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Prevalence of depression in females from menarche to menopause: An observational study

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Abstract

Background and Aims: Depression is a serious condition that can impact every phase of woman's life. It affects social life, career, relationships and a sense of low self esteem. It is seen in women of all ages**.** Aim of this study was to know the prevalence of depression in different phases of woman s life from menarche to menopause.

Material & Methods: This is an observational study conducted on 4000 patients . The criteria used to diagnose depression in women is DSM-IV(Diagnostic and Statistical Manual of Mental Disorders-Chapter IV)[1] criteria. Various signs and symptoms of depression as listed in DSM-IV criteria were taken into consideration.

Results: The prevalence of depression is more common in teenagers, women with no living issue , during pregnancy, postpartum period and in perimenopausal women.

Conclusion: There are different causes of depression at menarche, during pregnancy and menopause. Most of the patients suffering from depression were treated as outpatients. Some inpatients were also included in the study. Psychiatric opinion was sought for patients having moderate to severe symptoms.

Keywords: Depression, DSM-IV.

Introduction

It is predicted that depression will be the second leading cause of disability worldwide by 2020. This is truly an alarming development. WHO states that burden of depression is 50% higher for females than males. Unipolar depressive disorder is the fourth most common cause of disability in females of all age groups as per the Global Burden of Disease,2000[2]. The prevalence is 9% and average age of onset of depression is 31.9 years in India[3].

Women are at great risk of developing depressive disorder in different phases of life, spanning from menarche to menopause. There are several factors that contribute to the unique picture of depression in women such as social pressure, environment, educational status and individual response to stress. It is likely that genetic, biological, chemical, hormonal, environmental, psychological and social factors all contribute towards depression. The fluctuating levels of various sex hormones during the reproductive years

contribute to the Premenstrual Dysphoric Syndrome, Depression during pregnancy and Post partum Psychosis.

Women with delayed menarche, difficulty in acceptance of pregnancy (especially in newly wed), infertility, STI'S and HIV infection, recurrent pregnancy loss, unwanted pregnancy and postpartum period are more prone to depression. Perimenopausal age group who are at higher risk of malignancies also suffer from depression. Also the geriatric age group suffers from various problems that include medical illnesses like diabetes mellitus and hypertension. Women who have lost their partner and loneliness in those whose children are away also manifest with depression. Psychosocial events such as role stress, sex-specific socialization, stigma of mental illness and low status of women in society have all been known to contribute to depression[4]. Vague physical symptoms are more common than psychological symptoms[5]. The higher rate of depression has been reported in the rural areas as compared to urban area.

Materials and Methods

This is an observational study done on 4000 patients attending outpatient department and indoor patients over the period of 6 months in Guru Nanak Dev Hospital attached to Govt. Medical College, Amritsar. Women from all age groups were included starting from menarche to menopause. Causes of depression in each group were noted.

Inclusion criteria:

- Women at high risk of depression due to gynaecological and obstetrical conditions.
- Teenage girls, women with no living issue, antenatal cases, delivered patients and perimenopausal women were included.

DSM-IV criteria was used to diagnose depression that include following signs and symptoms[1] :

DSM-IV Criteria for Major Depressive Disorder (MDD)

• Depressed mood or a loss of interest or pleasure in daily activities for more than two weeks.
• Mood represents a change from the person's baseline.
• Impaired function: social, occupational, educational.
• Specific symptoms, at least 5 of the 9 following symptoms, present nearly every day that include:

1. Depressed mood or irritable most of the day, nearly every day, as indicated by either subjective report (e.g. feels sad or empty) or observation made by others (e.g. appears tearful).
2. Decreased interest or pleasure in most activities, most of each day.
3. Significant weight change (5%) or change in appetite.
4. Change in sleep: Insomnia or hypersomnia.
5. Change in activity: Psychomotor agitation or retardation
6. Fatigue or loss of energy
7. Guilt/worthlessness: Feelings of worthlessness or excessive or inappropriate guilt
8. Concentration: diminished ability to think or concentrate, or more indecisiveness
9. Suicidality: Thoughts of death or suicide, or has suicide plan

DSM – V was proposed (This is not yet adopted).In this protocol, anxiety symptoms that may indicate depression were included that are: irrational worry, preoccupation with unpleasant worries, trouble relaxing, feeling tense and fear that something awful might happen.

