DEPRESSION IN HOSPITALIZED PATIENTS : AN OVERVIEW

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ABSTRACT

OBJECTIVE

Mental health affects most people in this rapid world due to social and family stress which is also associated with the physical health of the patients. This study aims to describe the prevalence of depression in hospitalized patients with comorbidities and their effects in therapeutic outcomes

IMPORTANT FEATURES

PHQ-9, Back depression inventory andBDI – 2, Zung self - rating depression scale, CES – D, CDS. Hamilton depression scale (HAM-D), the beck depression inventory (BDI), hospital anxiety and depression scale (HADS),Montgomery-Asberg depression rating scale (MADRS) are the most important diagnostic criteria used. Bright light therapy stabilizes and enhance reduction of depressive symptoms. prealbumin may be a useful biomarker in assessing depression

CONCLUSION

Prevalence of depression was found to be high in hospitalized patient due to fear and stress especially cardiac patients. combination of pharmacotherapy and psychotherapy are good options to achieve therapeutic outcome.

KEYWORDS

Diagnostic criteria, bright light therapy, prealbumin, combination therapy

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INTRODUCTION:

Major depressive disorder may be defined as a disorder where an individual experience one or more major depressive episodes with history of manic, mixed or hypomanicepisodes.Addiction, substance abuse, suicidal thoughts, deaths are more common in adults. Depressive disorder and suicides tends to occur within families and first-degree relatives of patients are more likely to develop depression[1].Depressive disorder causes suicidal thoughts, disruption of interpersonal relationships, substance abuse, adverse outcomes which enhances the rate of morbidity and mortality[2].The American psychiatric association diagnostic statistical manual of mental disorders, fifth edition (DSM-5) classifies depressive disorders as disruptive mood dysregulation disorder, major depressive disorder, persistent depressive disorder, premenstrual dysphoric disorder and depressive disorder due to other medical conditions[3]. According to National comorbidity survey replication 16.2% of population had experienced major depressive disorder in their lifetime.

Majordepressive disorder is experienced by the people aged between 25 – 44 years[4]. Males are more prone to post stroke depression[5]. Women are more prevalent to depression than men[6] especially under 45 years of age[7]. The depression and depressive symptoms were found to be higher among outpatients in developing countries and their prevalence slightly decreased from 1996 to 2010[8]. Pediatric hospitalized patients are more prone to dysphoric mood and depression[9].

Aetiology includes single social, developmental or biological theory. More number of hypersomnia patients reported depressive symptoms with normal range of objective test with high level of sleepiness complaints[10]. Major cause for depressivesymptoms are due to changesinthe Brain monoamine neurotransmitters(norepinephrine,seroto nin,dopamine). Depression is highly prevalent in cardiovascular disease, hypertension, coronary artery disease, diabetes and geriatric patients[11]. symptoms of depressive disorder include insomnia, decreased sexual desire, mooddisturbances,fatigue,anxiety, suicidal thoughts[12].

Drugs like cocaine or amphetamines that produce acute rise in neurotransmitter availability do not have efficacy over antidepressants. The role of CNS 5HT activity in the major depressive pathology is suggested by selective serotonin reuptake inhibitors efficacy, desipramine which is an Anti – depressant has no effect on 5HT, whereas Tiapentine enhances the 5 HT uptake[13]. Circadian rhythm and sunlight exposure triggers and alters 5HT in the CNS which mediates seasonal depressive disorder that arises during winter and fall and resolves in summer and spring[14].

Depressive patients are observed with brain structural changes such as increased lateral ventricle size, large cerebrospinal fluid volume, small volumes of basal ganglia, large hippocampal volume, hippocampus frontal lobe, orbitofrontal cortex, gyrus rectus when compared to normal patients [15].

DIAGNOSIS AND ASSESSMENT:

Diagnosis includes variety of medical disorders like CNS diseases (parkinsonism, dementia, multiple sclerosis). Endocrine disorders, cocaine abuse, infectious disease, bipolar disorders, anxiety disorders[16]. A single question screening revealed 97% specificity and 32 % sensitivity[17], a two-question screening showed 97% sensitivity and 67% specificity in primary health care[18].

PHQ-9, Back depression inventory and BDI– 2, Zung self - rating depression scale, CES – D, CDS[19]. Hamilton depression scale (HAM-D), The beck depression inventory (BDI), Hospital anxiety and depression scale (HADS), Montgomery-asberg depression rating scale (MADRS) and geriatric depression scale (GDS) are valid for Parkinson's disease. Laboratory studies include CBC count, TSH, VITB12, RPR, HIV test, electrolyte, calcium, phosphate,

prealbumin,magnesium, BUN, LFT, blood alcohol level, blood and urine toxicology, ABG, dexamethasone suppression test, ACTH stimulation test, neuroimaging studies (CT, MRI, PET, SPECT) are some of the main screening instruments.

Depressionamong hospitalized patients are unrecognized, untreated, undiagnosed and are found to be associated with poor functional outcomes, worse physical health, return to hospital after discharge[20]. PHQ – 9 reveals that 17% and 10.5 % of hospitalized patients were diagnosed with major depressive disorder and other depressive disorder. DSM-5 criteria identified 12% of elderly with major depression, overall the number of comorbidities associated with depression is higher in major depressive disorder group than in normal[21]. Hamilton depression scale (HAM-D) showed high incidence of depression in isolated hospitalized patients[22].

