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MAIN FEATURES OF PREVALENCE AND SEVERITY OF MAJOR DEPRESSIVE EPISODE IN ROMANIA

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The objectives of the current article are to present some nationally representative estimates of lifetime, 12-months prevalence of MDE the age of onset, years in episode, the effects of MDE on role impairment.

The lifetime prevalence of MDE was 3.3% for "all ages", with higher values for females than for males (4.1% versus 2.5%) and the prevalence estimates of CIDI/DSM-IV 12-months Major Depressive Episode (MDE) was 1.8% (2.2% for females and 1.4% for males).

Approximately half of those with lifetime prevalence MDE presented 12-months MDE too (53.8%).

Within the age groups "18-34", "all ages" and "50-64", the females have the mean onset of MDE earlier than males (a slight difference for the first two situations, a difference of about 8 years for the latter). Within the age groups "35-49" of "65 years and over", the males have the onset of MDE earlier than the females with 3-4 years.

Regarding the mean number of years in episode, for all subjects was found a value of 5.7 years.

Symptom severity assessed with the Quick Inventory of Depressive Symptomatology Self Report (QIDS-SR), revealed that almost two thirds of cases with MDE were "severe" or "very severe" from clinical point of view. Number of weeks depressed in the 365 days before the interview, expressed as mean was 30.8 for those with "severe" symptoms/domain.

In the past 30 days, the highest WHODAS score was for out of role domain (36.2), then for mobility (14.6).

Regarding the number of days out of role in the last year due to depression, this was 82.1 for the age group "50-64" and 63.5 for those of "65 years old and over".

Major Depression Episode is a seriously impairment condition.

The severe consequences of the depression on functioning in labour and social areas call attention to the need for early diagnostic, proper treatment and intervention.

Key words: major depressive episode, lifetime prevalence, 12-mo prevalence, Sheehan score, disability assessment schedule

BACKGROUND

In the last decades, the interest for measuring the effects of mental disorders on daily functioning and on complex roles a person has to deal with, became higher.

Among the mental disorders responsible for severe effects on social, family life, the major depressive episode (MDE) is one of the most impairing, and there is an increasing awareness that depression is a very common and very serious illness [1,2].

The World Health Organization (WHO) now ranks major depression as one of the most burdensome diseases in the world [3].

Since 1994, the American Psychiatric Association introduced the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) system which emphasises the clinical significance requirement for a diagnosis of Major Depressive Disorder more prominently than did in the earlier DSM editions [4].

THE OBJECTIVES

As in the last decades in Romania there was no nationally representative population-based study available with regard to DSM-IV disorders, from which the Major Depressive Episode (MDE) is one of most impairing, the objectives of the current article are to present some nationally representative estimates of lifetime, 12-months prevalence of MDE the age of onset, years in episode, the effects of MDE on role impairment.

DIAGNOSTIC ASSESSMENT

The DSM-IV criteria were used here and the target of the article is the major depressive episode , part of mood disorders.

In addition to the prevalence of MDE, in this article is too reported the comorbidity with anxiety disorders (panic disorder, agoraphobia without panic, social anxiety disorder, specific phobia, generalized anxiety disorder, adult separation anxiety disorder and posttraumatic stress disorder), substance use disorders, (alcohol and drug abuse and dependence) and impulse control disorders [5,6,7].

DESIGN AND SETTING

The nationally representative "face-to face" household survey conducted in Romania between 2005-2007 used World Health Organization (WHO) World Mental Health (WMH) Survey Initiative version of the Composite International Diagnostic Interview (CIDI) [8,9].

The fully structured interview known as WMH-CIDI was administered by trained lay interviewers as Computer Assisted Personal Interview (CAPI version) [10].

The interviewers explained the study and obtained verbal informed consent prior to beginning each interview. →

SAMPLE

The Romanian Mental Health Study is a nationally representative survey of Romanian-speaking household residents aged 18 years and older in Romania.

PARTICIPANTS:

The sample contains 2357 subjects of 18 years or older, from which 940 cases are 44 years old or less. The response rate was 70.9%.

METHODS:

Were estimated the lifetime, 12-months prevalence, the mean and median age of onset, the median and the mean number of years in episode.

The respondents who met CIDI/DSM-IV 12-months Major Depression Episode (MDE) was administered two scales: the Sheehan Disability Scale (SDS) [11] to assess the extent to which depression interfered with functioning in work, household, relationship, and social roles in the worst month of the past year and a truncated version of the Quick Inventory of Depressive Symptomatology Self Report (QIDS-SR) to assess symptom severity in the worst month of the past year [12,13,14].

Transformation rules developed for QIDS-SR were used to convert scores into clinical severity categories mapped to the conventional Hamilton Rating Scale of Depression (HRSD) ranges of "none" (i.e. not clinically depressed), "mild", "moderate", "severe" and "very severe" [13,14].

In addition, an open-ended question asked respondents to estimate the number of days in the past 365 days when they were "totally unable to work or carry out the normal activities because of depression" [5,14].

All respondents completed the WHO Disability Assessment Schedule (WHO-DAS) [15] to assess functional impairments in 6 domains during the past 30 days: the domain 1 refers to the number of days in the past 30 days when the respondent was completely unable to work or carry out the normal activities because of physical or mental health problems and the domains from 2 to 6 refer to the severity, persistence of impairments in 5 domains of functioning during the same period of time.