Depressive Episode Criteria (may be part of Major Depressive Disorder OR an isolated episode)

A Depressed mood, loss of interest and enjoyment in usual activities, reduced energy and decreased activity
B Reduced self esteem and confidence, ideas of guilt and unworthiness, pessimistic thoughts, disturbed sleep ,diminished appetite and ideas of self harm.

Severity of Depressive Episode:

Mild: > 1 from point A plus 1-2 from point B. Or 5-6 symptoms but mild in severity and functional impairment.

Moderate: > 1 from point A plus 2-3 from point B. Or 7 – 8 symptoms but moderate functional impairment.
Severe: All 3 from point A plus > 3 from point B. Or fewer symptoms but any of these: severe functional impairment, psychotic symptoms, recent suicide attempt, or has specific suicide plan or clear intent.

Exclusion criteria:

Screening for conditions that may mimic or co exist with Major Depressive Disorder like:
• Substance abuse causing depressed mood (eg. drugs, alcohol, medications)

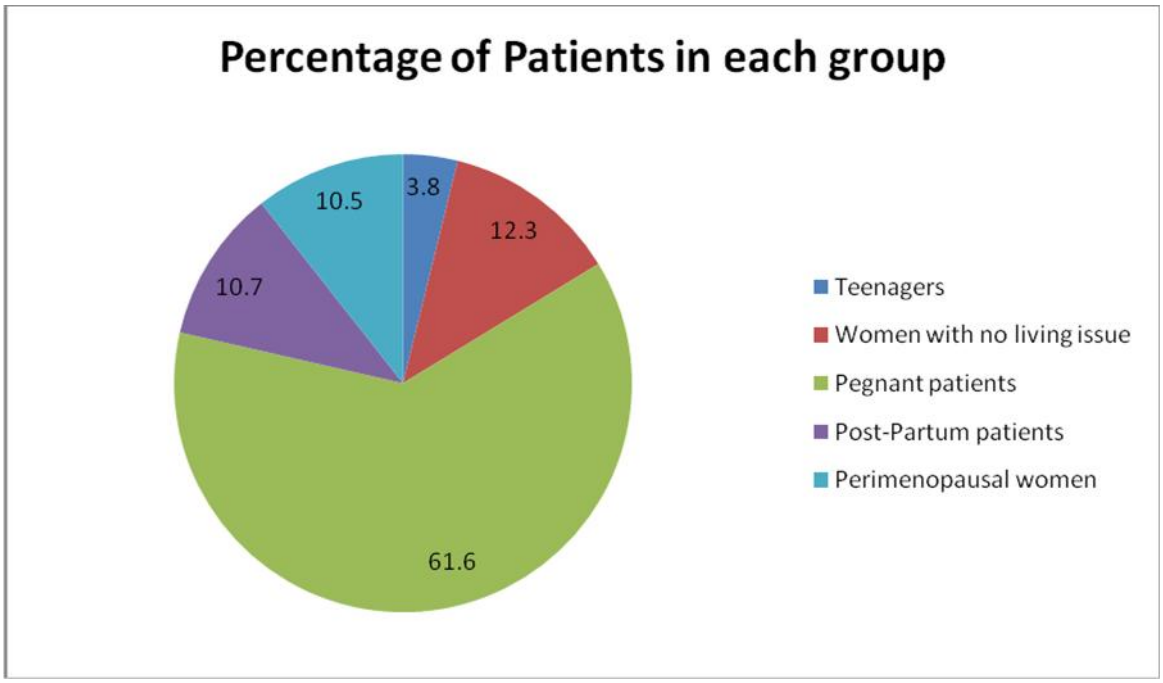
- Medical illness leading to depressed mood
- Other psychiatric disorders: Mania, Hypomania, Bipolar, Schizoaffective, Schizophrenia, etc.
- Bereavement where symptoms persist for > two months or show marked functional impairment, morbid preoccupation worthlessness, suicidal ideation,
- psychotic symptoms, or psychomotor retardation.

