Online ISSN: 2581-3935
Print ISSN: 2589-7837

International Journal of Medical Science and Diagnosis Research (IJMSDR)

Available Online at www.ijmsdr.com

Volume 2, Issue 4; July-August: 2018; Page No. 206-213

Why so depressed?

Dr. Devraj Ramakrishnan[1], Dr. Dhanya Raghunathan[2]

[1] MD. Community Medicine, Assistant Professor, Department of Community Medicine, Amrita Institute of Medical Sciences, Edapally, Kochi, Kerala

[2] MDS. Public Health Dentistry, Assistant Professor, Department of Public Health Dentistry, Government Dental College, Alappuzha, Kerala

ABSTRACT:

Depression is a common mental illness characterized by persistent sadness and a loss of interest in activities that people normally enjoy, accompanied by an inability to carry out daily activities, for 14 days or longer. Prevalence of depression varies in different age groups in different parts of the world. According to WHO, an estimated 300 million suffered from depression in 2017.

Female gender, presence of comorbidity, previous history of depression, familial background of depression, high birth order, nuclear family, parental conflicts, residential schooling, chronic illness and cognitive decline inability to cope with studies, work place stress and harassment are a few known risk factors of depression.

Preventing and Early Diagnosis of Depression helps in controlling the morbidity and mortality due to depression. The Health Ministry should take necessary steps in establishing counselling cells, 24*7 help lines and mobile chat applications to reduce the emotional turmoil experienced by the youth and adolescents. Promoting healthy lifestyle and organizing geriatric clubs to encourage socialization will reduce depression among elderly to a certain extent. This review seeks to collect and collate information on depression, to create an evidence base and to aid the stakeholders in taking appropriate measures to reduce depression.

Keywords: Depression, Risk Factors, Prevention, Adolescents, Youth

Introduction

Depression is a dynamic entity and it is increasing day by day specially among the adolescents and elderly. India's highly inequitable distribution of mental health resources means at least 90% of people with mental disorders are undiagnosed and untreated. There are also huge disparities in access to mental health services particularly for people in rural areas[1].

Depression is a common mental illness characterized by persistent sadness and a loss of interest in activities that people normally enjoy, accompanied by an inability to carry out daily activities, for 14 days or longer. In addition, people with depression normally have several of the following: a loss of energy; a change in appetite; sleeping more or less; anxiety; reduced concentration; indecisiveness; restlessness; feelings of worthlessness, guilt, or hopelessness; and thoughts of self-harm or suicide according to the Diagnostic and Statistical Manual of Mental Disorders-V[2].

To attain a mentally healthy population, we need to know the prevalence of depression and risk factors associated with depression. This review seeks to collect and collate information on

Corresponding author: Dr. Dhanya Raghunathan

depression, to create an evidence base and to aid stakeholders in taking appropriate measures to reduce depression.

Prevalence of Depression

Prevalence of depression varies according to different age groups in different regions of the world. Studies in brazil and many other parts of the world has shown the prevalence of depression is highest in late life whereas studies in USA depicted highest depression rates among middle aged women. Highest prevalence of major depressive episode was seen in 18-25 years in a number of studies[3]. Most mental disorders begin during youth (12–24 years of age), although they are often first detected later in life[4].

Adolescence is the time when they have severe psychosocial stress. They are exposed to physical and psychological change and changes in social perceptions and expectations. Depression in adolescents is more often missed than it is in adults, possibly because of the prominence of irritability, mood reactivity, and fluctuating symptoms in adolescents. The prevalence of depressed adolescents in Europe ranged from 7.1% to 19.4%. The prevalence of depressed adolescents in different European countries is as depicted in fig 1[5].

