'Social' dimension (associations and interventions) of Depression

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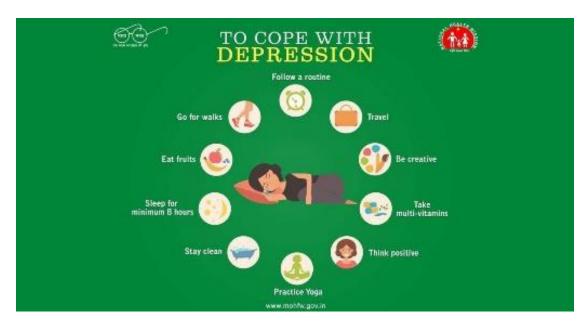
A. Introduction

'Depressive disorders' was referred to as the 'common cold' of psychiatry by then Director of mental Health, Prof. Norman sartorius in 1981. The public health importance of depression has reached everest proportion in the last 4 decades. A good reflection was the designation of depression as the theme for the 2017, World health day.

There are multiple attempts to understand 'depression'. There are biological theories, psychological theories and 'social' theories of both association and intervention. It is important that the Indian Psychiatric Society initiative to COMBAT DEPRESSION reflect this multidimensional natire and multidisciplinary/multisectoral interventions.

However, it is salient to recognise that the 'social' dimension is not shared by all, as illustrated by the following recent example.

B. Ministry of Health and Family Welfare Poster on depression(June 2018)



A recent controversy of a health education poster on depression, titled, 'To Cope With Depression' outlining a variety of non-pharmacological interventions for depression. The response of the mental health professionals were as follows(Scroll.in, June 27, 2018):

"Depression is a disease which needs treatment and the government has turned it into some behavioral problem"

"This message from the government is like telling a person with diabetes to walk and not take medicines."

"We know that depression needs medical attention and the chemical imbalance in the brain can be corrected with medicines and cognitive therapy also helps,"

"The poster is an example of wishful thinking," "How can you expect a person suffering from depression to start thinking positively?"

"What they have said in the poster can perhaps help prevent mental illness and are good tips to keep happy but not tools to cope with depression,"

"It has trivialised depression and after reading the poster, people on treatment may just stop taking medicines and instead follow advice of the government"

"Activity such as performing yoga can only supplement medication and therapy".

"Lack of vitamins can lead to depression but we cannot advise people to pop multivitamins for depression."

The above response is contrary to the evidence of the bio-psycho-social nature of depression and the effectiveness of a number of non-pharmacological interventions, summarised in the next section (C).

C. Recent Evidence for 'SOCIAL' dimension:

There is strong evidence to support the 'social model' to understand, prevent and care for mental health issues of the society

Association with prevalence:

- 1. Bhugra and Mastrogianni (2004) recognized the **breaking down of the cultural boundaries** and changes in idioms of distress and pathways to care. They called for training packages that could enhance clinicians cultural competency in multicultural settings. (**BMJ**, 2004, 184:10-20)
- 2. The most recent review of mental health, the Lancet -WPA Future of Psychiatry, summarises the challenges as follows: 'A large body of evidence shows the importance of **social determinants for mental disorders.** Societal factors such as social inequality, crime, poverty, poor housing, adverse upbringing conditions, poor education, unemployment, and social isolation are related to increased rates of mental disorders. The relevance of some social determinants varies across the world. Examples are substantial urbanisation in LMICs; increasing social isolation in high-income countries; the changing flow of refugees in some

regions; and different levels of economic instability, civil unrest, and inequality between rich and poor people. Most of these social determinants influence physical health problems too, but they can be seen as particularly relevant to psychiatry'. (Bhugra et al, 2017,The Lancet Psychiatry, 4: 775-818)

