus in 2014 been identified [3]. A broad review of psychological impact has been experienced

during the Infection episode, at singular, local area, public, and global levels. Individuals are bound to become ill or kick the bucket, feel weakness, and be generalized by others [4]. The pandemic has affected public emotional wellness, which can even prompt mental emergencies [5]. Early distinguishing proof of people in the beginning phases of a mental problem makes the intercession procedures more successful. Well-being emergencies, such as the Coronavirus pandemic, lead to mental changes, in the clinical specialists, yet in the residents, and such mental changes are impelled by dread, tension, gloom, or instability [6].

The pandemic situation affects people's routine life and leads to psychological impacts due to this impact; people may have nervousness and anxiety. Recent research studies showed that people in isolation periods and quarantine experience constant levels of stress, anger, anxiety, and confusion [7]. Most of the studies stated about the psychological impact during the COVID-19 pandemic have reported that the affected individuals show psychological impacts such as emotional distress, depression, mood swings, stress, irritability, insomnia, attention deficit disorder, post-traumatic stress, and anxiety [8]. Some researchers found that regular watching of media news also leads to stress. At present situation, it is difficult to predict the psychological impact of COVID-19 [9].

Cognitive Behaviour Therapy alludes to a class of intercessions that share the fundamental reason that psychological problems and mental trouble are kept up with by psychological variables. The central reason for this treatment approach, as spearheaded by (Beck,1970) and (Ellis,1962), holds that maladaptive insights add to the support of passionate trouble and social issues. As shown by Beck's model, these maladaptive insights incorporate general convictions, or compositions, about the world, oneself, and the future, leading to explicit and programmed contemplations circumstances. The essential model places

that restorative methodologies to change these maladaptive comprehensions lead to changes in passionate misery and risky practices [10]

Cognitive Behaviour Therapy showed adequacy has provoked requires its expanded scattering to routine clinical practice settings. For the far and wide scattering of CBT to be fruitful in accomplishing effects like the first viability preliminaries, there must likewise be a successful spread of CBT-preparing rehearses. CBT preparation isn't proof-based. This result analyses what can be gained from the existing investigation into the adequacy and viability of CBT preparation [11].

Most people suffering from psychological problems never take treatment at the initial stage of illness. Those who have severe problems consult the general physician for treatment and not showing interest to consult a psychiatrist. Counseling is done for the patient by the clinical psychologist with medical management. This was accepted by the patients and also other healthcare team members. CBT is effective management for treating depression, with the benefit of reduced rates of long-term relapse. CBT is effective when given by treating doctors, but most doctors do not have the time to undergo training to practice this technique. some researchers assessed the effect of teaching general practitioners' skills in brief CBT improved their attitudes to the management of depression and the outcomes of their patients with common mental disorders [12].

The researcher examined the effect of CBI on the nurses' sense of coherence (SOC), perceived stress, and mood states by using the randomized controlled study to evaluate the effectiveness of Cognitive Behavior Intervention (CBI) comprised of 16 meetings for cognitive intervention and stress-reducing behavior skills. The study consists of 36 nurses and is divided into two groups an experimental and a control group. This study found that the CBI group had significantly decreased fatigue, increase

SOC, mood reduce levels of stress. These findings suggest that CBT intervention was effective to maintain psychological feelings among nurses. In this study, the long-term effect of CBT was not assessed, used a small sample so the study result was not generalized [13].

This study aimed to give education to the nurses who are working in the clinical area to help them overcome psychological issues such as stress and anxiety and through them, the patient also benefited to overcome the psychological problem such as anxiety and stress in certain illnesses from December 2019 the whole world is stressed about the coronavirus infection and the complication of the disease. Stress about the condition is there is no particular treatment and the spreading of the disease is higher, to reduce the spreading of the disease people are advised to be quarantined and this led to stress and loneliness, in the hospital the infected patients are isolated. Due to the illness, fear of death separated from the family all these aspects make the patient in psychological distress. To avoid such problems and make the patient comfortable at the hospital and at home-cognitive behavior therapy helps, a lot of studies about this therapy have proven in other psychological conditions. This study taken to identify the effect of teaching about cognitive therapy was implemented among nursing students whereas internship training.