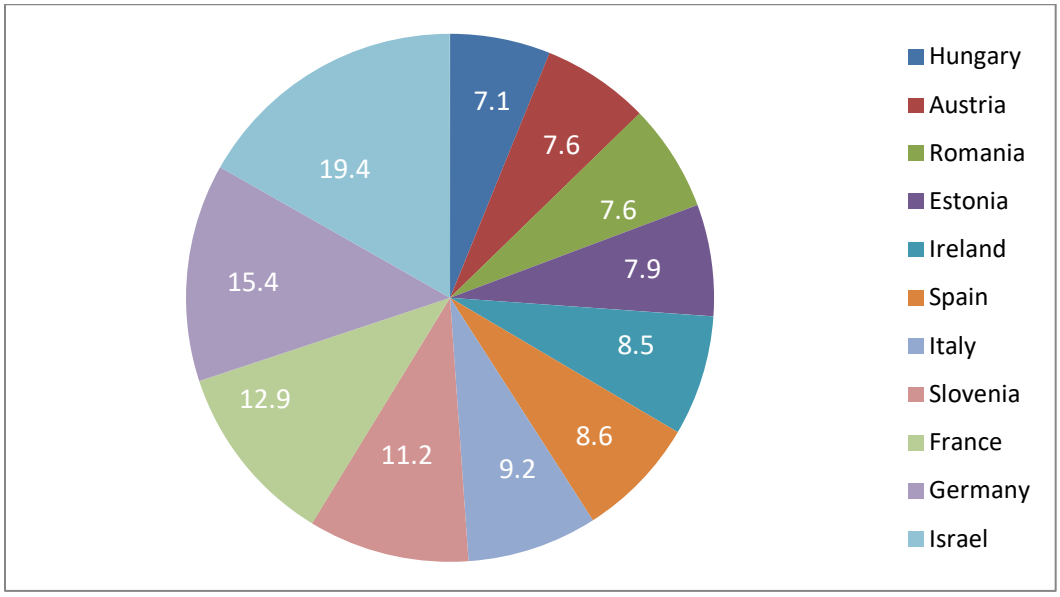

Figure1: The prevalence of depressed adolescents in different European countries

A study assessing the prevalence of depression among 964 adolescents in South India showed that 378 adolescents (39.2%) were found to be non-depressed, 358 (37.1%) were mildly depressed, 187 (19.4%) were moderately depressed and 41 (4.3%) severely depressed[6]. Using GHQ-12 and Beck's Depression Inventory Questionnaire, a study in India found that 15.2% of school-going adolescents were having evidence of distress and 18.4% were depressed[7] .

Unipolar depressive disorder in adolescence is common worldwide but often unrecognised. The incidence, notably in girls, rises sharply after puberty and, by the end of adolescence, the 1 year prevalence rate exceeds 4%. The burden is highest in low-income and middle-income countries. Untreated Depression heightens suicide risk[8].

A study among University students showed 27.1% of their respondents suffered from depression[9].Global prevalence of depression among medical students was 28%.The overall mean frequency of suicide ideation was 5.8% , but the mean proportion of depressed medical students who sought treatment was only 12.9%[10]

A study among medical college students in Rajasthan showed that 44.2% of students were depressed[11] The prevalence of depression among 143 dental students in a study .in US was found to be 16.7%[12]

Interest in geriatric depression has increased in recent years, and several population studies have examined its prevalence, with results ranging from 1% to 20%.

The prevalence of dementia and of depression among persons aged 70 and above in Hobart was measured by interviewing subjects using a modified version of the Geriatric Mental State Schedule (GMS) (Copeland et al. 1976) and the Mini Mental State Examination (MMSE) (Folstein et al. 1975). Rates of morbidity were derived from different diagnostic procedures. It is concluded that more detailed specification of criteria is desirable if the comparative epidemiology of dementia and depression in old age is to advance[13].

The current and lifetime prevalence of depressive disorders in 4559 non demented individuals in Cache County aged 65 to 100 years was estimated in a population study. Point prevalence of major depression was estimated at 4.4% in women and 2.7% in men . Among subjects with current major depression, 35.7% were taking an antidepressant and 27.4% a sedative/hypnotic. Estimated lifetime prevalence of major depression was 20.4% in women and 9.6% in men , decreasing with age[14].

