

INDIVIDUALS WITH PSYCHIATRIC
DISORDER EXHIBITING ORAL
MANIFESTATIONS DURING SEVERE
ACUTE RESPIRATORY SYNDROME,
CORONA VIRUS DISEASE-19 AND
OMICRON PANDEMIC ERA- AN
ORIGINAL RESEARCH

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**INDIVIDUALS WITH PSYCHIATRIC DISORDER EXHIBITING ORAL
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Abstract:

Background:

Poor oral hygiene status is witnessed in patients with schizophrenia disorder. Daily routine lifestyle of the patient is affected due to schizophrenia. These studies focus on the patients with schizophrenia disorders during the severe acute respiratory syndrome, corona virus disease-19, omicron pandemic particularly in relation to the oral condition.

Methodology:

Studies focusing on patients with schizophrenia disorder in relation to oral health were ³ described in terms of preferred reporting items for systematic reviews and meta-analyses.

Results:

Personal factors such as resilience, sense of coherence, hope, self-esteem, and self-determination were considered among the 10 studies included. Peer review and rehabilitation programmes which are the part of environmental factors are also considered. Among all the factors which was most influential was dental stress pertaining to schizophrenia patients.

Conclusions:

Oral health of schizophrenia patients is highly influenced by the coping strategies. Future research should focus on translation process dentally and mentally.

Keywords

Dental, psychiatry, neurological, quality of life, stress

Background:

Oral and maxillofacial disorders, endocrine pathology, infectious diseases, neoplastic conditions, respiratory disorders, gastro intestinal upset, and cardiovascular pathologies may be witnessed in these patients. Global population about 0.7% to 1% accounts to schizophrenia. Gain of weight, disturbances to the metabolic system and poor oral hygiene status are the main side effects from psychiatric medications^{1,2,3,4,5}. Moreover, the side effects also include dry mouth in case of anti-psychotics whereas clozapine induces increased salivary secretion which is also common first generation anti-psychotics and increased smoking habits. Dental treatments in such patients is really challenging because these patients develop neurological complications and the anti-psychotic drugs in order to avoid stressful and aversive stimulations. Main obstacles in case of learning new strategies which might lead to improvised health includes personality disorder, dysfunctional self-esteem and social life ultimately leading to isolation and victimization^{6,7,8,9,10}.

Objective:

This study focuses on patients with neurological complications in conjunction with oral manifestations.

Methods:

Inclusion criteria involve prospective and retrospective studies. Editorials and conference abstracts were not included. A detailed scientific literature exploration was done. The search terms were Oral, dental health, quality of life, psychiatry, schizophrenia, maxillofacial, hygiene, stress, and psychology. Importance was given to full studies pertaining to the topic involved.

Results:

The basic search included 50 studies which led to narrowing down to 20 studies, entirely based on inclusion and exclusion criteria and finally ending up in 10 studies to be included in systematic review.

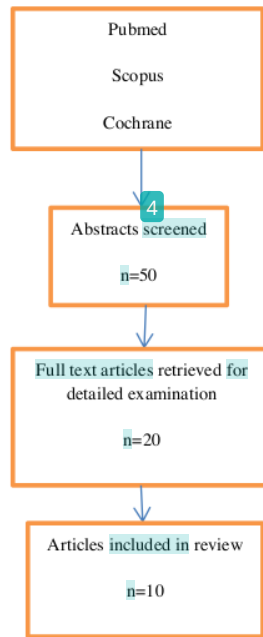


Fig1-Diagramatic representation

Features:

Scientific literature in English language was included. Participating countries were France, Canada, China, Thailand, Malaysia, Romania, Syria and India.

Table A

Factors influencing coping strategies

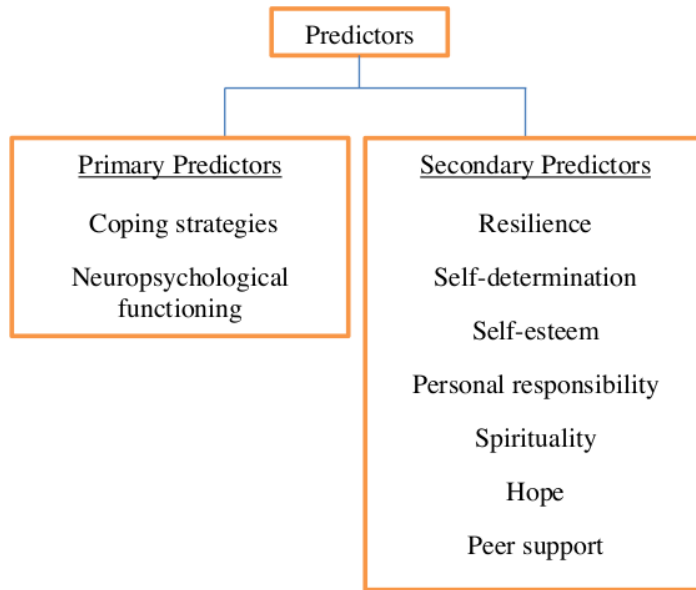
Author	Year	Country	Description
Frederic Denis et al	2020	France	Preferred treatment was tooth extraction.
Francesca Siu Paredes et al	2019	France	The coping strategies were favourable.
Mi Yang et al	2018	China Thailand	Poor oral hygiene witnessed.

