



Comparison of Depression among Married and Divorced People in Ethiopia: Secondary Data Analysis

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Abstract

Background: In Ethiopia, mental illness in particular depression is the leading non-communicable disorder in terms of burden. The purpose of this review is to provide latest available comparison of depression among married and divorced people in Ethiopia.

Methods: This is systemic review and meta-analysis by study design. The studies were searched in Google Scholar, Medline and Web of science database and PRISMA guidelines protocol was used to write the systematic review.

Results: Twenty studies were found to be eligible and included in the meta-analysis. The combined effect size of all studies revealed a statistically significant association between marital status and depression (OR = 0.57; 95% CI: 0.37 - 0.86).

Conclusion: We found that divorced people were more likely to have depression than married people. Thus, more attention should be paid to strengthen activities which discourage divorce at community level and integrating mental health counseling into health extension programme is advisable.

Keywords: Depression; Ethiopia; Marital Status; Mental Disorder

Introduction

Depression, a mental illness characterized by low mood (sad mood), is one of the most serious and common mental disorders [1].

At a global level, over 300 million people were estimated to suffer from depression in 2015, which was equivalent to 4.4% of the world's population [2]. Even though, mental health and wellbeing are specifically addressed under SDG Target 3.4, an estimate of one in 10 people in the world suffer from a mental disorder [3]; which make it a barrier to sustainable development in all regions.

The number of persons with common mental disorders globally is going up, particularly in lower-income countries, because the population is growing and more people are living to the age when depression most commonly occurs. The total estimated number of people living with depression increased by 18.4% between 2005 and 2015 [4]; this reflects the overall growth of the global population, as well as an increase in the age groups at which depression is more prevalent. Eighteen-country adult based study reported that the life time prevalence of Major Depressive Disorder (MDD) was 14.6% in 10 high income countries and 11.1% in 8 low and middle income countries [5]. Depression was also reported as 29.6% in

Thai [6], 47.3% in Kathmandu Valley [7], 45.2% in Thailand [8]. We also found that depression is highly prevalent in Botswana which accounts 25.3% among women and 31.4% among men [9].

In Ethiopia, mental illness in particular depression is the leading non-communicable disorder in terms of burden. Nationwide study using data from the Ethiopian National health survey showed depressive episode of 9.1% [10] and 4.8% [11] among women. Moreover, the life time prevalence of depression in general population was reported 2.2% [12].

Depression prevents people from reaching their full potential, impairs human capital, and is associated with premature mortality from suicide and other illnesses and It represents a barrier to sustainable development in all regions [13,14].

Depressive disorders led to a global total of over 50 million Years Lived with Disability (YLD) in 2015 and up to 15% of individuals with severe depression (about 1 in 7) will die from suicide unless they are properly identified, treated and followed up [1,2].

Although depression can and does affect people of all ages, from all walks of life, the risk of becoming depressed is increased by chemical changes in the brain, poverty, older age, lower educational level, unemployment, life events such as the death of a loved one or a relationship break-up (divorce), lack of adequate support, physical illness and problems caused by alcohol and drug use [1,10,15].

Providing reliable and up-to-date evidence on depression among married and divorced adults especially for country having larger populations like Ethiopia is a key ingredient of effective health policy, planning, evaluation and intervention concerning depression. Additionally, it is useful to indicate that whether there is difference in depression among married and divorced adults and if there is difference which group is at risk for depression so that clinician can use this information for patient management. Therefore, this systemic review and meta-analysis was aimed at providing latest available comparison of depression among married and divorced people in Ethiopia.

Materials and Methods

Study design and searching strategy

This is systemic review and meta-analysis by study design. The PRISMA guidelines protocol was used to write the systematic review [16]. The studies were searched in Google Scholar, Medline

and Web of science database by using the following terms: “depression”, “determinants of depression” and Ethiopia. The data used for this review were extracted from articles published between 2012 and 2019 [10,17-35].

Population and sample

The study population was all people having age of ≥ 18 . Intervention/exposure is married while comparison is divorced and the outcome was depression.

Inclusion criteria

Studies were included in the review if; (1) the study was an observational study (cross-sectional study, case-control study, or cohort study), (2) the outcome of interest was depression, (3) the study reported data on married and divorced with respect to depression, and (4) studies are published between 2010 and 2020.

Exclusion criteria

Studies conducted abroad Ethiopia and studies identified depression without tool was excluded.