The community-based mental health studies in India have reported prevalence of depressive disorders in geriatric Indian population varies between 13% and 25%[15–19]

Risk factors for Depression

Emotional manifestations of depression include sadness, irritability, self-accusations and crying spells that dominated over cognitive, behavioral and physical manifestations of depression

Economic difficulty, physical punishment at school, teasing at school, Parental fights, beating at home and inability to cope up with studies were found to be the causes of depression among school students[20]

Adolescents with a family history of depression and exposure to psychosocial stress increased the prevalence of depression among adolescents[21].

Besides gender and genetics, the important factors associated with depression in adolescents include low level of parental warmth, high levels of maternal hostility and escalating adolescent-parent conflict. Lifestyle is another important issue, as factors indicative of adoption of non-traditional lifestyle are associated with an increase in prevalence of depression[20]

Depression among elderly results in reduced life satisfaction and quality, social deprivation, loneliness, increased use of health and home care services, cognitive decline, impairments in activities of daily living and suicide[22].

Chronic illness, subjective health status, and cognitive impairment were significant factors associated with depression in elderly[23] The commonly reported physical illnesses in subjects with depression include those involving the musculoskeletal, cardiovascular and ophthalmological systems.

Females are more prone to depression than males. The prevalence, incidence and morbidity risk of depressive disorders are more common in females beginning at mid puberty and persisting throughout adult life[24]

Major Depression, Dysthymia, Atypical Depression and Seasonal Winter Depression are more common in females whereas Bipolar Disorders are more common in males. Female medical students have proven to have increased stress and anxiety .Health care professionals should take adequate steps in depression control giving special care to females[25].

Various studies have shown that women have high rejection sensitivity and were more depressed when they experienced a partner-initiated breakup but not when they experienced a self-initiated or mutually initiated breakup[26,27]. Break up distress scale scores reported that sudden and unexpected break ups have made

them feel rejected and betrayed and were not willing to start a new relationship[28]

A study done in 1988 using Chidren's Depression Inventory has shown that first-born children showed significantly higher levels of self-esteem and lower depression than second-born and youngest children[29]. This finding is contrary to a few studies that showed higher birth order within the sibling group has been linked to heightened risk of depression and anxiety, as well as to lower self-esteem[11,30,31].

Children of high birth order are born into conditions characterized by restricted access to parental attention and supervision, which may result in less attention paid to the health and safety of these children during their first years of life, including lower awareness of children's psychological health and signs of psychiatric deviations. Genetic and Biological factors might have contributed to this. The theoretical basis for birth order has not been dealt in detail

Depression disrupts family life, yet families can be major forces of care, comfort, even cure. Those in nuclear families are at a higher depression risk than in extended or joint families[22,32,33].This may be due to the busy life and inadequate time to be with family and friends .Those who have a close friend are at a lesser depression risk than others[28].

The intake of trans fatty acids or the consumption of foods rich in fat, like fast food or commercial bakery products, have recently been reported as contributors to higher depression risk. Dietary patterns directly involved in cardio metabolic risk could also exert a detrimental effect on depression[34–36]. The role of vitamin B12 has been explained in a study conducted using Beck's depression inventory questionnaire[37].Further studies should be done to establish association between diet and depression.

Residential children were more likely to have blended families, were more likely to have previously received residential treatment, and had higher rates of conduct disorder, anxiety, and attention deficit disorder, as measured by the Diagnostic Interview Schedule for Children. They showed significantly poorer academic performance and more often separated from the school under negative circumstances[26,38,39].

Smoking was found to increase the risk of developing an episode of Major Depressive Disorder and drug abuse/dependence and disruptive behavior disorders. These findings have important clinical implications, both for psychiatric care and for smoking prevention and cessation efforts[40,41].