MATERIALS & METHODS

A one-group pre-test post-test study was carried out with 35 samples at the college of applied medical science, Muhayil in the academic year 2020-2021 after approval of the ethics committee. The inclusion criteria were female nursing students who completed the Baccalaureate Nursing program. Informed consent was got from the subjects. In the present study, convenient sampling techniques were adopted. The purpose of the study was explained to the sample and informed about the data that will be used only for research purposes and will be kept confidential. Further, the researchers assured the participants that participation was voluntary and that they could withdraw from the study with no negative consequences. For conducting the pre-test, the questionnaire was distributed to the sample it comprises demographic data such as age, internship training in a government hospital or private hospital, whether having experience in the care of the COVID-19 patient, knowledge regarding cognitive behavior therapy (20 questions), and attitude about the therapy (10 statement). After completion of the pre-test, information regarding cognitive behavior therapy was presented to the sample through PowerPoint and explained how the therapy can be provided to the patient. Post-test was carried out after a one-week period with the same questionnaire, which is used during the pre-test.

RESULT

Table 1. Mean Score of Pre and Post items on knowledge about cognitive behaviour therapy among nursing students n=35

Items	Pre-Mean	Post-Mean
What is mean by CBT	1.55	1.79
What would a CBT therapist do to help the patient	1.73	1.94
What technique would a CBT therapist likely use to help patient identify and recognize their cognitive disorder	1.73	1.93
What is the role of the therapist in CBT	1.61	1.91
Which patient benefits most from the time-limited CBT	1.48	1.76
What is the name of the technique CBT therapist use to challenge client's maladaptive thoughts and false belief	1.70	1.94
In order for a therapy to be "cognitive-behaviour" it must be based on which one of the following ideas	1.39	1.61
Which one of the following is not proposition of cognitive behavioural therapies	1.55	1.76
Which one of the following constructs associated with cognitive behavioural therapies	1.24	1.70
Which one of the following choices list all components of CBT case formulation	1.48	1.85
Which one of the following theorists developed the concept of self-efficacy that has been used as a cognitive-behavioural theoretical explanation for how people change	1.52	1.79
Which one of the following is not the indication of CBT	1.76	1.97
Which one of the following strategies used in CBT	1.61	1.85

Items	Pre-Mean	Post-Mean
Why the CBT is effective therapy	1.67	1.88
Which one of the following is the steps of CBT	1.15	1.48
Which one of the following is not the intervention in CBT	1.45	1.82
What is the drawback in following CBT	1.24	1.55
Which one of the following is the technique of providing CBT	1.67	1.82
Which one of the following is the benefits of the CBT	1.82	1.97
CBT therapy period is	1.30	1.73

Table 1 showed knowledge of cognitive behavioral therapy post-test knowledge mean score was improved compared to the pre-test mean score. This revealed that the nursing students understood the therapy. This will help them practice themselves and the patients who have anxiety and stress because of the illness, not only the infectious disease and other illnesses. If the

patients are admitted to the hospital for any chronic illness because of the diagnosis and treatment, the financial burden, away from the family illness, makes a psychological impact on the patient. The nurses are the person who is always with the patient to understand the psychological issue of the patient and provide a relaxation technique to overcome stress and anxiety.

