



ISSN: 0975-833X

RESEARCH ARTICLE

ASSESSING THE PREVALENCE AND SEVERITY OF DEPRESSION IN SUBJECT'S CHEWING KHAT (CHAT) BY USING ZUNG SELF-RATING DEPRESSION SCALE

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ARTICLE INFO

Article History:

Received 16th July, 2014
Received in revised form
25th August, 2014
Accepted 04th September, 2014
Published online 25th October, 2014

Key words:

Khat, substance abuse,
Substance dependence,
Depression,
Zung Self-Rating Depression Scale.

ABSTRACT

Many people suffering with depression may abuse alcohol or other substances. Despite a few of them become dependent on this substances or drugs. Khat is one of the substance which was classified by WHO in 1980's as a drug of abuse that can produce mild- to- moderate psychological dependence (less than tobacco or alcohol), long-term abuse of khat may cause or worse depression (Nutt D-2007). However men or women with depression are more likely to suffer from both substance abuse & substance dependence than are other. The current study will examines the prevalence and severity of depression in people chewing Khat by using Zung Self-Rating Depression Scale. This Scale is the most widely used subjective self measure of depression (Zung w- 1965). The present research shows that majority of respondents who are chewing khat are having normal range with no sign of depression, considerable percent of respondents are mildly depressed, and minority percent of respondents are moderately depressed and there are no severely depressed respondents.

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INTRODUCTION

Depression is a condition with feeling of sadness, loss of interest, self- neglect, anorexia, sleep disturbances, emptiness, hopelessness, worthlessness, irritability, or restlessness, in severe cases suicidal feelings, etc. and stands to be a global problem in the current world. Many people suffering with depression may abuse alcohol or other substances. Despite a few of them become dependent on this substances or drugs. The comorbidity of depression with substance abuse and dependence is substantial; such comorbidity adversely affects the course and progression of each problem in people who suffer from both substance misuse and depression. (charleseckubly foundation). Khat is one of the substance which was classified by WHO in 1980's as a drug of abuse that can produce mild- to- moderate psychological dependence (less than tobacco or alcohol), although WHO does not consider khat to be seriously addictive(Al- Mugahed 2008). On the other hand long-term abuse of khat may cause or worse depression (Nutt 2007). However men or women with depression are more likely to suffer from both substance abuse and substance dependence than are other (DEA. 2006). The current study will examines the prevalence and severity of depression in people chewing Khat by using Zung Self-Rating Depression Scale. This Scale is the most widely used subjective self measure of depression. (Zung 1965).

MATERIALS AND METHODS

The current study conducted to assess the prevalence and severity of depression in subjects chewing Khat from more than 3 years in Dilla, Gedio-zone, Ethiopia. A total of 102 subjects whose age is 20 and above were included in the study and assessed the prevalence and severity of depression by using Zung Self-Rating Depression Scale. The Zung Self-Rating Depression Scale is a short self-administered survey to quantify the depressed status of a respondent (Kirkby, 2005). Although the test is quick and easy to administer, it is dependent on the subject's interpretation of the rating system. There are 20 questions on the scale that rate the rating affective, psychological and somatic symptoms associated with depression. There are ten positively worded and ten negatively worded questions as shown in Table-1. Each question is scored on a scale of 1 through 4 (based on these replies: "a little of the time", "some of the time", "good part of the time", "most of the time").

The checked marks for each statement were compared with the key given below in Table-2 with value (1-4) that correlates with subjects responses to each statement. Adding up overall values for all statement, a total score of each respondent can be calculated and Interpreted according to Zung Self-Rating Depression Scale, presented in Table-3. Total score of the test range from 20 through 80. Below Table-2 presents the scores for each response.