Causal linkage exists between alcohol use disorders and major depression, such that increasing involvement with alcohol increases risk of depression. Further research is needed in order to clarify the nature of this causal link, in order to develop effective intervention and treatment approaches[42].

Social media contains useful signals for characterizing the onset of depression in individuals, as measured through decrease in social activity, raised negative affect, highly clustered ego networks, heightened relational and medicinal concerns, and greater expression of religious involvement[43,44]

Medical schools are known to be stressful environments for students and hence medical students have been believed to experience greater incidences of depression than othersThe presence of a chronic disease , major life events and being a student at the clinical level were independently associated with depression[45]

Academic Performance and Year of study contribute significantly to depression[46]. First year and Final year of study has higher depression rates than others. This may be due to the increased work load in the final year of study of medical courses and home sickness and non-adaptive conditions experienced in the first year of study

The risk factors of depressive symptoms identified in medical students were females, older age, lower family income, students who did not choose admission in MBBS course on their own, had addictions, felt negatively about results, faced difficulty with study course and had relationship issues[47].

Tools to assess depression

In clinical and research work, apart from uniform diagnostic criteria, some means to objectively quantify the presence of particular symptoms and level of their severity is required. For this purpose, a number of rating scales have been devised worldwide, of which clinician rated Hamilton Depression Rating Scale (HDRS)[48], self reporting Beck Depressive Inventory, Montgomery-Asberg Depression rating scale (MADRS) as the most popular ones[49]. Additionally scales like Amritsar Depressive Inventory (ADI) a self reporting scale has been developed on the basis of symptoms and signs of depression as manifested by Indian patient[50]. Avasthi *et al* translated the PRIME-MD questionnaire in Hindi and showed that it is useful for screening various psychiatric disorders[51]. Brief Patient Health Questionnaire (PHQ) has also been translated in 11 languages and validated for Indian population[52] Many studies have also evaluated the psychometric properties of various scales in India[8,51,53,54].

Prevention of depression

Recognising depression at the earliest stage is the best method of preventing complications of depression which affects our mental and physical state of health and Quality of Life.

A healthy diet, regular exercise, taking time out for fun and relaxation, not overworking, and saving time to do things you enjoy may work together to prevent a depressed mood.

For this screening at regular intervals at district level supervised by a competent authority is essential. Periodic Screening at schools and professional institutions will help in reducing depression prevalence among school children, youth and adolescents.

Establishing Counseling cells , Help lines accessible round the clock through phone calls, chats or mobile applications may help those undergoing emotional turmoil due to break ups or other severe mental stress. Activities promoting Healthy Friendships should be encouraged and all efforts should be undertaken to incorporate such activities in daily life.

Owing to the recurrent nature of the disorder, it is important not just to treat the acute episode, but also to protect against its return and the onset of subsequent episodes.

Several types of interventions have been shown to be efficacious in treating depression. The antidepressant medications are relatively safe and work for many patients, but there is no evidence that they reduce risk of recurrence once their use is terminated. Electro-convulsive therapy is particularly effective for the most severe and resistant depressions, but raises concerns about possible deleterious effects on memory and cognition[55]

Interpersonal approach aids as an effective method of treating depression. It has been shown to reduce acute distress and to prevent relapse and recurrence so long as it is continued or maintained.

Cognitive behavior therapy (CBT) also appears to be efficacious in treating depression, and recent studies suggest that it can work for even severe depressions in the hands of experienced therapists. Not only can CBT relieve acute distress, but it also appears to reduce risk for the return of symptoms as long as it is continued or maintained. Moreover, it appears to have an enduring effect that reduces risk for relapse or recurrence long after treatment is over[55]

Good medical management of depression can be hard to find, and the empirically supported psychotherapies are still not widely practiced. Although great strides have been made over the past few decades, much remains to be done with respect to the treatment of depression

"Let's work together to attain complete mental health for all".