History of patients was taken and clinical examination done to diagnose various gynaecological and medical disorders. Prevalence of depression among females with different gynaecological and obstetrical disorder was observed and number of patients requiring psychiatry treatment was also noted. Descriptive statistics were used to calculate the results .

Results

The mean age of depression is 35.5 years according to this study. In this study, out of 4000 high risk patients, 152(3.8%) were teenagers, 493(12.3%) were women with no living issue, 2505(62.6%) were pregnant, 428(10.7%) in postpartum period and 422(10.5%) were perimenopausal as shown in chart 1.

Chart 1



The prevalence due to different causes in each group of patient was calculated which is as follows:

Table 1 Prevalence of depression in teenagers (n=152)

Cause of depression	Total number of patients	Number of patients with depression	Percentage (%)
1.Late menarche	36	12	33.5%
2.STI's and HIV	31	16	51.6%
3.PCOD,hirsutism and obesity	85	20	23.5%

Out of total 36 teenagers with late menarche, 12 (33.5%) were suffering from depression. Out of 31 patients with STI's and HIV, 16 (51.6%) were suffering from depression. Out of 85 patients of PCOD, hirsutism and obesity, 20 (23.5%) suffered from depression.

Table 2 Prevalence of depression in women with no living issue (n=493)

Cause	Total number of patients of no issue	Number of patients with depression	Percentage (%)
1.Primary infertility	203	106	52.2%
2.Secondary infertility	130	63	48.46%
3.Recurrent pregnancy loss	160	86	53.7%

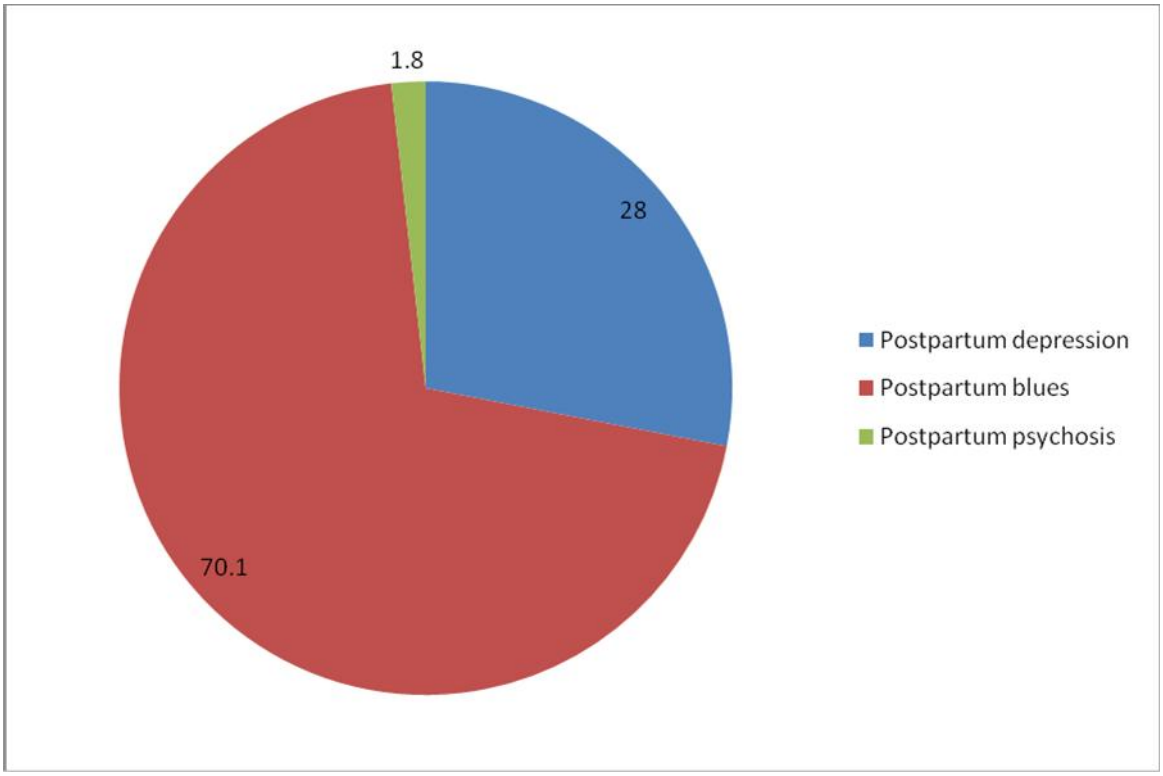
From the above study, total 493 women with no living issue, 203 were suffering from primary infertility and 130 were with secondary infertility and 160 were with recurrent pregnancy loss. Out of 203 with primary infertility, 106 (52.2%) were suffering from signs and symptoms of depression. Out of 130 patients with secondary infertility, 63 (48.46%) were depressed. Out of total 160 patient with recurrent pregnancy loss, 86 (53.7%) were depressed.