These domains include: self-care (e.g., bathing, dressing), mobility (e.g., standing, walking), cognition (e.g., concentrating, remembering), social functioning (e.g., conversing, maintaining emotional control while around others), and role functioning (e.g., quality and quantity of normal activities at home or work).

All 6 WHO-DAS scales were transformed to a theoretical range of "0" meaning "no impairment at any time in the past 30 days" to 1.0 meaning "complete inability to perform the functions throughout the full 30 days" [15].

Whenever possible were tested the difference in prevalence and Odds Ratios (ORs) across the age groups and between genders [5].

RESULTS

Life time prevalence of Major Depressive Episode (see Table 1)

For "all ages" the lifetime prevalence of MDE was 3.3%, with higher values for females than for males (4.1% versus 2.5%).

These point values translated in absolute figures, taking into account the real population from 2007, would correspond to approximatelly to 574000 persons from which 209000 are men and 365000 females.

The lifetime prevalence of MDE is increasing by age; from 2.1-2.6% for "18-34" and "35-49" age groups, to 4.4-5.2% for "50-64" and "65 and over". The lifetime prevalence of MDE is higher for females, the difference being of 1.6 percentage points.

For females, the lifetime prevalence of MDE is increasing by age from 3.1-3.4% for "18-34" and "35-49" age groups, to 4.6-5.8% for "50-64" and "65 years and over" age groups. For males, the lifetime prevalence of MDE is increasing from 1.1-1.8% for "18-34" and "35-49" age groups to 4.2% for the older age groups.

The gender difference is quite large for the age groups "18-34", "35-49", "65 years old and over" and for "all ages" (being 2 percentage points for the first one and 1.6 percentage points for the next two categories and for "all ages").

For the age group "50-64", the gender difference is less than half percentage point.

For females of "all ages" the prevalence rate is 4.1%; as the age is increasing, the prevalence rate is increasing too.

Compared to each corresponding previous age group, the rhythm of the increase is of 1.2 percentage points for the groups of age "50-64" and "65 years and over"; instead, the increase for the age group "35-49" compared to the youngest is only of 0.3 percentage point. For females after 50 years old, the prevalence of MDE is ascendant, with a rhythm more consistent than in young ages.

For males of "all ages", the prevalence rate is 2.5%. The same pattern of rate increase by age can be noticed but the difference found across ages for males is much higher than that for females. For instance, for the group of "50-64" compared to "35-49" the difference is 2.4 percentage points for males compared to difference of 1.2 percentage points for females).

Again the age difference for males for the age group "35-49" compared to the youngest age group "18-34" is almost twice higher than that corresponding for females (0.7 compared to 0.3).

At age groups "50-64" and "65 years and over" the rates for males are equal (4.2%).

For males, the age of "50-64" brings a much higher prevalence but the prevalence rate remains constant for the next age group, instead, the prevalence for females is increasing constantly over 50 years old.

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Table 1. Prevalence of life-time and 12-months MDE

		Total			Females			Males			
Diagnosis (12 Mo or LT)	**Cohorts**	**Denominator N[1]**	**N[2]**	**%(SE)**	**Denominator N[1]**	**N[2]**	**%(SE)**	**Denominator N[1]**	**N[2]**	**%(SE)**	**1 df test between gender[3]**
12-months MDE	18-34	568	8	1.3 (0.5)	313	5	1.6 (0.8)	255	3	1.1 (0.7)	X²=0.2, P=.630, df=1
	35-49	524	8	1.5 (0.7)	271	6	2.2 (1.1)	253	2	0.9 (0.9)	X²=0.9, P=.352, df=1
	50-64	619	15	2.4 (0.7)	322	9	2.5 (0.7)	297	6	2.3 (1.2)	X²=0.0, P=.858, df=1
	65+	646	15	2.2 (0.7)	359	11	2.7 (0.9)	287	4	1.5 (0.8)	X²=1.4, P=.237, df=1
	All Ages	2357	46	1.8 (0.3)	1265	31	2.2 (0.5)	1092	15	1.4 (0.5)	X²=1.8, P=.175, df=1
	3 df significance test across cohorts[3]	.	.	X²=2.2, P=.528, df=3	.	.	X²=1.0, P=.810, df=3	.	.	X²=1.2, P=.749, df=3	--
LT MDE	18-34	568	13	2.1 (0.7)	313	10	3.1 (1.1)	255	3	1.1 (0.7)	X²=2.8, P=.094, df=1
	35-49	524	15	2.6 (0.8)	271	11	3.4 (1.1)	253	4	1.8 (1.1)	X²=1.1, P=.288, df=1
	50-64	619	33	4.4 (0.9)	322	20	4.6 (1.1)	297	13	4.2 (1.3)	X²=0.1, P=.807, df=1
	65+	646	40	5.2 (1.0)	359	27	5.8 (1.5)	287	13	4.2 (1.1)	X²=0.7, P=.417, df=1
	All Ages	2357	101	3.3 (0.5)	1265	68	4.1 (0.7)	1092	33	2.5 (0.5)	X²=4.5*, P=.033, df=1
	3 df significance test across cohorts[3]	.	.	X²=8.4*, P=.039, df=3	.	.	X²=2.3, P=.509, df=3	.	.	X²=11.2*, P=.011, df=3	--
12-months MDE among LT MDE	18-34	13	8	64.4 (12.8)	10	5	51.8 (16.4)	3	3	100.0 (0.0)	X²=2.8, P=.094, df=1
	35-49	15	8	58.7 (15.3)	11	6	63.4 (18.2)	4	2	48.8 (31.1)	X²=0.2, P=.691, df=1
	50-64	33	15	54.3 (10.6)	20	9	54.4 (9.6)	13	6	54.2 (17.8)	X²=0.0, P=.994, df=1
	65+	40	15	42.5 (8.1)	27	11	46.6 (12.1)	13	4	34.7 (15.8)	X²=0.3, P=.602, df=1
	All Ages	101	46	53.8 (5.9)	68	31	53.4 (6.8)	33	15	54.6 (11.2)	X²=0.0, P=.929, df=1
	3 df significance test across cohorts[3]	.	.	X²=2.2, P=.535, df=3	.	.	X²=0.6, P=.898, df=3	.	.	X²=4.2, P=.242, df=3	--