References

1. Moussavi S, Chatterji S, Verdes E, Tandon A, Patel V, Ustun B. Depression, chronic diseases, and decrements in health: results from the World Health Surveys. The Lancet. 2007 Sep 8;370(9590):851–8.
2. DSM-5 [Internet]. [cited 2018 May 23]. Available from:

https://www.psychiatry.org/psychiatrists/practice/dsm
3. Patel V, Fischer. Mental health of young people: a global public-health challenge - ScienceDirect. The Lancet. 369(9569):1302–13.
4. Kessler RC, Bromet EJ. The Epidemiology of Depression Across Cultures. Annu Rev Public Health. 2013;34(1):119–38.
5. Balazs J, Miklósi M, Keresztény á., Apter A, Bobes J, Brunner R, et al. P-259 - Prevalence of adolescent depression in Europe. Eur Psychiatry. 2012 Jan;27:1.
6. Nair MKC, Paul MK, John R. Prevalence of depression among adolescents. Indian J Pediatr. 2004 Jun 1;71(6):523–4.
7. Bansal V, Goyal S, Srivastava K. Study of prevalence of depression in adolescent students of a public school. Ind Psychiatry J. 2009;18(1):43–6.
8. Grover S, Dutt A, Avasthi A. An overview of Indian research in depression. Indian J Psychiatry. 2010 Jan;52(Suppl1):S178–88.
9. Sarokhani D, Delpisheh A, Veisani Y, Sarokhani MT, Manesh RE, Sayehmiri K. Prevalence of Depression among University Students: A Systematic Review and Meta-Analysis Study. Depress Res Treat [Internet]. 2013 [cited 2018 Feb 21];2013. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3800630/
10. Puthran R, Zhang MWB, Tam WW, Ho RC. Prevalence of depression amongst medical students: a meta-analysis. Med Educ. 2016 Apr;50(4):456–68.
11. Agarwal N, Sharma S. Prevalence of Depression and its Associated Factors among Students of a Medical College in Western Rajasthan. Natl J Community Med [Internet]. 2017;8(1). Available from: www.njcmindia.org/home/download/973
12. Laurence B, Williams C, Eiland D. Depressive symptoms, stress, and social support among dental students at a historically black college and university. J Am Coll Health J ACH. 2009 Aug;58(1):56–63.
13. Kay DWK, Henderson AS, Scott R, Wilson J, Rickwood D, Grayson DA. Dementia and depression among the elderly living in the Hobart community: the effect of the diagnostic criteria on the prevalence rates. Psychol Med. 1985 Nov;15(4):771–88.
14. Steffens DC, Skoog I, Norton MC, Hart AD, Tschanz JT, Plassman BL, et al. Prevalence of Depression and Its Treatment in an Elderly Population: The Cache County Study. Arch Gen Psychiatry. 2000 Jun 1;57(6):601–7.
15. Blazer D, Burchett B, Service C, George LK. The Association of Age and Depression Among the Elderly: An Epidemiologic Exploration. J Gerontol. 1991 Nov 1;46(6):M210–5.
16. Goyal A, Kajal KS. Prevalence of depression in elderly population in the southern part of Punjab. J Fam Med Prim Care. 2014 Oct 1;3(4):359.
17. N S. The Prevalence of Depression among the Rural Elderly in Chittoor District, Andhra Pradesh. J Clin Diagn Res JCDR. 2013 Jul;7(7):1356–60.
18. Nakulan A, Sumesh TP, Kumar S, Rejani PP, Shaji KS. Prevalence and risk factors for depression among community resident older people in Kerala. Indian J Psychiatry. 2015;57(3):262–6.
19. Nautiyal A, Madhav NS, Ojha A, Sharma RK, Bhargava S, Kothiyal P, et al. Prevalence of Depression among Geriatric People in Dehradun City of Uttarakhand, India. J Depress Anxiety [Internet]. 2015 Oct 9 [cited 2018 Apr 22];4(4). Available from: https://www.omicsonline.org/open-access/prevalence-of-depression-among-geriatric-people-in-dehradun-city-of-uttarakhand-india-2167-1044-1000208.php?aid=62583
20. Singh M, Gupta M. Prevalence & factors associated with depression among schoolgoing adolescents in Chandigarh, north India. Indian J Med Res. 2017;146(2):205–15.
21. Thapar A. Depression in adolescence. The Lancet. 2012 Mar 17;379(9820):1056–67.