Table 3 Prevalence of depression in pregnancy and postpartum period

Cause	Total number of patients	Number of patients with depression	Percentage (%)
1.Pregnancy	2505	128	5.1%
2.Post-partum period	428	102	23.8%

Out of total pregnant patients (2505), 128 (5.1%) were suffering from signs and symptoms of depression. Out of total postpartum patients (426), 102 (23.8%) were depressed

Chart 2 Percentage of patients with different types of depression in post partum period



Out of total postpartum patients, 46 (28%) were suffering from postpartum depression, 115 (70.1%) from postpartum blues and 3 (1.8%) from postpartum psychosis.

Table 4 Prevalence of depression amongst perimenopausal womem (n=422)

Cause	Total number of patients	Number of patients suffering from depression	Percentage (%)
1.Malignancies	26	12	46.8%
2.Abnormal uterine bleeding	350	72	20.5%
3.Other gynaecological and medical disorders	46	13	28.2%

Out of total 422 perimenopausal women, 26 were suffering from malignancies, out of which 12 (46.8%) were depressed. 350 patients were with abnormal uterine bleeding, out of which 72 (20.5%) were depressed and 46 were with other gynaecological and medical disorders, out of which 13 (28.2%) were depressed.

Majority of the patients studied were randomly taken from the outpatient department. Some indoor patients were also included in the study. Patients with moderate to severe symptoms required psychiatric help.

Discussion

In this study, prevalence of depression is found to be highest among patients of primary infertility (52.2%), recurrent pregnancy loss (53.7%) and patients suffering from malignancies(46.8%).

Previous studies report that the incidence of depression is 11% in postpartum patients[6]. The prevalence of major depression during pregnancy in US women varies from 8.3% to 12.7%[7]. Community based studies have indicated that poor urban women are twice at risk as middle-class women for major and minor depression during pregnancy and postpartum period(20-25% vs 9-13% respectively)[8-9]. The depressive disorder was present in 42% of women suffering from malignancies which is comparable to our study[10]. A cross-sectional study has found that those with ovarian cancer or other poorly differentiated tumor and/or those receiving triple agent chemotherapy appear to be at increased risk of depression[11].

Depression was seen both during pregnancy as well as in post partum period. In pregnancy, depression can lead to various complications like hyperemesis, IUGR, pre-term labor, PPROM, prolonged labor and increased operative intervention and low birth weight babies. In post partum period it can lead to postpartum blues, post partum psychosis, failure of lactation. In post-partum blues depressive symptoms start from 3 days-6 weeks. This condition is very common and symptoms are mild . In post partum depression , the onset is between 6 weeks-1 year and symptoms are more marked. In postpartum psychosis,psychotic symptoms appear. In perimenopausal age group malignancies, abnormal uterine bleeding, difficulty in acceptance of menopause, various medical illnesses were main causes of depression.

Many a times, the condition is missed. So depression remains underdiagnosed and untreated. This is because of lack of awareness, low social status of women, increased level of stress and domestic violence. Awareness through public education, organized National Mental Health Programmes and Comprehensive Management with judicious utilization of limited resources can detect and treat the cases of female depression at the earliest in a cost effective manner.

Conclusion

Depression is a serious condition involving every phase of woman s life. There are different causes of depression at menarche, during pregnancy and at menopause. Many a times this condition is missed and remains underdiagnosed and untreated. Early public awareness is cost effective and need of the hour.

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