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Architectural Interventions in Psychiatric Centre towards Treating Social Isolation: A Review

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Abstract: ***Tackling isolation is much more complex than bringing people's private space physically closer. Bullying and harassment among peers, adult abuse and neglect of children, and suicide as a kind of self-abuse are the primary cause of social isolation. To improve the overall well-being of human beings, mental health should be kept in the first place for that.***
Since mental illness is sometimes stigmatized, sufferers may feel humiliated or embarrassed about needing treatment. Even worse, mental health facilities are stigmatized as depressing, institutional places where no one wants to spend time. So, the study of alternate method of treatment is required which include architectural interventions.
Keywords: Psychiatric Centre, social isolation, depression, architectural interventions, biophilia.

I. INTRODUCTION

Social isolation is the lack of social contacts and having few people to interact with regularly. Loneliness and social isolation are now widely acknowledged as severe public health problems.
They could be signs of social isolation:

1) Depression and anxiety
2) Aggressive behavior
3) Lethargy
4) Insomnia or light sleep
5) Memory loss
6) Poor self-care



Figure 1: Causes of social isolation (source: internet)

Isolation, mental illness, and fatigue are increasing daily among all age groups and gender, people's mental health problems some time so severe that they end up to suicide. To improve the overall well-being of human beings, mental health should be kept in the first place for that.
The goal of this study is to gain a better understanding of how isolation and its major problems depression and some other mental illness can be improved and treated through architecting interventions.

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A. Objective

1) Mental health is considered as taboo most of the time, so to create an environment is important, where people don't face any hesitation to come over to treat their problems just like other health care premises.
2) Understand the major problem occurs because of social isolation, and find the scope of architectural interventions into their treatment methods.

II. GLOBAL SCENARIO OF MENTAL HEALTH

According to WHO, Depression is one of the leading explanations for the disability. Depression is a common illness worldwide, with an estimated 3.8% of the population affected, including 5.0% among adults and 5.7% among adults older than 60 years. Approximately 280 million people in the world have depression. Suicide is the fourth leading cause of death among 15-29-year-olds. Over 700000 people die due to suicide every year. People with severe mental health conditions die prematurely – as much as two decades early – due to preventable physical conditions. (WHO,2022, mental health)

Individuals with mental health disorders frequently face significant human rights breaches, bias, and stigma regardless of developments in some different nations.

There is a need to feed more investment in every aspect of mental health, including awareness campaigns to encourage comprehension and lessen stigma, initiatives to improve access to effective psychiatric treatment, and research to find novel approaches and enhance those currently available for all psychiatric disorders.

III. MAJOR PROBLEM THAT OCCURS BECAUSE OF SOCIAL ISOLATION- "DEPRESSION"

A. Signs, causes, and consequences of Depression

Many people are bound to experience depression at some point in their lives. 9.1 percent of respondents reported having significant or slight depression right now, according to the Centres for Disease Control and Prevention. If untreated, depression can make it significantly harder for you or someone you love to live life to the fullest and, regrettably, motivate a person to attempt suicide.

B. Depressions in their different manifestations

1) Major Depressive Disorder
2) Chronic Depression/Dysthymia
3) Atypical Depression
4) Bipolar or Manic Depression
5) Seasonal Affective Disorder (SAD)
6) Postpartum Depression
7) Psychotic Depression

C. Causes depressive disorders

1) It might be inherited.
2) Depression can arise from personal trauma and stressors like failing relationships or a job layoff. Conflict with relatives and close friends can lead to social isolation, which may be a contributing cause.

D. Depression warning signs

1) *Emotional Signs*

a) Withdrawal from social activities
b) Loss of interest in once-enjoyed pastimes
c) Constant sorrow or irritation
d) persistent negativity
e) feelings of inferiority and self-hatred

2) *Physical Symptoms*

Depression has physical consequences as well as mental ones. Unpredictable sleep patterns, decreased hunger (or rise with atypical depression), persistent exhaustion, muscle pains, headaches, and back pain are a few of the physical symptoms.