[1]Total cases among each age group
[2]cases of 12-mo/LT MDE among the age groups
[3]3 df tests for significant difference across age groups and 1 df test for significance difference across genders; odds ratios and significance tests are not presented for the models where the size of the subsample is less than 15, or the count of the dependent variable is less than 5
*The test is significant at the 0.05 level

When both genders are considered together, we see a continuous increase, from one age group to another.

A substantial increase can be noticed after 50 years old compared with the age "35-49" (1.8 percent increase).

After the age of 65 years, even not so ascendant (0.8 percentage points), the increasing tendency still can be noticed.

The lowest increase can be seen for the age group "35-49" compared to the youngest (0.5 percentage points).

The lifetime of MDE has a significant difference across age groups for males and for "all subjects" but not for females.

For "all subjects" with lifetime MDE there is a significant difference across genders but this cannot be found within each age group.

The mean age of MDE onset (see table 2)

For "all subjects", the mean age of onset is 32 years, ranging shortly from 31.1 for females to 33.5

Table 2. History of depression by age and sex

		Total			Females			Males			
	Cohorts	N[1]	Mean(SE)	Median (IQR Range)	N[1]	Mean(SE)	Median (IQR Range)	N[1]	Mean(SE)	Median (IQR Range)	1 df test between gender[2]
Mean age of onset	18-34	13	21.1 (1.5)	18.0 (17.3-21.0)	10	20.9 (1.6)	18.2 (17.3-21.1)	3	21.9 (3.2)	18.0 (18.0-21.0)	---
	35-49	15	26.4 (2.7)	25.3 (20.6-32.6)	11	27.4 (2.2)	25.9 (20.3-32.3)	4	24.3 (6.4)	11.0 (11.0-25.0)	X^2=0.2, P=.643, df=1
	50-64	33	35.3 (2.6)	31.9 (25.2-44.9)	20	31.5 (3.3)	28.0 (19.4-41.5)	13	39.8 (3.3)	42.5 (28.2-46.8)	X^2=4.8*, P=.028, df=1
	65+	40	39.8 (3.2)	34.6 (22.5-54.7)	27	41.3 (3.4)	39.7 (24.6-54.7)	13	37.0 (5.3)	31.1 (20.4-45.0)	X^2=0.5, P=.478, df=1
	All Ages	101	32.0 (1.7)	28.6 (19.3-42.2)	68	31.1 (1.9)	26.4 (19.1-39.7)	33	33.5 (2.6)	30.8 (20.2-43.6)	X^2=0.7, P=.397, df=1
	3 df significance test across cohorts[2]	.	X^2=62.6*, P=.000, df=3		.	X^2=41.8*, P=.000, df=3		.	X^2=25.4*, P=.000, df=3		--
Mean number of years in episode	18-34	13	2.1 (0.4)	1.2 (1.0-1.9)	10	2.2 (0.5)	1.1 (1.0-2.2)	3	1.8 (0.2)	2.0 (2.0-2.0)	---
	35-49	15	6.5 (1.8)	5.4 (6.0-8.3)	11	6.9 (2.3)	4.7 (5.0-7.6)	4	5.9 (2.1)	9.0 (7.0-9.0)	X^2=0.1, P=.733, df=1
	50-64	33	5.8 (1.1)	4.2 (2.0-7.7)	20	6.6 (1.0)	6.6 (6.0-7.9)	13	4.9 (2.0)	1.9 (2.0-5.4)	X^2=0.6, P=.438, df=1
	65+	40	7.5 (1.6)	3.7 (1.2-11.5)	27	6.6 (1.5)	3.0 (1.1-8.9)	13	9.2 (2.5)	6.9 (1.4-13.8)	X^2=1.4, P=.236, df=1
	All Ages	101	5.7 (0.7)	2.7 (2.0-7.8)	68	5.6 (0.6)	3.0 (2.0-7.5)	33	5.8 (1.3)	2.0 (2.0-8.3)	X^2=0.0, P=.874, df=1
	3 df significance test across cohorts[2]	.	X^2=18.0*, P=.000, df=3		.	X^2=25.2*, P=.000, df=3		.	X^2=13.2*, P=.004, df=3		

[1]Cases with lifetime MDE;
[2]3 df tests for significant difference across age groups and 1 df test for significance difference across genders; odds ratios and significance tests are not presented for the models where the size of the subsample is less than 15, or the count of the dependent variable is less than 5; Significance tests also omitted if dependent variable has no variation (all are 0s or all are 1s)

for males; the age of onset is 2.4 years lower for females compared to males, indicating an earlier onset.