22. Taqui AM, Itrat A, Qidwai W, Qadri Z. Depression in the elderly: Does family system play a role? A cross-sectional study. BMC Psychiatry. 2007 Oct 25;7:57.

23. Park J-I, Park TW, Yang J-C, Chung S-K. Factors associated with depression among elderly Koreans: the role of chronic illness, subjective health status, and cognitive impairment. Psychogeriatr Off J Jpn Psychogeriatr Soc. 2016 Jan;16(1):62–9.

24. Piccinelli M, Wilkinson G. Gender differences in depression: Critical review. Br J Psychiatry. 2000 Dec 1;177(6):486–92.

25. Yousif W, Wahed A, Hassan S. Prevalence and associated factors of stress, anxiety and depression among medical Fayoum University students. Alex J Med. 2017 Mar 1;53(1):77–84.

26. Gilman SE, Kawachi I, Fitzmaurice GM, Buka SL. Socio-economic status, family disruption and residential stability in childhood: relation to onset, recurrence and remission of major depression. Psychol Med. 2003 Nov;33(8):1341–55.

27. Östman M. Severe depression and relationships: the effect of mental illness on sexuality. Sex Relatsh Ther. 2008 Nov 1;23(4):355–63.

28. Drapeau S, Gagné M-H, Saint-Jacques M-C, Lépine R, Ivers H. Post-Separation Conflict Trajectories: A Longitudinal Study. Marriage Fam Rev. 2009 Apr 15;45(4):353–73.

29. Gates L, Lineberger MR, Crockett J, Hubbard J. Birth order and its relationship to depression, anxiety, and self-concept test scores in children. J Genet Psychol. 1988 Mar;149(1):29–34.

30. Arnetz BB, Hörte L-G, Hedberg A, Malker H. Suicide among Swedish Dentists: A Ten-Year Follow-Up Study. Scand J Soc Med. 1987 Dec 1;15(4):243–6.

31. Rostila M, Saarela J, Kawachi I. Birth Order and Suicide in Adulthood: Evidence From Swedish Population Data. Am J Epidemiol. 2014 Jun 15;179(12):1450–7.

32. Sander J, Carty C. Youth Depression in the Family Context: Familial Risk Factors and Models of Treatment [Internet]. [cited 2018 May 3]. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1352328/

33. Socio-economic status, family disruption and residential stability in childhood: relation to onset, recurrence and remission of major depression | Psychological Medicine | Cambridge Core [Internet]. [cited 2018 Mar 14]. Available from: https://www.cambridge.org/core/journals/psychological-medicine/article/socioeconomic-status-family-disruption-and-residential-stability-in-childhood-relation-to-onset-recurrence-and-remission-of-major-depression/0C1CE43F451F289FD4AE601443198665

34. Jacka FN, Cherbuin N, Anstey KJ, Butterworth P. Does reverse causality explain the relationship between diet and depression? J Affect Disord. 2015 Apr 1;175:248–50.

35. Sanchez-Villegas A, Martínez-González MA. Diet, a new target to prevent depression? BMC Med. 2013 Jan 3;11:3.

36. Mediterranean diet and depression | Public Health Nutrition | Cambridge Core [Internet]. [cited 2018 Mar 14]. Available from: https://www.cambridge.org/core/journals/public-health-nutrition/article/mediterranean-diet-and-depression/67F265CA11470ADC1C9AD2838B7340B7

37. Geisser ME, Roth RS, Robinson ME. Assessing Depression among Persons with Chronic Pain Using the Center for Epidemiological Studies-Depression Scale and the Beck Depression Inventory: A Comparative Analysis. Clin J Pain. 1997 Jun;13(2):163.