IV. TYPES OF MENTAL HEALTH SOLUTIONS AND SCOPE OF ARCHITECTURAL INTERVENTION

No one method works for everyone in treating mental illness. Even persons having similar behavioral diagnoses can experience vastly different mental health issues.

Table 1: Scope of architectural intervention in type of mental health treatment.

Sr. no.	Types of mental health solutions	scope of architectural intervention
1	Psychiatric hospitalization	Low
2	Inpatient or residential mental health treatment	High
3	Outpatient mental health treatment	Moderate
4	Dual diagnosis treatment	Low
5	Psychotherapy	Moderate
6	Medication	Low
7	Complementary and alternative treatments	High

V. REVIEW OF INPATIENT WARDS: FOR A BETTER UNDERSTANDING OF THEIR PLACEMENT AND SCOPE FOR THE INTERVENTIONS

There is major 4 types of inpatient wards, categorized as per the severity of the treatment.

1) Intermediate/improved patients' unit- is intended to assist individuals who have either recovered after prolonged treatment or whose therapy entails a shorter hospital stay and who will likely be relieved in a few weeks or months from now.

2) Acute-care unit- Patients with severe mental illnesses who require extended hospital stays and specialized treatment are accommodated in acute-care units. Their Wards are single-storey in design because such patients are not anticipated to move higher.

3) Forensic unit- The Forensic Ward is designed to host criminals or offenders with mental illnesses who are hospitalized as a result of legal admissions. To protect the rights of other patients and guarantee sufficient police security, such patients had to be housed in separate Ward blocks.

4) Chronic-stay unit- Chronic Stay Units have been designed to house those chronically-ill patients who are unable to sustain lifestyles on their own, and, therefore, need external help to perform their daily chores. The majority of these patients are unlikely to be recovered and hence need hospitalization throughout the remaining part of their life. Additionally, a private outdoor recreation area or court must be made available to patients.

VI. HOW ARCHITECTURALLY ACHIEVE GOOD MENTAL HEALTH

1) *Biophilic Design:* It is a term used in the construction industry to describe how to use direct, indirect, and space and place variables to promote occupant connectedness to the natural world.