Measures

Studies included in this review use different tool to measure depression but all of them dichotomized depression as “yes” if there is depression and “No” if there is no depression. Married and divorced were considered to be indicators of marital status.

Data extraction and synthesis

Data extraction was made by using data extraction form. We developed the data extraction form that meet the objective of this study. It included year of publication, the name of an author, study design, and number of depression among married and divorced.

Quality assessment

The assessment of included studies were done using checklist developed by Joanna Briggs Institute which consists of eight points to screen article and all studies have acceptable quality [36].

Statistical analysis

We used Review Manager Version 5.3 and Meta essential software to calculate combined effect size and associated 95% confidence intervals so as to compare depression among married and divorced population.

We determined combined effect size across the studies using Mantel-Haenszel (MH) statistic (random effect model) and moderator analysis by taking prevalence of depression as fixed factor. The

I^2 statistic was used to assess variation across studies and above 50% was considered as significant [37]. Finally, Egger's and Begg's tests were used to assess for publication bias [38].

[18,21,26,34], one study from Harari [33], One study from Tigray [31], One study is national from Ethiopia [10] (Table 1).

Results

Search outcomes

The electronic searching of records results in 351 articles. Among 351 research articles, 200 were excluded due to duplication and our inclusion criteria and 103 articles were excluded because title and abstract did not fit our inclusion criteria. 48 of full-text articles assessed for eligibility and 26 of full-text articles excluded, with reasons of not presenting data on depression and marital status.

Finally, twenty two research articles were included to estimate pooled odd ratio of depression among married and divorced adults in Ethiopia (Figure 1).

Study characteristics

The sample size of included studies ranges from 4925 [10] to 264 [25]. All included studies were cross-sectional surveys and done in different regions of Ethiopia. Four studies from Oromia [24,30,32,35], four studies from Amhara region [17,20,22,32], four studies from Addis Ababa [25,27-29], four studies from SNNP

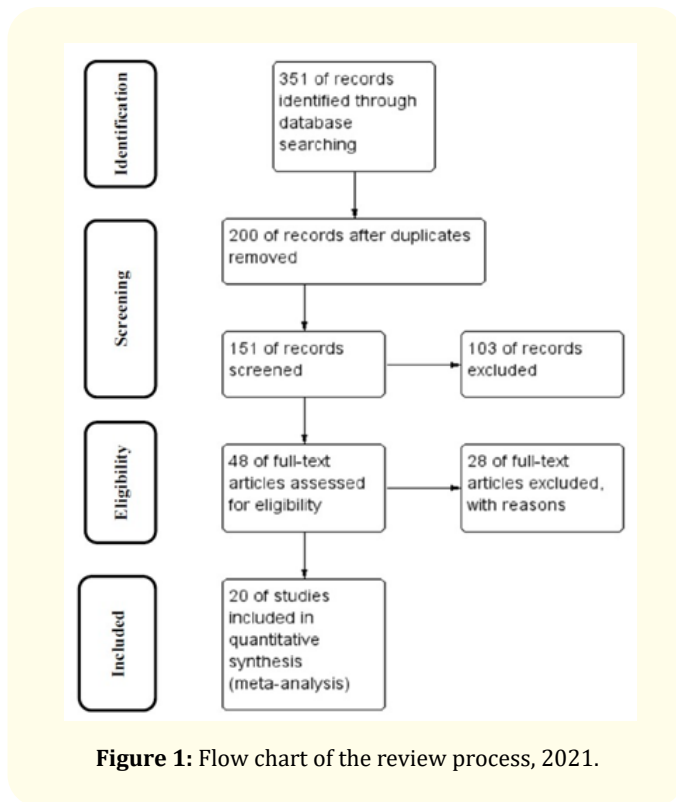


Figure 1: Flow chart of the review process, 2021.