For the two first age groups the mean age of onset of MDE is 21.1 and respectively 26.4 but is 35.3 and respectively 39.8 for the eldest age groups.

The gender difference shows slightly higher mean age of onset for males within the youngest age group (21.9 for males compared to 20.9 for females) and for "all ages" (33.5 for males compared to 31.1 for females) but consistently much higher for the age group "50-64" (39.8 for males and 31.5 for females).

Within the age groups "18-34", "all ages" and "50-64", the females have the onset of MDE earlier than the males (a difference of 1-2.4 years for the first two situations, and of about 8 years for the latter).

Compared to females, the onset of MDE is earlier for the males belonging to the age group "35-49" (24.3 for males and 27.4 for females) and for those of "65 years and over" (37 for males and respectively 41.3 for females).

Within the age groups "35-49" of "65 years and over", the males have the onset of MDE earlier than the females with 3.1-4.3 years.

It seems that in the most recent cohorts, so for the youngest, the onset of MDE is earlier compared to the eldest.

The median age of onset (see table 2)

Regarding the median age of onset, 50% of the persons with MDE had the onset before the age of 28.6 years.

50% of the persons with lifetime MDE had the onset before the age of 18 years within the youngest age group ("18-34") and before 25.3 years within the "35-49" age group.

For the age group "50-64" and of "65 years and over", the median age of onset was 31.9 years and respectively 34.6 years.

Regarding the inter quartile range (IQR), containing 50% of the distribution from the first till the third quartile, can be noticed that within the age group "18-34", the age of onset of 50% of the subjects happened from 17.3 till 21 years old, within a range of 4.3 years.

Within the age group of "35-49", 50% of the subjects had the age of onset from 20.6 till 32.6 years old within a range of 12 years and within the next age group of "50-64", for 50% the age of onset took place from 25.2 till 44.9 years old within a range of 19.7 years.

Within the age group of those of "65 years and over", the onset inter quartile range happened from 22.5 till 54.7 years within a range of 32.2 years.

Considering "all ages", 50% from the subjects had the onset from 19.3 till 42.2 years old within a range of 22.9 years.

Across the age groups there is a significant difference for the mean age of onset for "all subjects" and within each gender.

By gender can be noticed a significant difference for the age group of "50-64".

The mean number of years in episode (see table 2)
Regarding the mean number of years in episode, for all subjects with lifetime MDE was found a value of 5.7 years.

As the age is increasing, the mean number of years in episode gets higher: is 2.1 years for the youngest age group, reaches a three times higher value of 6.5 years for those of "35-49" years old; is decreasing slightly to 5.8 years for the "50-64" age group and is reaching 7.5 years for the eldest age group of "65 years and over".

It was found a quite big gender difference of 2.6 years for the eldest age group of those of "65 years and over" (6.6 for females and 9.2 years for males), the males appearing more affected regarding the time in MDE when they get older.

For the age groups of "35-49" and "50-64", the gender difference is reversed, the females showing a mean number of years in episode larger with 1-1.7 years than the men (6.9 years for females and 5.9 years for males in the age group of "35-49" years old; 6.6 years for females and 4.9 years for males in the age group of "50-64" years old).

For the youngest age group the mean number of years in episode is only slightly higher (0.4 years) for females than for male (2.2 for females and 1.8 for males).

For mean years in episode, across age groups was found a significant difference for "all subjects" with 12-months MDE but too for each gender.

The median number of years in episode (see table 2)
Regarding the median number of years in episode, 50% of all cases with lifetime MDE spent less than 2.7 years in episode.

For the youngest age group, the median was 1.2 years, increased 4.5 times for the "35-49" age group, reaching a value of 5.4 years.

For the following age group, "50-64", it decreased with 1.2 years, reaching the value of 4.2 years and continued to decrease slowly in the eldest age group reaching the value of 3.7 years.

Looking to the inter quartile range (IQR) can be noticed that 50% of the subjects (from the first till the third quartile) from the youngest age group spent in episode from 1 till 1.9 years.

In the age group of "35-49" the time range of being in episode for 50% of the subjects with lifetime MDE was much longer from 6 till 8.3 years.

For the eldest age groups, IQR became larger, being 2-7.7 for those of "50-64" years and 1.2–11.5 years for those of "65 years and over".

Regarding the time in episode, the subjects of "35-49" years appear as the most affected, IQR being high and homogeneous (6-8.3 years).

If we assess the gender difference by age groups, we can notice that the most affected are the males in age group of "35-49" (the median number of years in episode is 9, with IQR from 7 till 9 years) and the females in the age group of "50-64" years (the median number is 6.6 years and the IQR 6-7.9 years).

The gender difference is obvious for the age groups "35-49" and "65 years and over", where the males are more affected.

The women are more affected than men in the age group of "50-64".

12-months prevalence of MDE (see table 1)
The prevalence estimates of CIDI/DSM-IV12-months MDE were 1.8% (2.2% for females and 1.4% for males).

These point values altered in absolute figures, taking into account the real population from 2007, would correspond to approximately to 313000 persons from which 117000 are men and 196000 females.