38. Mattison, Richard. Four-year predictive value of the Children's Depression Inventory. Am Psychol Assoc. 1990;2(2):169–74.

39. Silver SE, Duchnowski AJ, Kutash K, Friedman RM, Eisen M, Prange ME, et al. A comparison of children with serious emotional disturbance served in residential

and school settings. J Child Fam Stud. 1992 Mar 1;1(1):43–59.
40. Brown RA, Lewinsohn PM, Seeley JR, Wagner EF. Cigarette Smoking, Major Depression, and Other Psychiatric Disorders among Adolescents. J Am Acad Child Adolesc Psychiatry. 1996 Dec 1;35(12):1602–10.
41. Fergusson DM, Goodwin RD, Horwood LJ. Major depression and cigarette smoking: results of a 21-year longitudinal study. Psychol Med. 2003 Nov;33(8):1357–67.
42. Boden JM, Fergusson DM. Alcohol and depression. Addiction. 2011 May 1;106(5):906–14.
43. De Choudhury M, Gamon M, Counts S, Horvitz E. Predicting depression via social media. ICWSM. 2013;13:1–10.
44. Bessière K, Kiesler S, Kraut R, Boneva BS. Effects of Internet Use and Social Resources on Changes in Depression. Inf Commun Soc. 2008 Feb 1;11(1):47–70.
45. Ngasa SN, Sama C-B, Dzekem BS, Nforchu KN, Tindong M, Aroke D, et al. Prevalence and factors associated with depression among medical students in Cameroon: a cross-sectional study. BMC Psychiatry. 2017 Jun 9;17:216.
46. Mahroon ZA, Borgan SM, Kamel C, Maddison W, Royston M, Donnellan C. Factors Associated with Depression and Anxiety Symptoms Among Medical Students in Bahrain. Acad Psychiatry. 2018 Feb 1;42(1):31–40.
47. Prianka M, Sonali S, Kumar MN, Kanti ST, Indira D, Amitava C. Evaluation of major risk factors related to depression among medical students of NRS medical college. -. Int J Med Res Health Sci. 2014;3(4):911–7.
48. Hamilton M. A RATING SCALE FOR DEPRESSION. J Neurol Neurosurg Psychiatry. 1960 Feb;23(1):56–62.
49. Beck AT, Ward CH, Mendelson M, Mock J, Erbaugh J. An inventory for measuring depression. Arch Gen Psychiatry. 1961 Jun;4:561–71.
50. Kalra G, Bhugra D. Mutual learning and research messages: India, UK, and Europe. Indian J Psychiatry. 2010 Jan;52(Suppl1):S56–63.
51. Avasthi A, Varma SC, Kulhara P, Nehra R, Grover S, Sharma S. Diagnosis of common mental disorders by using PRIME-MD Patient Health Questionnaire. Indian J Med Res. 2008 Feb;127(2):159–64.
52. Kochhar PH, Rajadhyaksha SS, Suvarna VR. Translation and validation of brief patient health questionnaire against DSM IV as a tool to diagnose major depressive disorder in Indian patients. J Postgrad Med. 2007 Jun;53(2):102–7.
53. Adewuya AO, Ola BA, Afolabi OO. Validity of the patient health questionnaire (PHQ-9) as a screening tool for depression amongst Nigerian university students. J Affect Disord. 2006 Nov 1;96(1):89–93.
54. Chisholm D, Sweeny K, Sheehan P, Rasmussen B, Smit F, Cuijpers P, et al. Scaling-up treatment of depression and anxiety: a global return on investment analysis. Lancet Psychiatry. 2016 May 1;3(5):415–24.
55. Hollon SD, Thase ME, Markowitz JC. Treatment and Prevention of Depression. Psychol Sci Public Interest. 2002 Nov 1;3(2):39–77.