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Table 1. Questionnaire

Please read each statement and decide how much of the time the statement describes how you have been feeling during the past several days

S. NO: AGE : SEX: OCCUPATION:

Make check mark () in appropriate Column	Little of the time	Some of the time	Good part of the time	Most of the time
1. I feel down- hearted				
2. Morning is when I feel the best				
3. I have crying spells or feel like it				
4. I have trouble sleeping at night				
5. I eat as much as I used to				
6. I still enjoy sex				
7. I notice that I am losing weight				
8. I have trouble with constipation				
9. My heart beats faster than usual				
10. I get tired for no reason				
11. My mind is as clear as it used to be				
12. I find easy to do the things I used to				
13. I am restless & can't keep still				
14. I find hopeful about the future				
15. I am more irritable than used				
16. I find it easy to make decisions				
17. I feel that I am useful & needed				
18. My life is pretty full				
19. I feel that others would be better off if I were dead				
20. I still enjoy the things I used to do				

Table 2. Key to scale the value of subject response of each statement

	Little of the time	Some of the time	Good part of the time	Most of the time
1. I feel down- hearted	1	2	3	4
2. Morning is when I feel the best	4	3	2	1
3. I have crying spells or feel like it	1	2	3	4
4. I have trouble sleeping at night	1	2	3	4
5. I eat as much as I used to	4	3	2	1
6. I still enjoy sex	4	3	2	1
7. I notice that I am losing weight	1	2	3	4
8. I have trouble with constipation	1	2	3	4
9. My heart beats faster than usual	1	2	3	4
10. I get tired for no reason	1	2	3	4
11. My mind is as clear as it used to be	4	3	2	1
12. I find easy to do the things I used to	4	3	2	1
13. I am restless & can't keep still	1	2	3	4
14. I find hopeful about the future	4	3	2	1
15. I am more irritable than used	1	2	3	4
16. I find it easy to make decisions	4	3	2	1
17. I feel that I am useful & needed	4	3	2	1
18. My life is pretty full	4	3	2	1
19. I feel that others would be better off if I were dead	1	2	3	4
20. I still enjoy the things I used to do	4	3	2	1
Total				

After adding scores with table-2 format the total score may range from 20 to 80. The total score can be interpreted by using Zung Self-Rating Depression Scale which is presented in the Table-3.

Table 3. Scale showing the scores fall into four ranges

Score range	Rated as
20- 44	Normal range
45- 59	Mildly depressed
60- 69	Moderately depressed
70 and above	Severely depressed

RESULTS

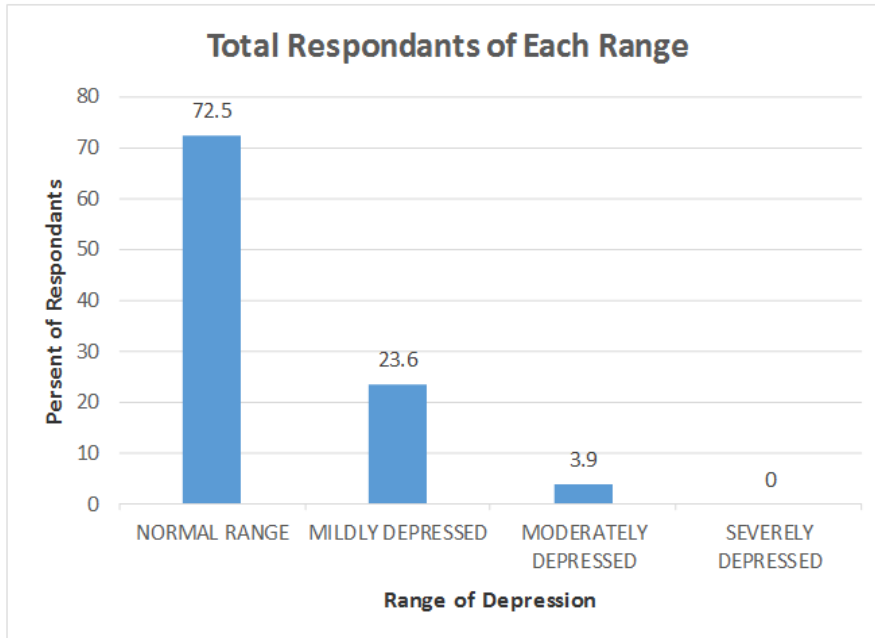
By using above statements a survey has been conducted among 102 subjects in Dilla region, Ethiopia and total score were calculated for each respondent which has been presented in the following Table-4.