S.no	Author Name	Publication year	Prevalence of depression (%)	Region	Sample size	Tool used
1	Abadiga [30]	2019	41.7	Oromia	393	PHQ_9
2	Amha., et al. [17]	2020	45.9	Amhara	813	GDS
3	Azeze., et al. [26]	2020	29.3	SNNPR	418	PHQ_9
4	Berhe., et al. [31]	2013	44	Tigray	269	HAM-D
5	Dorsisa., et al. [32]	2020	31	Oromia	303	PHQ_9
6	Duko B., et al. [21]	2019	32	SNNPR	363	HADS
7	Duko., et al. [18]	2018	48.6	SNNPR	401	PHQ_9
8	Edemealem., et al. [22]	2020	6	Amhara	404	PHQ_2
9	Ejigu et al. [27]	2020	27.5	Addis Ababa	862	PHQ_4
10	Fanta., et al. [29]	2020	18	Addis Ababa	418	PHQ_9
11	Feyera., et al. [19]	2015	38.3	Somali	847	PHQ_9
12	Habtewold., et al. [25]		44.7	Addis Ababa	264	PHQ_9
13	Hailemariam., et al. [10]	2012	9.1	All regions	4925	ICD_10
14	Minichil., et al. [28]	2019	57.6	Addis Ababa	416	PHQ_9
15	Mossie., et al. [35]	2016	29	Oromia	590	BDI-II
16	Reta., et al. [23]	2019	44	Amhara	336	PHQ_9
17	Seid., et al. [20]	2020	20	Amhara	395	PHQ_9
18	Tilahun., et al. [33]	2018	59.7	Harar	489	PHQ_9
19	Tilahune., et al. [34]	2016	24.5	SNNPR	326	PHQ_9
20	Yeshaw., et al. [24]	2017	22.9	Oromia	354	DASS_21

Table 1: Descriptions of the included studies in the meta-analysis in Ethiopia, 2021.

Comparison of depression

In this meta-analysis, we examined the association between marital status and depression by using 20 studies.

As we have seen from the forest plot, there are 9731 respondents out of which 3280 of them reported having depression and 8576 of them are married while 1155 are divorced.

The combined effect size of all studies revealed a statistically significant association between marital status and depression. Accordingly, married people were less by 43% risk of developing depression compared to divorced people (OR = 0.57; 95% CI: 0.37 - 0.86).

There is a significant heterogeneity across the studies included ($I^2 = 85\%$) (Figure 2).

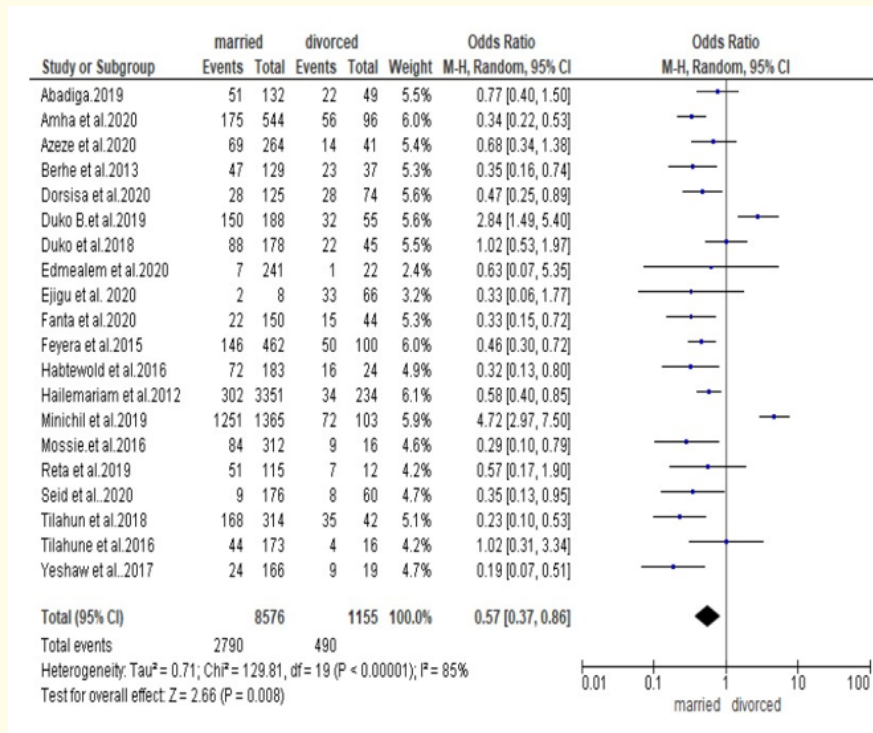


Figure 2: Forest plot of the pooled effect size of depression among married and divorced people in Ethiopia, 2021.

Source of heterogeneity

To identify the possible source of heterogeneity, we undertake moderator analysis by taking prevalence of depression as a moderator by using fixed effect model. Accordingly, the moderator analysis indicated that as prevalence of depression increase the effect size of depression also increase (B= 0.02, P-value < 0.001) (Figure 3).