- 3. Ribeiro et al(2017) in a meta-analysis of research in this area report greater **inequality** is associated with higher rates of anxiety and depression, though there is heterogenicity among the studies. They call for inclusion of income inequality in the public health agenda. (**The Lancet Psychiatry 2017**; 4: 554-562.)
- 4. **Urbanisation** affects mental health through the influence of increased stressors and factors such as an overcrowded and polluted environment, high levels of violence, access to illicit drugs, and reduced social support (**Bhugra et al, 2017, The Lancet Psychiatry, 4: 775-818).**
- 5. Loneliness is gaining attention as an important factor for mental ill health. A number of longitudinal studies indicate that loneliness preceeds depression, sleep difficulties, high blood pressure, physical inactivity, functional decline, cognitive impairment and increased mortality. Physical and mental health components of quality of life were significantly reduced by loneliness. (Musich et al, 2015, Gerontology and Geriatric Medicine; 2015: 1-9).).
- 6. Child neglect and abuse is gaining recognition as public health priority. Adverse conditions in early life are associated with higher risk of mental disorders. The evidence of the long-lasting effects of 'child neglect and abuse' are increased rates of mental disorders. Physically abused, emotionally abused and neglected individuals have a higher risk, two to three times, of developing depressive disorders than non-abused individuals. Children with a history of bullying, 40-50 years later, had an increased risk for depression and suicidal thoughts and were likely to have lack of social relationships, lower educational levels and also more likely to be unemployed and earning less. Other significant associations between childhood adversities are occurrence of first-onset and recurrent mania, fatigue syndromes, adult violent offending, and criminality. There is growing evidence of the mediation of the effects of child neglect and abuse are biologically based with associated changes at the level of stress response, changes in brain structures, inflammatory response and neurocognitive functions (Srinivasa Murthy, 2014,).
- 7.Among community-dwelling adults, self-reported feelings of depression and worthlessness were significantly decreased, and self-reported poor mental health was nonsignificantly reduced for those living near **greened vacant land.** The treatment of blighted physical environments, particularly in resource-limited urban settings, can be an important treatment for mental health problems alongside other patient-level treatments. (JAMA Psychiatry, July, 2018;1(3):e180298. doi:10.1001/jamanetworkopen.2018.0298)
- 8.In the largest and most extensive study of its kind, the analysis involved 33,908 Norwegian adults who had their levels of **exercise** and symptoms of depression and anxiety monitored over 11 years. The research team found that 12 percent of cases of depression could have been prevented if participants undertook just one hour of <u>physical activity</u> each week;(Amer J Psych, 2018)
- **9.** Association of **neighborhood greenness** with self-perceived stress, depression and anxiety symptoms in older U.S adults, show neighborhood environment, such as green vegetation,

has been shown to play a role in coping with stress and mental ill health .(Environmental Health 2018**17**:39).

- 10 . A large and growing literature base has demonstrated that **religious involvement** is positively related to mental, behavioral, and physical health .(**Hoenig, Religion, Spirituality, and Health: A Review and Update, ADVANCES, SUMMER 2015, VOL. 29. NO. 3 :19-26).**
- 11.In his book, 'Lost Connections' by Johann Hari (Bloomsbury, 2018) reviews the evidence for 'disconnection/ at 9 levels and suggests 9 methods of establishing 'reconnections' (eg. work, values, restoring future etc) as a way to address depression.
- 12. The book 'The Inflamed Mind' by Bullmore presents a radical new approach to depression linking body and mind through the immune system. (2018) Editor of Nature has referred to this view' exciting new approach to reducing mental illness while capturing the essence of powerful strand in fundamental brain science".
- 13. Another recent study suggested a perceived lack of **social engagement** is also associated with depressive symptoms in people with dementia. Researchers measured social engagement, medication use, and depressive symptoms in 402 community-dwelling adults whose average age was 86 years. The data were collected during the first interview at which the participants met the criteria for a dementia diagnosis. The researchers found a link between perceived social isolation and the severity of depressive symptoms but not between antidepressant use and severity of depressive symptoms. (https://doi.org/10.1186/s12940-018-0381-2).
- 14. Survivors of disaster have higher rates of mental disorders, especially anxiety and depression(Srinivasa Murthy, Current Opinion in Psychiatry, September 2016)

'Social' Treatment interventions

- 1. **Exercise** is moderately more effective than no therapy for reducing symptoms of depression. Exercise is no more effective than antidepressants for reducing symptoms of depression, although this conclusion is based on a small number of studies. Exercise is no more effective than psychological therapies for reducing symptoms of depression, although this conclusion is based on small number of studies. The reviewers also note that when only high-quality studies were included, the difference between exercise and no therapy is less conclusive.(Mead et al(2008). Exercise for depression. Cochrane Database of Systematic Review, (4):CD004366)
- 2. .Exercise is well known to be beneficial to physical health; however, increasing research indicates that physical exercise is also beneficial to brain health and may alleviate symptoms of mental disorders. This book, written by international experts, describes and explores the theory and practice of exercise intervention for different mental disorders across the life span. Drawing on evidence from basic neuroscience research, and enriched with findings from the latest clinical trials, the work provides clear descriptions of current practice and highlights ways to translate this knowledge into pragmatic advice for use in daily practice. (Physical Exercise Interventions for Mental Health, by (Editor), Lam, LCW, Riba, M., (Editor) 2016. Cambridge)