For females, across age groups, the 12 months MDE prevalence increased slightly: was 1.6% for "18-34" group, 2.2% for "35-49" group, 2.5% for "50-64" group, reached 2.7% for those of "65 years and over".

For males, for the first age group "18-34" the prevalence was 1.1% - lower than that of females, of 1.6% - and decreased slightly till 0.9% for "35-49" age group; it reached the highest value for those of "50-64" years (2.3%) and decreased till the value of 1.5% for those of "65 years and over".

When the adults males get from "35-49" to "50-64" age group the 12-months MDE prevalence increases with 1.4 percentage points, being the most spectacular increase noticed within 12-month MDE prevalence.

For all subjects, the 12-months MDE prevalence increased continuously from the youngest age till the age group of "50-64" years having the values of 1.3% for "18-34" age group, 1.5% for "35-49" age group, 2.4% for "50-64" age group and decreased slightly for those of "65 years and over" reaching the value of 2.2% for the last age group.

For females and for "all cases" can be noticed a continuous increase of 12-months MDE prevalence as age is increasing.

The females, accordingly with the 12-months prevalence of MDE, become more depressed as the age is increasing but the increase is minor under 1 percentage point, being 0.6 for the age group of "35-49" compared to the youngest and only 0.2-0.3 when about other age groups.

For "all cases", the increase was more pronounced (of 0.9 percentage points) for the age group "50-64" compared to "35-49"; the age group of "65 years and over" had a

prevalence rate slightly lower (with 0.2 percentage points) than the previous age group.

For males, the age group "50-64" shows a consistent increase of 1.4 percentage points in 12-months MDE prevalence rate compared to previous age groups.

For the age groups "35-49" and "65 years and over", a decrease compared to the previous age group can be noticed, more pronounced for the last age group (0.2 respectively 0.8 percentage points).

Neither across cohorts within each gender or between genders within each age group is noticed any statistic significant difference.

12-months MDE among lifetime MDE (see table 1)
Talking about "all ages" can be noticed that approximately half of those with lifetime MDE presented 12-months MDE as well (53.8%).

Among those with lifetime MDE, in the younger age groups, 12-months MDE is higher compared to elder age groups, varying from 64.4% to 42.5%.

It appears that among those with lifetime MDE, the older have a lower likelihood to have too 12-months MDE.

The percent of those with 12-months MDE among those with lifetime MDE decreased from 58.7% for the age group "35-49", to 53.3% for "50-64" age group but much more till two fourths (42.5%) for the eldest age group.
The proportion of 12-months MDE among lifetime MDE cases was similar for both males and females for all subjects (53.4% for females and 54.6% for males) and for the age group "50-64" (54.4% for females and 54.2% for males), representing about half of lifetime MDE.

Within the age group "35-49", the percentage of subjects with 12-months MDE among those with lifetime MDE was higher for females compared to males (63.4 versus 48.8%); a similar situation of a higher percent of 12-months MDE among lifetime MDE was noticed for the age group of those of "65 years and over" (46.6% for females and 34.7% for males).

From the subjects with lifetime MDE in the youngest age group ("18-34"), the proportion of 12-months MDE cases was much larger for males (100%) compared to females (51.8%) but the few number of cases recommends caution in interpreting.

Neither across age groups or between genders was found a significant difference for the 12-months MDE among lifetime MDE.

Symptom severity and correlates of symptom severity of 12-months CIDI/DSM-IV Major Depressive Episode (see table 3)

Symptom severity was assessed with the Quick Inventory of Depressive Symptomatology Self Report (QIDS-SR), expressed by percent of people with one of the symptom severity domains: "mild", "moderate", "severe" or "very severe".

Almost half of those with 12-months MDE (45.6%) met the clinical category "very severe", one sixth (16.5%) "severe", more than fourth (27.3%) "moderate" and one tenth (9.6%) "mild" clinical severity category.

About two thirds of cases with 12-months MDE were "severe" or "very severe" from clinical point of view.

Number of weeks depressed in the 365 days before the interview, expressed as mean was 18.0 weeks for "all cases" with 12-months MDE, but varied by symptom severity, being 11.7 for those with "mild" severity, 15.7-16.0 for those with "moderate" and "very severe" categories and 30.8 for those with "severe" symptoms/domain.

The mean number of days totally unable to work or carry on usual activities because of depression in the 365 days prior to the interviews was 45.8 for all 45 respondents with MDE but varied progressively with symptom severity.

The number of days out of role was less than 1 day for "mild" severity, was 5.8 days for "moderate" cases, increased almost 5 times for those with "severe" symptoms (28.1 days), and again increased 3 times for those with "very severe" symptoms (82.7 days).

For role impairment the percent of those who reported "severe" or "very severe" impairment in at least one Sheehan Disability Scale (SDS) role domain was considered.

For co morbidity was considered the percent of those with two or more co morbid 12-months CIDI/DSM IV disorders.

The percent of those who reported "severe" or "very severe" impairment in at least one SDS role domain was about one fourth (21-25%) for those with "mild", "moderate" or "severe" symptom severity but was 80.5% for those with "very severe" category and almost 50% (49.7%) for all cases.

As co morbidity the percent of those with two or more co morbid 12-months CIDI/DSM-IV disorders was less than one fifth (17.5%) for all 45 cases; the highest percent of co morbid disorders is met among those with "very severe" symptoms (27.8%) less among those with "mild" (17.9%) and less than 10% for those in "moderate" and "severe" category (8% and 4.4%).