Depressed cancer patients reported lower levels of cognitive, emotional depressive symptoms like worthlessness and suicidal thoughts, somatic depression symptoms was reported by 1 out of 5[23] ,27% in 257 subjects revealed by psychiatric examination shows major depression than in non-cancer patients which is similar to hospital anxiety and depression scale (HADS), higher with beck depression inventory – II (BDI – 44 %) and patient health questionnaire (PHQ – 56%)[24].On evaluating medical and demographic variables in depressed cancer patient showed greater degree of physical disability and poor social supports[25].Depression was found to be prevalent in Type 2 diabetes patients when patients were diagnosed with Charlson comorbidity index (CCI)[26]. When a group of 110 patients of pulmonary tuberculosis were diagnosed with Hamilton Rating Scale 59.6% were depressed which includes more males [27].

Bright light therapy stabilizes and enhance reduction of depressive symptoms[28]. Pulmonary rehabilitation, cognitive behavioural therapy (CBT) are beneficial in depressive patients[29]. Depression patients with elevated mania, MXD adolescents with elevated suicidal thoughts, anxiety, trauma is shown[30]. The validity and reliability of centre for epidemiological studies depression scale (CES-D) and patients health questionnaire – 8 (PHQ-8) are good but requires additional research[31].

Pre-albumin might be useful biomarker as it was associated with the levels post stroke depression at 1 month[32]. peer counselling, emotional support and counselling are beneficial[33]. Teens who have enhanced self-harmful symptoms must require psychiatric approach. PHQ-9 & MARDS both are beneficial in case of epilepsy patient[34]. Mental disorder screening must be done for adults with worse family structure and oncology adult patients[35]. Treatment outcome expectations and previous hospitalization may enhance depressive symptoms[36].

Parkinson must be screened for depression. Composite international diagnostic interview (CIDI)are used for diagnosing depression, Barthel index (BI) to find out symptoms of depression in stroke patients [37]

TREATMENT APPROACHES:

Pharmacological therapy includes Selective serotonin reuptake inhibitor(SSRIs), Serotonin/norepinephrine reuptake inhibitors (SNRIs), Atypical antidepressants, Serotonin-Dopamine Activity Modulators (SDAMs), Tricyclic antidepressants (TCAs), Monoamine oxidase inhibitors (MAOIs), N-methyl-D-aspartate (NMDA) receptor antagonists, St. John's wort therapy. Selective serotonin reuptake inhibitors (SSRIs) are greatly preferred over the other classes of antidepressants for the treatment of children and adolescents, and they are also the first-line medications for late-onsetdepression[38]. Brexpiprazole (2mg or 3 mg) plus antidepressants therapy on primary endpoint [39].

Wide range of treatments are available, pharmacotherapyitself an insufficient treatment[40]. combination of medication andpsychotherapy alone may relieve depression with better treatment compliance especially greater than 3 months duration of treatment, to prevent relapse empirical therapy are used and also proven to enhance quality of life[41]. psychostimulants like dextroamphetamine are considered to safe in depressed cancer patients [42].

According to the 2008 American college of physician's guideline patient's preference is important for choosing the pharmacotherapy courses as patient may avoid Anti – depressant drugs due to previous negative exposure. patients who do not show adequate response at 6-8 weeks may be continued with 4-9months of treatment once after the response is achieved[43].The evaluation of empirical support psychological treatment and considered it efficacious & specific[44]

CBT id direct and time limited involving 10 to 20 patients, cognitive therapy is used based on depression exhibits which includes negative views of themselves, World and future[45]. Interpersonal therapy (IPT) are time limited (16 sessions), for major depressive disorder but not as beneficial as cognitive and behavioural therapy[46]. Mindfulness based cognitive therapy **(**MBCT) designed to reduce relapse among individual and successful[47]. which aims to improve problem solving attitude in an individual and also for seasonal affective disorders and BLT for non- seasonal affective disorder.30 min of bright light therapy and 20 mg fluoxetine improves non-seasonal depressive disorder where a light therapy alone is beneficial than drugs[48]. Electroconvulsive therapy is highly effective, rapid, beneficial which is a decent choice for patients who do not respond drug therapy and dangerous to themselves

Depending on the type of patient's clinical condition the length of stay in inpatients with depressionvaries.recurrent depressive episodes are found to increase hospitalization[49]. on average, the depressed inpatients stayed 10 days longer that non-depressive patients due to improper therapeutic outcome [50].

Non-pharmacological therapy includes yoga, exercises, aerobic, naturopathy, aroma therapies etc. the aerobic exercise found to reduce the depressive symptoms than other sought of physical activities [51]. breathing techniques are beneficial in depressed COPD patients[52].

CONCLUDINGREMARKS:

Peer counselling, emotional support, psychiatric approach is important for depressed hospitalized patients. The depression was found to be prevalent in hospitalized patient due to fear and stress. Cardiac patients are most affected by depression and need to be monitored to avoid self-harmful symptoms. combination of pharmacotherapy and psychotherapy, bright light therapy is beneficial which also enhances the treatment outcome. Patients family must be educated about the patient condition and each depressed patient must require thorough analysis and specific treatment

CONFLICT TO INTEREST:

The author declared that there is no conflict of interest

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