Table 2. Pre- test and Post- test Mean score of Attitude towards implementing cognitive behavior therapy

Items	Pre-Mean	Post-Mean
It is effective therapy	1.94	2.00
It is more expensive	1.45	1.70
Lack of privacy and security	1.33	1.76
Only the psychologist can provide CBT	1.45	1.79
It is time consuming procedure	1.70	1.91
I am comfortable in providing CBT to the patient	1.94	2.00
CBT support the family and friends of the patient	1.91	2.00
It reduces the duration of taking medication	1.79	1.94
People is not willing to change the behavior	1.36	1.76

Table 2 showed the attitude toward implementing cognitive behavior therapy among nursing students in implementing to patients who are in need to overcome psychological issues such as anxiety and

stress. The results revealed a positive attitude toward the therapy and this will help them implement the therapy in the hospital, whoever is in need

Table 3. Comparison between pre-test and post- test knowledge on cognitive behavior therapy

Items	t	Sig
What is mean by CBT	3.20	0.003*
What would a CBT therapist do to help the patient	2.93	0.006*
What technique would a CBT therapist likely use to help patient identify and recognize their cognitive disorder	2.94	0.006*
What is the role of the therapist in CBT	3.73	0.001*
Which patient benefits most from the time-limited CBT	3.46	0.002*
What is the name of the technique CBT therapist use to challenge client's maladaptive thoughts and false belief	3.20	0.003*
In order for a therapy to be "cognitive –behaviour "it must be based on which one of the following ideas	2.93	0.006*
Which one of the following is not proposition of cognitive behavioural therapies	2.94	0.006*
Which one of the following constructs associated with cognitive behavioural therapies	5.16	0.000*
Which one of the following choices list all components of CBT case formulation	4.28	0.000*
Which one of the following theorists developed the concept of self-efficacy that has been used as a cognitive –behavioural theoretical explanation for how people change	3.46	0.002*
Which one of the following is not the indication of CBT	2.95	0.005*
Which one of the following strategies used in CBT	3.20	0.003*
Why the CBT is effective therapy	2.94	0.006*
Which one of the following is the steps of CBT	4.00	0.000*
Which one of the following is not the intervention in CBT	4.28	0.000*
What is the drawback in following CBT	3.73	0.001*
Which one of the following is the technique of providing CBT	2.39	0.023*
Which one of the following is the benefits of the CBT	2.36	0.021*
CBT therapy period is	4.86	0.000*

Table 3 showed the significant difference between the pre-test and post-test knowledge of CBT. This revealed that there is a significant difference between pre and post-test, the

students gained knowledge on cognitive-behavior therapy, and helps them to practice in the clinical area

Table 4. Comparison of pre-test and post- test on attitude among nursing students regarding cognitive behavior therapy

Items	t	Sig
It is effective therapy	1.44	0.160NS
It is more expensive	3.20	0.003*
Lack of privacy and security	4.86	0.000*
Only the psychologist can provide CBT	4.00	0.000*
It is time consuming procedure	2.93	0.006*
I am comfortable in providing CBT to the patient	1.43	0.161NS
CBT support the family and friends of the patient	1.79	0.083NS
It reduces the duration of taking medication	2.39	0.023*
People is not willing to change the behavior	4.56	0.000*

Table 4 showed the significant difference between the pre-test and post-test on attitude regarding implementing CBT. This revealed that there is a significant difference between

pre and post-test, this indicates the students have a positive attitude in implementing the therapy to the patients to overcome the psychological issues in the hospital

Table 5. Correlation between pre and post attitude in relation to cognitive behavior therapy

Item	Pre-Mean	Post Mean	Correlation	t	Sig
It is more effective treatment for psychological problem patient	8.06	8.91	0.793	4.24	0.000*

Table 5 shows there is a significant difference in pre-and post-test attitude among nursing students in providing cognitive-behavior therapy and there is a

positive attitude in aspects of this therapy is more effective for the patient who has psychological issues such as anxiety and depression and so on