Thirty-Day Standardized Comparisons of Functional Impairment by the WHO-DAS among Respondents With vs, Without CIDI/DSM-IV Major Depressive Disorder (see table 4)

All respondents completed the WHO Disability Assessment Schedule (WHO-DAS) [15] to assess functional impairments in 6 domains during the past 30 days.

In the past 30 days, the highest score WHO-DAS was for "out of role" domain (36.2), then for "mobility" (14.6) being much lower for "self care" and "cognition" (each one 5.5) and for "social" domain (3.3).

Table 3. Distributions and correlates of symptom severity (Quick Inventory of Depressive Symptomatology Self-Report) of 12-month CIDI/DSM-IV Major Depressive Episode

		Mild	Moderate	Severe	Very Severe	Total
			% (SE)			
I, Symptom severity	QIDS(%)[1]	9.6 (4.3)	27.3 (7.9)	16.5 (6,3)	45.6 (7.1)	100.0(0.0)
II, Correlates of symptom severity			Mean (SE)			
	Duration (mean)[2]	11.7(6.3)	15.7 (3.3)	30.8 (6.1)	16.0 (2.5)	18.0 (2.4)
	Days out of role (mean)[3]	0.8 (0.7)	5.8 (2.5)	28.1 (28.3)	82.7 (31.6)	45.8 (15.8)
			% (SE)			
	Role impairment (%)[4]	21.0 (18.7)	23.0 (12.3)	25.3 (11.0)	80.5 (11.1)	49.7 (7.9)
	Comorbidity (%)[5]	17.9 (16.5)	8.0 (6.0)	4.4 (4.6)	27.8 (8.7)	17.5 (4.8)
	(n)[6]	(5)	(14)	(9)	(17)	(45)

[1]Percent of people with the symptom severity domain,
[2]Number of weeks depressed in the 365 days before the interview, $F_{3,25=1,2,\ p=0,332}$[7]
[3]Number of days totally unable to work or carry on usual activities because of depression in the 365 days prior to the interviews, $F_{3,25=5,7,\ p=0,005}$[7]
[4]Percent who reported severe or very severe impairment in at least one SDS role domain, $X^2_{2=17,6,\ p=0,001}$[7]
[5]Percent with two or more comorbid 12-month CIDI/DSM-IV disorders, $X^2_{3=231,7,\ p=0,000}$[7]
[6]Number of cases with valid QIDS-SR scores within each severity domain; the QIDS-SR was self-administered in a respondent booklet that was collected at the end of the interview
[7]Significance tests control for age, sex, marital status, and education

Table 4. Thirty-Day Standardized Comparisons of Functional Impairment by the WHO-DAS Among Respondents With vs, Without CIDI/DSM-IV Major Depressive Episode

	Recency of MDE, Mean Score (SE) (95% CI)					
	Past 30 day	Past 12 Months	>12 Months Ago	No Lifetime MDE		
WHO-DAS Domains	n=16	n=30	n=55	n=2256	$F_{3,25}$	P-Value*
Out of role	36.2 (SE=11.6), 95% CI=(12.3,60.1)**	16,4 (SE=7.0), 95% CI=(2.0,30.8)	16,5 (SE=5.6), 95% CI=(4.9,28.1)	6,3 (SE=0.5), 95% CI=(5.3,7.4)	3.6	0.028
Self-care	5.5 (SE=5.1), 95% CI=(-5.0,16.0)	1,1 (SE=1.0), 95% CI=(-0.9,3.1)	3,6 (SE=3.8), 95% CI=(-4.3,11.5)	0,6 (SE=0.2), 95% CI=(0.3,1.0)	0.5	0.699
Mobility	14.6 (SE=6.7), 95% CI=(0.8,28.4)	3.3 (SE=1.9), 95% CI=(-0.6,7.2)	8.0 (SE=3.6), 95% CI=(0.6,15.4)	2.0 (SE=0.2), 95% CI=(1.6,2.4)	2.9	0.057
Cognition	5.5 (SE=4.4), 95% CI=(-3.7,14.6)	0.6 (SE=0.3), 95% CI=(-0.0,1.2)	0.8 (SE=0.8), 95% CI=(-0.7,2.4)	0.5 (SE=0.1), 95% CI=(0.2,0.8)	1.7	0.185
Social	3.3 (SE=3.1), 95% CI=(-3.0,9.6)	0.4 (SE=0.3), 95% CI=(-0.2,1.0)	0.3 (SE=0.3), 95% CI=(-0.3,0.8)	0.4 (SE=0.1), 95% CI=(0.1,0.6)	0.3	0.817
Global WHODAS	13.0 (SE=5.1), 95% CI=(2.5,23.5)**	4.3 (SE=1.6), 95% CI=(1.0,7.7)	5.8 (SE=2.6), 95% CI=(0.5,11.2)	2.0 (SE=0.2), 95% CI=(1.6,2.3)	2.8	0.06

Abbreviations: CIDI, Composite International Diagnostic Interview; DSM-IV, Diagnostic and Statistical Manual of Mental Disorders, Fourth edition; MDE, Major Depressive Episode; WHO-DAS, World Health Organization-Disability Assessment Schedule;
*Significantly different from respondents with no lifetime MDE at the .05 level, 2-sided test;
**Comparison across the 4 recency categories.