a) *Principal of biophilia:*

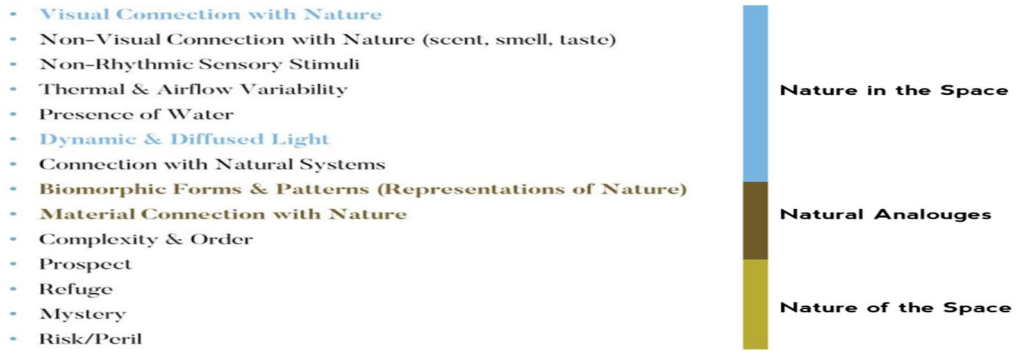


Figure 2: principles of biophilia

b) Benefits of biophilia

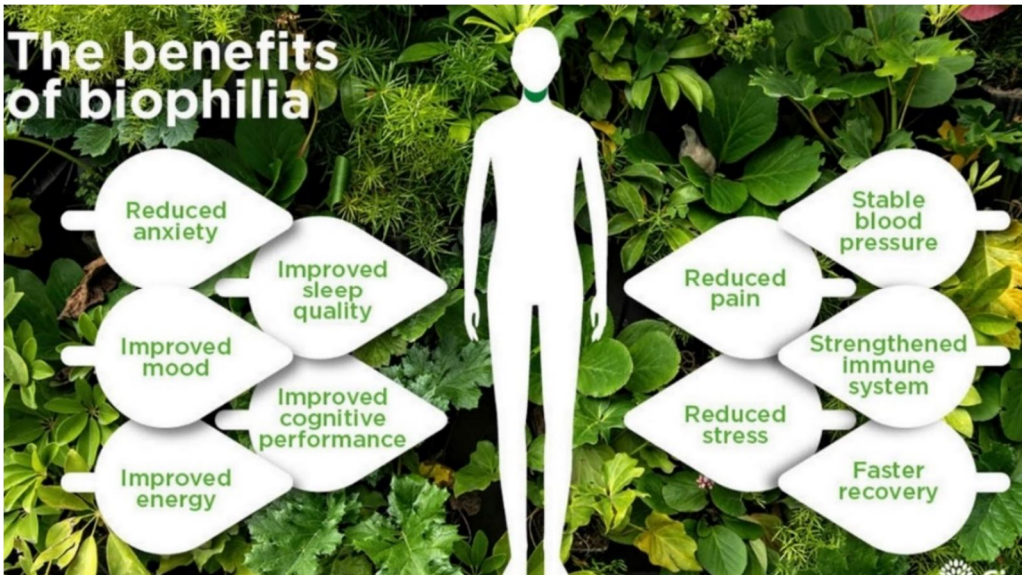


Figure 3 benefits of biophilia (source: https://www.cignaglobal.com)

2) Listing And Summarizing Architectural Interventions, Which Can Be Implemented For The Better Treatment Of Patients And In Achieving Good Mental Health

a) Natural Light: it is proven to be essential to our health and well- being. It also affect our hormones, metabolic functions, and immune system. In fact lack of daylight has been linked to sadness, fatigue, and mood disorder.

b) Easy access to the spaces: it is important for the patient admitted to the inpatient ward, and also for OPD patients who visit the centre premises. Not finding easy access can lead to more frustration and complications for the patient.

c) Use of Curvature: throughout a variety of research studies conducted, it appears that our brain has associated the visual of curves as signifying, a lack of threat (Jaffe, 2013)

d) Use of calm interiors: like installing buddha statues and other soothing pictures.

e) Sense of security: it can be achieved through proper placement of blocks in the site w.r.t. to other spaces, especially if a patient is admitted to a hospital. For better treatment patient should think they are in a safe place with safe people around.

f) Use of colour psychology: it is the study of how our brain perceives colour which can be linked to our feeling and emotion (Przybyla, 2016). While emotional responses to colours can vary based on culture, geographic location, personal experiences, and gender.



Figure 4: colours and their association with mental well-being

g) The Provision of additional space for leisure activities, such as workshops, gyms, and games, for the socialization and rehabilitation of each individual patient. Additionally, these areas ought to be artistically engaging.

VII. CONCLUSION

Critics may claim that making social isolation a health priority will take precious resources away from other urgent problems (such as addiction, violence, and poverty), yet tackling social isolation and loneliness may also aid in addressing these and other issues.
After analyzing the literature reviews and case study's merits and demerits, here we summaries some strong recommendations for the healing of mental patients other than the traditional procedures-