- 3.Exercise appears to be an effective treatment for depression, improving depressive symptoms to a comparable extent as pharmacotherapy and psychotherapy (ACMS Health and fitness,2012);
- **4.**A meta-analysis in 2011, concluded that **yoga** in major depressive disorder (MDD) as an adjunct treatment for depression and anxiety(Cabral et al, 2012, Varambally,and Gangadhar, 2016)
- 5...Selective **dietary supplementation** in early postpartum is associated with high resilience against depressed mood (**Dowlati et al, PNAS** | **March 28, 2017** | **vol. 114** | **no. 13** | **3509**–**3514**);
- 6. Stress-related illnesses are a major threat to public health, and there is increasing demand for validated treatments. The study aimed test the efficacy of **nature-based therapy** (NBT) for patients with stress-related illnesses. Randomised controlled trial comparing NBT with the cognitive-behavioural therapy known as Specialised Treatment for Severe Bodily Distress Syndromes (STreSS). In total, 84 participants were randomly allocated to one of the two treatments. The primary outcome measure was the mean aggregate score on the Psychological General Well-Being Index (PGWBI). Both treatments resulted in a significant increase in the PGWBI (primary outcome) and a decrease in burnout (the Shirom-Melamed Burnout Questionnaire, secondary outcome), which were both sustained 12 months later. No significant difference in efficacy was found between NNBT and STreSS for primary outcome and secondary outcomes.(**Br J Psychiatry. 2018 Jul;213(1):404-411. doi: 10.1192/bjp.2018.2. Epub 2018 May 25.**)
- 7. In this cluster randomized trial of **urban greening** and mental health, 110 randomly sampled vacant lot clusters were randomly assigned to 3 study groups. Among 342 participants included in the analysis, feeling depressed significantly decreased by 41.5% and self-reported poor mental health showed a reduction of 62.8% for those living near greened vacant lots compared with control participants. Among community-dwelling adults, self-reported feelings of depression and worthlessness were significantly decreased, and self-reported poor mental health was nonsignificantly reduced for those living near greened vacant land. The treatment of blighted physical environments, particularly in resource-limited urban settings, can be an important treatment for mental health problems alongside other patient-level treatments. (JAMA Network Open. 2018;1(3):e180298. doi:10.1001/jamanetworkopen.2018.0298
- 8.. A recent pilot <u>study</u> suggested that increasing **exposure to daylight** can reduce depression in people with dementia. The 12-week study involved 77 people living in 8 dementia care communities. At 4 of the communities, staff took study participants to a room with windows for socialization from 8 AM to 10 AM each day. At the other 4 communities, staff took study participants to socialize in the mornings in a room illuminated only with typical artificial light. At the end of the study, participants who had socialized in the rooms with daylight had a statistically significant decrease in their scores on the <u>Cornell Scale for Depression in Dementia</u>, while the other participants did not. More studies are needed to determine the appropriate timing, duration, wavelength, and intensity of light exposure for adults with dementia, the researchers concluded.

- 9.The effect of the **dance movement therapy (DMT)** was observable whether the patient was taking antidepressant medication or not. At follow-up, between group effect sizes (ES) were medium in favor for the DMT group. In the DMT group, the within ES at the 3 months follow-up varied from 0.62 to 0.82 as compared to treatment as usual(TAU). The results indicated that DMT is beneficial in the treatment of depressed patients .(Front Psychol. 2015 Jul 10;6:980. doi: 10.3389/fpsyg.2015.00980. eCollection 2015).
- 10. The literature endorsed **canine assistance** for PTSD in veterans as a promising modality. (Nurse Educ Today. 2016 Dec;47:43-50. doi: 10.1016/j.nedt.2016.04.020. Epub 2016 May 11).
- 11. "Painting to Find my Spirit": Art Making as the Vehicle to Find Meaning and Connection in the Mental Health Recovery Process, (Journal of Spirituality in Mental Health 16(1):19-36. January 2014, DOI: 10.1080/19349637.2013.864542)
- 12. Cancer survivors participating in **exercise** demonstrate improved cardiovascular fitness and muscle strength, improved physical functioning, improved body image, decreased body fat, reduced fatigue, and improved overall quality of life (QOL) (**Psycho-Oncology**, **Feb 2009**).

D. Implications

At this point in time, there is a potential revolution in thinking about mental health and mental disorders in general and depression in particular. There is a convergence of the biological, psychological and social understandings raising the possibilities of a holistic approach to mental health care in general and depression in particular.

However, as pointed out in section B, there is danger of looking only at pharmacological interventions and mental health professionals as the ONLY ONES to address the broad spectrum of mental health issues.

There is urgent need to keep the 'SOCIAL DIMENSION' in understanding and intervening efforts to address DEPRESSION.