Global WHO-DAS score was 13.0 in the last 30 days, 4.3 in the past 12 months and 5.8 over 12 months ago compared to 2.0 for those with no lifetime MDE.

Comparisons of respondents with no lifetime history of MDE on the WHO-DAS dimensions provides additional of broad impairment associated with MDE [5].

Recent MDE (within 30 days before the interview) is associated with statistically significant impairments in three WHO-DAS domains compared with respondents who never met criteria for MDE (p=0.028 for out of role domain, p=0.057 for mobility and p=0.06 for global WHO-DAS).

Role Impairment of 12-Months MDE by age and gender (see table 5)

From 46 cases with 12-months MDE, 44 had a valid Sheehan score. Responses were scored with a "0-to-10" visual analogue scale having response options labelled: "none" (score 0), "mild" (score1-3), "moderate" (score 4-6), "severe" (score 7-9), and "very severe" (score 10).

Regarding the "global" role functioning, the most impaired, being in "severe" category appeared "all cases" and the males from the age group "35-49" (mean Sheehan score 7.3 respectively 8.8, at lower and upper limit of "severe category") and the

Table 5. Severity of MDE Mean Sheehan score by age and sex category

		Total		Females		Males		
Sheehan Disability Scale	**Cohorts**	**N[1]**	**Mean(SE)**	**N[1]**	**Mean(SE)**	**N[1]**	**Mean(SE)**	**1 df test between gender[2]**
Mean Sheehan score, global	18-34	7	4.8 (1.2)	5	4.7 (1.8)	2	5.1 (1.1)	X^2=0.0, P=.839, df=1
	35-49	8	7.3 (1.0)	6	6.7 (1.3)	2	8.8 (0.0)	X^2=2.5, P=.114, df=1
	50-64	14	6.9 (0.6)	8	7.5 (1.1)	6	6.2 (1.2)	X^2=0.4, P=.515, df=1
	65+	15	6.2 (1.0)	11	6.5 (1.2)	4	5.4 (2.2)	X^2=0.2, P=.666, df=1
	All Ages	44	6.3 (0.5)	30	6.4 (0.7)	14	6.3 (0.9)	X^2=0.0, P=.915, df=1
	3 df significance test across cohorts[2]	.	X^2=4.4, P=.221, df=3	.	X^2=2.3, P=.515, df=3	.	X^2=13.9*, P=.003, df=3	--
Mean Sheehan score, close relations	18-34	7	3.7 (1.5)	5	4.6 (1.8)	2	1.9 (2.0)	X^2=1.0, P=.307, df=1
	35-49	8	6.9 (1.0)	6	6.6 (1.4)	2	7.8 (0.0)	X^2=0.8, P=.359, df=1
	50-64	14	4.2 (0.9)	8	6.0 (0.9)	6	2.2 (1.6)	X^2=3.5, P=.060, df=1
	65+	15	5.1 (1.2)	11	5.1 (1.6)	4	5.2 (2.2)	X^2=0.0, P=.960, df=1
	All Ages	44	4.9 (0.7)	30	5.6 (0.7)	14	3.7 (1.3)	X^2=1.7, P=.188, df=1
	3 df significance test across cohorts[2]	.	X^2=5.4, P=.148, df=3	.	X^2=1.4, P=.698, df=3	.	X^2=15.7*, P=.001, df=3	--
Mean Sheehan score, home	18-34	7	3.7 (1.4)	5	3.0 (1.9)	2	5.1 (1.1)	X^2=0.9, P=.339, df=1
	35-49	8	5.8 (1.1)	6	5.4 (1.4)	2	7.1 (0.0)	X^2=1.5, P=.217, df=1
	50-64	14	6.1 (0.6)	8	6.5 (1.2)	6	5.6 (1.0)	X^2=0.2, P=.629, df=1
	65+	15	5.2 (0.9)	11	5.8 (0.9)	4	3.7 (2.3)	X^2=0.8, P=.381, df=1
	All Ages	44	5.3 (0.4)	30	5.2 (0.7)	14	5.4 (0.8)	X^2=0.0, P=.895, df=1
	3 df significance test across cohorts[2]	.	X^2=3.8, P=.283, df=3	.	X^2=2.5, P=.480, df=3	.	X^2=6.0, P=.113, df=3	--
Mean Sheehan score, work	18-34	7	2.7 (1.5)	5	3.1 (2.0)	2	2.2 (2.2)	X^2=0.1, P=.763, df=1
	35-49	8	6.0 (1.0)	6	5.5 (1.4)	2	7.1 (0.0)	X^2=1.3, P=.253, df=1
	50-64	14	5.3 (1.2)	8	6.8 (1.0)	6	3.7 (2.3)	X^2=1.2, P=.264, df=1
	65+	15	4.8 (1.1)	11	4.6 (1.3)	4	5.4 (2.2)	X^2=0.1, P=.771, df=1
	All Ages	44	4.8 (0.6)	30	5.1 (0.6)	14	4.3 (1.5)	X^2=0.2, P=.657, df=1
	3 df significance test across cohorts[2]	.	X^2=3.6, P=.307, df=3	.	X^2=4.2, P=.240, df=3	.	X^2=5.6, P=.134, df=3	--
Mean Sheehan score, social	18-34	7	2.7 (1.6)	5	3.2 (2.1)	2	1.6 (1.7)	X^2=0.3, P=.554, df=1
	35-49	8	6.6 (1.3)	6	6.1 (1.7)	2	8.1 (0.0)	X^2=1.5, P=.216, df=1
	50-64	14	4.7 (0.9)	8	6.5 (1.1)	6	2.7 (0.9)	X^2=6.8*, P=.009, df=1
	65+	15	5.0 (1.1)	11	5.8 (1.6)	4	2.8 (1.3)	X^2=2.0, P=.160, df=1
	All Ages	44	4.7 (0.6)	30	5.5 (0.7)	14	3.4 (1.1)	X^2=2.3, P=.128, df=1
	3 df significance test across cohorts[2]	.	X^2=5.5, P=.136, df=3	.	X^2=2.9, P=.414, df=3	.	X^2=65.0*, P=.000, df=3	--
Mean days out of role	18-34	7	1.8 (0.8)	5	2.2 (1.0)	2	1.1 (1.1)	X^2=0.6, P=.453, df=1
	35-49	8	20.5 (17.8)	6	28.0 (22.6)	2	0.0 (0.0)	X^2=1.5, P=.214, df=1
	50-64	14	82.1 (51.6)	8	41.3 (37.8)	6	128.1 (94.3)	X^2=0.7, P=.395, df=1
	65+	14	63.5 (26.0)	10	60.7 (35.9)	4	70.1 (60.0)	X^2=0.0, P=.906, df=1
	All Ages	43	45.3 (15.6)	29	33.4 (12.2)	14	66.8 (44.9)	X^2=0.4, P=.515, df=1
	3 df significance test across cohorts[2]	.	X^2=13.7*, P=.003, df=3	.	X^2=6.8, P=.080, df=3	.	X^2=3.2, P=.356, df=3	--