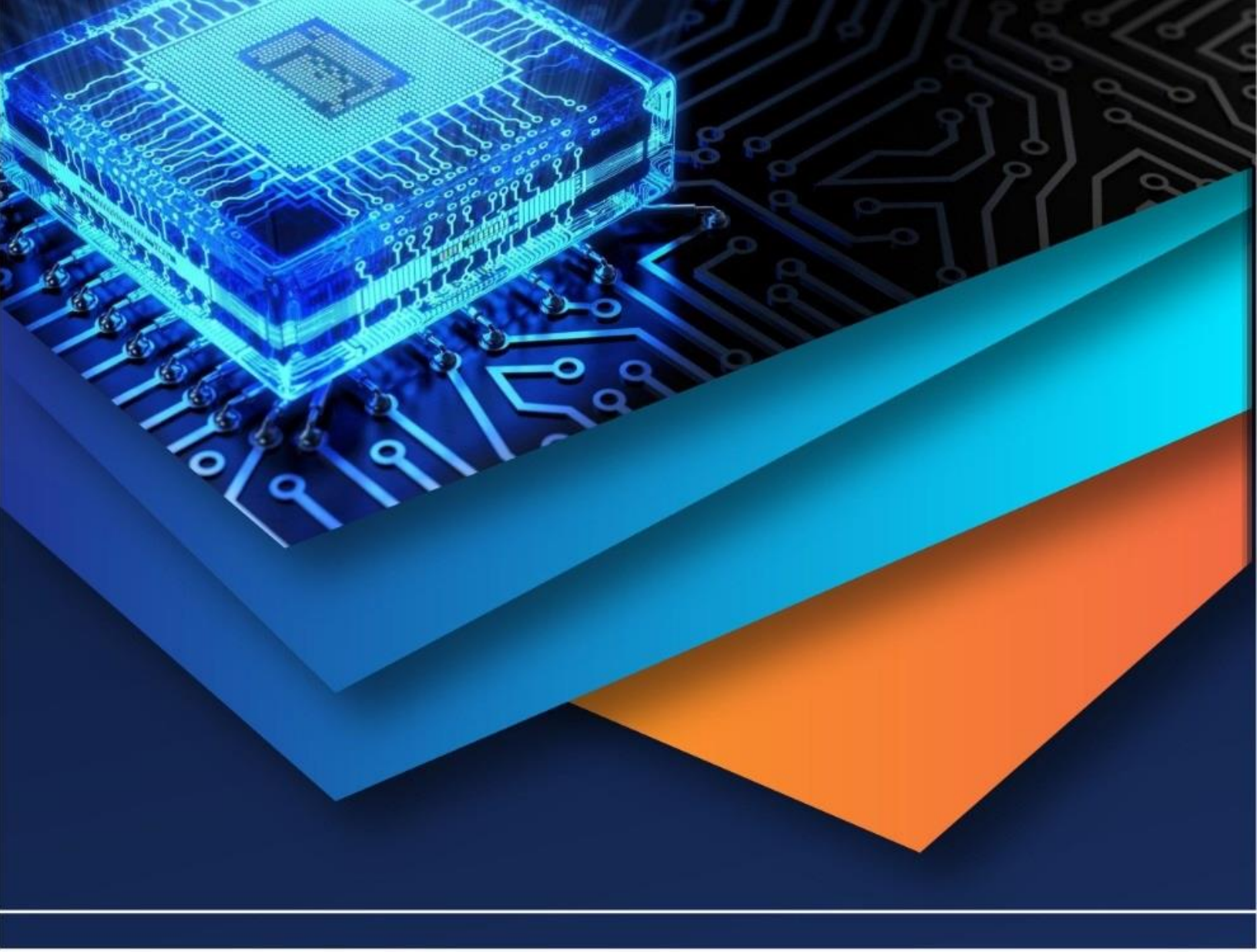
1) Recovery-focused mental health therapies are necessary.
2) Treatments for mental health need to be given in a setting that is therapeutically stimulating.
a) Comfortable like home
b) Friendly & informal setting
c) Physical and visual access to nature to aid in recovery.
d) Patient privacy, respect, and independence.
3) Services of mental health must able to be offered in a secure environment.
a) Reduce potential dangers.
b) Increase staff interaction and visibility with patients.
4) Services for mental health should be offered in environments that respect and can support a variety of patient populations and care requirements.
a) the dignity, safety, and privacy of female patients should not get compromised.

Despite using of architectural concept for patient's healing, we can't assure the complete treatment without medical indulgence. We can promote help but can not be used as an alternative treatment method.

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