From the above Table-4 and Graph-1 it can be interpreted that, 72.5% of respondents who are chewing khat are having normal range with no sign of depression, 23.6% of respondents who are chewing khat are mildly depressed, and 3.9% of

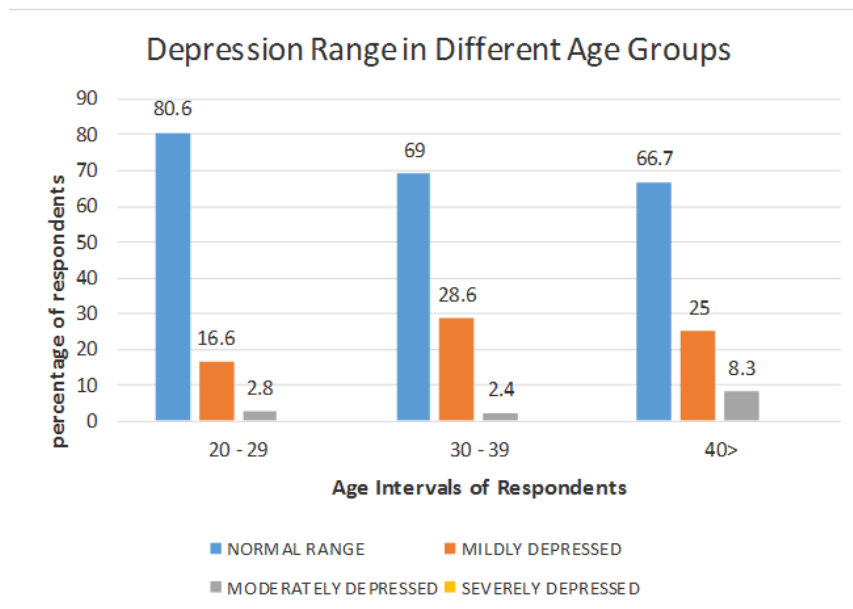
respondents are moderately depressed. The below Table-5 presents the range of depression in each age category as well as grand total of each age group with corresponding depression range.

Table 4. Total respondents in each range

Range	Total
Normal range	74(72.5%)
Mildly depressed	24(23.6%)
Moderately depressed	04(3.9%)
Severely depressed	00(0.0%)
Total	102(100%)



Graph-1



Graph-2 Showing the age distribution of respondents

Table 5. Age and range of depression

Age	Normal range	Mildly depressed	Moderately depressed	Severely depressed	Grand total
20 - 29	29(80.6%)	06(16.6%)	01(2.8%)	0	36(100%)
30 - 39	29(69.0%)	12(28.6%)	01(2.4%)	0	42(100%)
40>	16(66.7%)	06(25.0%)	02(8.3%)	0	24(100%)
Sub Total	74(72.5%)	24(23.6%)	04 (3.9%)	0	102(100%)

From the above Table- 5 and Graph-2 it can be interpreted that the range of depression varies from each age group to age group ranging from normal range to moderately depressed. The range of depression in different age group has been presented in the following.

20-29 Age Group

From the table-5 and Graph-2 it can be observed that respondents in 20-29 age group, who are having habit of chewing Khat are under normal range is about 80.6% respondents, mildly depressed are 16.6% respondents, moderately depressed are 2.8% respondents and there is no respondents who are severely depressed.

30-39 Age Group

In the age group of 30-39 who are having habit of chewing Khat are under normal range is about 69.0% respondents, mildly depressed are 28.6% respondents, moderately depressed are 2.4% respondents and there is no respondents who are severely depressed.

40 and Above Age Group

In the age group who are 40 and above age having habit of chewing Khat are under normal range is about 66.7% respondents, mildly depressed are 25.0% respondents, moderately depressed are 8.3% respondents and there is no respondents who are severely depressed.

Conclusion

From the above analysis of the answers to the questionnaire by the respondents, it can be concluded that a significant number of 72.5% are normal with no depression and 23.6% are mildly depressed and 3.9% moderately depressed and there is no respondents with severe depression. Even in the category of range of respondents who can be classified as mildly depressed are more in 30-39 years of age group and moderately depressed are more in 40 and above age group. But a statistical analysis of the results could not establish any overall association between the score and age.

There is no respondents with severely depressed in any khat chewing age groups which is Intune with WHO research findings i.e. Khat chewing is not severe causative agent for depression. This doesn't mean that khat is not a severe cause for depression, the severity of khat effects differs from person to person and quantity of consumed khat. The further research has to be done with more sample size with various dimensions like quantity of khat, years of abuse of khat and with short age intervals along with gender differences.

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