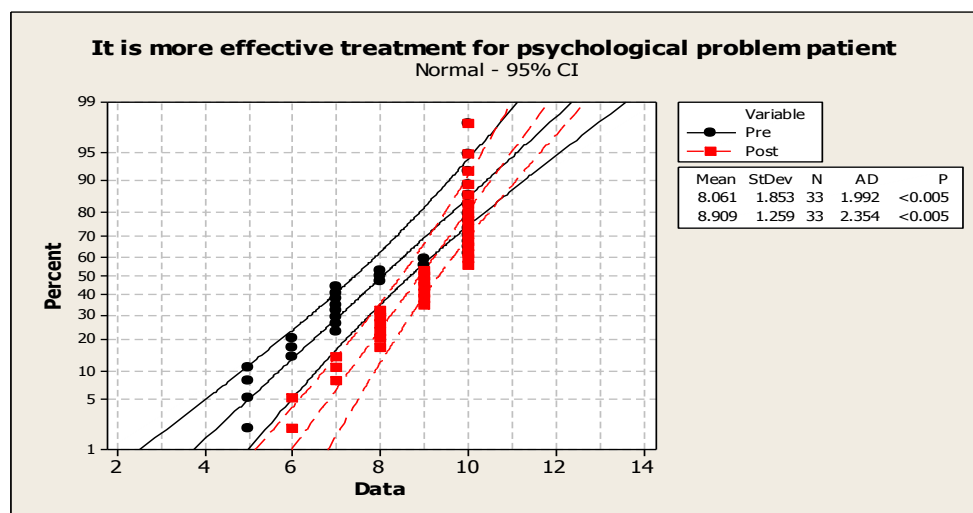


Fig. 1 Pre and Post Probability on Attitude on - It is more effective treatment for psychological problem patient

DISCUSSION

The present study aimed to assess the Impact of interventional education to support using cognitive behavioral therapy (CBT) among adult patients during the COVID-19 pandemic as nursing practice. Data analysis of the present study shows that the intervention impacts the knowledge of the nursing students and also it shows a positive attitude towards providing

cognitive behavioral therapy to the patients who have psychological issues. The present study was supported by another study conducted by the Nursing and Midwifery Council [14] which stated that nurses require new programs to adopt a more holistic approach to nursing and to increase their knowledge other than nursing, this is a big challenge for those who are already qualified. Nurses are required to assess and

teach those student nurses who may be conceptualizing patient cases differently and who may have been taught nursing interventions. Another challenge that nurses may face is the gap between knowledge and skills in implementing CBT. Some researcher posits that lack of training is among the factors that prevent the evidence-based practice from being delivered, a further challenge facing nurses may be the availability of funding for post-registration training [15].

A number of studies have suggested that CBT can assist in the reduction of healthcare use and costs. The researcher found that a 4-week CBT group intervention for COPD patients resulted in a reduction of episodes of psychological issues. Similarly, the other researcher [16] reported that, while a CBT program for chronic disease management had an immediate and sustained reduction in hospital admission and bed occupancy, it also offered an alternative to symptom palliation. Though this does not mean that all nurses will be required to train as CBT practitioners, it does require nurses to think about using non-traditional interventions in the hospital. Rather than seeing physical health problems as being determined by pathology or unhealthy lifestyles, nurses will be required to consider psychological precipitating factors involved in the illness. Perhaps, rather than relying on analgesics for pain control, nurses will be required to offer some form of psychological help that will assist the patient with coping and dealing with the pain presented.

Implications for practitioners

As clear from the aftereffects of this investigation, intellectual specialists rehearsing in nursing schools are urged to apply psychological, and social treatment for their expert practice. Clinicians should guide their understudies in surveying the mental pain of the patient and carrying out psychological, and social treatment. Proficient well-being instructors and clinicians should mean to execute

psychological, and social treatment preparing programs in nursing school. Under our examination's proposal, this treatment can be joined into the nursing education program and the preparation should be given by the analyst to rehearse treatment in the clinical setting so every patient needing this treatment will have profited from it.

CONCLUSION

This study shows the impact of education regarding CBT among nursing students. From the results, education influences knowledge about CBT, and the attitude toward providing this therapy also changed. Education has a lot of impact on the aspect of nursing practice, if the nurses came to know about any nursing intervention within their limit of practice they try to implement the intervention and note the effect of the intervention, and implement the intervention in various settings in the hospital and health care professionals who are working under the stressful situation also need to practice this therapy and get benefit in using such non-pharmacological therapy

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