Reporting bias

For this analysis, we also assessed publication bias using Begg’s and Egger’s tests, the result of the test statistics indicated that there was no possible presence of statistically significant publication bias (p = 0.795) and (p = 0.328) respectively (Figure 4).

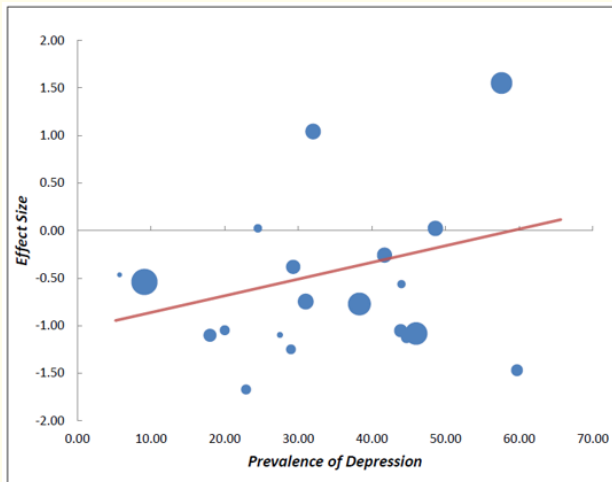


Figure 3: Moderator analysis of prevalence of depression and effect size of depression in Ethiopia, 2021.

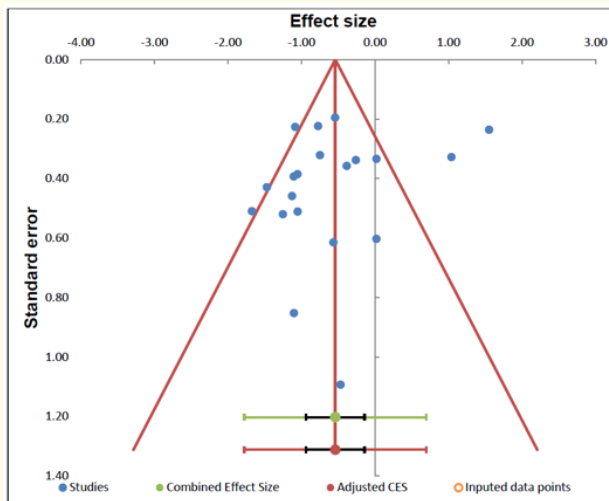


Figure 4: Funnel plot of the comparison between depression and marital status in Ethiopia, 2021.

Discussion

This systemic review and meta-analysis was done to compare depression among married and divorced peoples in Ethiopia.

The finding of our study suggests that marital status has significant association with depression. Thus, married people have lower

chance of depression compared to divorced people.

When compared to the available evidences, our finding was comparable with other studies carried out in different parts of the world like: in India [39], Sri Lanka [40,41], Botswana [9] and South Africa [42] that indicated, being married is a protective factor of depression. Similarly, the finding is in line with previous studies conducted in Ethiopia [17,19,27,34,43,44] that showed being divorced was positively associated with depression.

Potential explanations for this finding might be attributed to a difference in stress coping mechanism between married and divorced people as well as perceived loneliness sensation and loss of social support in divorced people unlike married people who have the opportunity to find emotional support and intimacy in one’s partner.

However, our finding is inconsistent with studies done in India [45] and Uganda [46] that showed marital status were not found to be statistically significantly associated with depression. Other study on depression and ART initiation among HIV serodiscordant couples in Kenya and Uganda also reports marital status has no association with probable depression [47]. Additionally, our finding is not comparable studies conducted in several parts of Ethiopia [18,25,26,31,32] which suggest that marital status were not found to be predictors of depression.

The possible reason for this discrepancy might be difference in study population, sample size, study setting, prevalence of depression and lifestyle factors such as sociocultural characteristics, environmental.

Conclusion

We found that divorced people were more likely to have depression than married people. So psychological support by mental health worker is needed for divorced people so as to decrease the occurrence of depression. More attention should be paid to strengthen activities which discourage divorce at community level and integrating mental health counseling into health extension programme is advisable.

Data Sharing Statement

All data belong to this study are contained and presented in this document.

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Disclosure

The authors declare that they have no conflicts of interests.

Authors' Contribution

All authors (AAA, KTT, GMW, ETT, MKT and AZ) made substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data. All authors (AAA, KTT, GMW, ETT, MKT and AZ) read and agreed to submit to the current journal.

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