Author	Year	Country	Description
Sathaka Thatreenaranon			Teamwork between dental and mental healthcare workers preferred.
Frederic Denis et al	2017	France	Oral health and hygiene is mandatory.
Swati Gupta et al	2016	China	Medical professionals need to work in conjunction with dental professionals. And hence knowledge and awareness of different aspects of this disease will help dental professionals in diagnosis and planning of better treatment strategies for this specific population.
Mang Chek Wey et al	2015	Malaysia	Dental disease in people with schizophrenia deserves the same attention as other comorbid physical illness. The disparity in oral health is most marked for dental decay. Oral documentation is mandatory.
Andreea-Silvana Szalontay et al	2021	Romania	Functional habits and para-functional habits to be noted.
Bahaa Aldin Alhaffar et al	2018	Syria	Gingiva more affected. Increased incidents of dental caries. More number of teeth was missing. Many tooth restorations were done.
Dennis Frederic et al	2016	France	Validation to be done both in psychiatry and dentistry ^{11,12,13,14,15,16,17,18,19,20} .

Discussion:

The main domains are coherence, personal responsibility, religion, socialism, peer group, spirituality, self-confidence, stress, stigma, self-determination, hope, resilience and neuropsychology. Future research has to be done on areas like neuropsychological functioning with interlinked to coping strategies in patients with schizophrenia pertaining to oral health. There is an important relation between coping strategies and neuropsychology which might result in flexible adaptive mannerism. The main determinants for a person with schizophrenia to cop-up with the stress are problem solving skills, ability to access stored knowledge, strategies, planning and abstractive thinking. Emotionally focussed coping style is much more important traditional feature in healthy population^{21,22,23,24,25}. Resilience is an important factor in case of adaptive strategies, adverse events and positive oral health. There is a direct proportional relation between sense of coherence and mental health, whereas

indirect proportional relation between sense of coherence and physical health. Excellent positive outcome and good oral hygiene are seen in patients with strong to moderate sense of coherence. Hope is defined as an expectation of a positive welcome and achievements and goals of people's own efforts. The main paradigm of hope includes cognition, motivation, behaviour and emotion. There is inter-link between self-determination, hope, in conjunction with depression in patients with schizophrenia. There should not be social inclusion, exclusion and discrimination. Exercise influences the risk of the disease even in the presence of high stress and can play a major role as a productive factor. In schizophrenia, the main key factor is powerlessness. This powerlessness can be overcome by decision making, motivation, self-responsibility, coping strategy and emotional well-being which are all the features of empowerment^{26,27,28,29,30}. Loss of function, aesthetics, and occlusion can be restored by proper dental treatments. This leads to positive social impact. Patients who are neurologically affected can have the ability to cope-up with the stress by two kinds of evaluations such as threat and challenges which are the successors of nature and degree of risk^{31,32,33,34,35}. The primary predictors of stress are coping mannerism and neuropsychological function whereas the secondary predictors are emotion, resilience self-esteem, social support and self-efficacy. In order to maintain resilience, coping building, social support or peer supports depends entirely on a see through network without discrimination and excellent social interaction. In such stressful situations, we can help out the people by encouraging and supporting. Patients get benefitted and lead a better quality of life when joining a peer group rather than isolation. Negative aspects of stress can also be prevented with the help of religion and spirituality^{36,37,38,39,40}.



This study deals with patients with schizophrenia pertaining to oral health there by improving their quality of life. There is a strong relationship between dental health behaviour and psychology, symptomatology, self-determination, resilience, sense of coherence, neuropsychological functions, self-esteem and self-stigma. Poor dental environment can be overcome by using peer support and rehabilitation programmes^{41,42,43,44,45}. Main important factor to cope with the oral health problems for a patient with psychiatry disorder is the coping strategies. Coping strategies refers to efforts which are done in a conscious manner to solve problems and fulfil daily life needs. Subjective coping strategies refer to self-esteem and hopelessness whereas objective coping strategies refer to symptom severity. In case of increased stress, concentration, effective coping strategy depends on independent decision making, motivation and emotional well-being. Till date, there is a scarcity of literature among the scientific community^{46,47,48,49,50}. Usually, patients with schizophrenia have negligence over their self-care both physical and oral, hygiene, cleanliness, lifestyle, dietary habits, use of psycho active substances, etc. Sufficient care can be provided to the patients with schizophrenia by clearing the obstacles which are the mental illness fear and deficient training, cost along

with environment. Promotional programmes can be done via social support group or peer group and learning programmes^{51,52,53,54,55}. Motivational programmes focus on self-stimulation, better dental hygiene, clock index scores and oral prophylaxis which include the most important factors like tooth brushing and mouth washing^{56,57,58,59}.

Conclusion:

This is the first and foremost study which explains the inter-link between psychiatry and dentistry. Our study highlights coping strategies which are the most important primary indicators to deal with the stressful conditions. This may ultimately result in good quality of life thereby fulfilling the daily needs of the patients. Moreover, oral health programmes can be done in the multi scale or large scale priorities to focus on oral and maxillofacial pathologies as well.

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