[1] Cases with a valid Sheehan severity score / # of days out of role, among those with 12-mo MDE;
[2] three df tests for significant difference across age groups and 1 df test for significance difference across genders; odds ratios and significance tests are not presented for the models where the size of the subsample is less than 15, or the count of the dependent variable is less than 5;
Significance tests also omitted if dependent variable has no variation (all 0s or all 1s)

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females from the age group "50-64" (mean Sheehan score of 7.5).

The tests for significant difference across age groups showed for males statistical significance (X^2=13.9*, P=.003, df=3).

Regarding the "close relationship" role, the most impaired appeared the males in the "35-49" age group (mean Sheehan score of 7.8 in severe category).

The tests for difference significance across age groups showed for males statistical significance (X^2=15.7*, P=.001, df=3).

In "home" functioning role, the most impaired were the males of "35-49" age group (mean Sheehan score of 7.1 corresponding to severe category).

The tests for significant difference across age did not show statistical significance.

Regarding the "work" role impairment the most impaired were the males of "35-49" age group, having a score in severe category at lower limit (score 7.1).

No significant difference was found across ages and between genders.

Regarding the "social" functioning role, the most impaired appeared the males of "35-49" age group (score 8.1 of severe impairment).

The tests for significant difference across age groups showed statistical significance for males (X^2=65.0*, P=.000, df=3) and the test for significant difference between genders showed statistical significance too for the age group "50-64" (X^2=6.8*, P=.009, df=1).

Regarding "the days out of role", if the youngest age group had 1.8 days out of role in the last year due to depression, this increased to 20.5 for those of "35-49", to 82.1 for the age group "50-64" and 63.5 for those of "65 years old and over".

The significance test across cohorts showed significant difference (X^2=13.7*, P=.003, df=3).

CONCLUSIONS

The prevalence of MDE was 3.3% for "all ages", with higher values for females than for males (4.1% versus 2.5%).

The lifetime prevalence of MDE is increasing by age groups for "all cases" with lifetime MDE and within each gender.

A significant difference across age groups for males and for all subjects can be noticed, but not for females and across genders for all subjects with lifetime MDE but not within each age group.

The prevalence estimates of CIDI/DSM-IV12-months Major Depressive Episode (MDE) was 1.8% (2.2% for females and 1.4% for males).

For females, within age groups, the 12-months MDE increased slightly by age with less than 0.6 percentage point.

When the adults males advance from "35-49" age group to "50-64" age group their 12-months MDE prevalence increases with 1.4 percentage points, being the most spectacular increase noticed for 12-months MDE prevalence.

If the 12-months MDE is continuously increasing by age for females, for males can be noticed two moments of slight decrease as age is increasing but too an relative important increase.

Approximately half (53.8%) of those with lifetime MDE presented 12-months MDE too.

Among those with lifetime MDE, were more cases presenting 12-months MDE in the younger age groups, compared to elder age groups, varying from 64.4% to 42.5%.

Within the age groups "18-34", "all ages" and "50-64", the females have the mean onset of MDE earlier than males (only a slight difference for the first two situations, but a difference of about 8 years for the later).

Within the age groups "35-49" of "65 years and over", the males have the onset of MDE earlier than the females with 3-4 years.

Regarding the median age of onset, 50% of the persons with MDE had the onset before the age of 28.6 years.

Regarding the mean number of years in episode, for "all cases" was found a value of 5.7 years (4.3-7.1).

As the age is increasing, the mean numbers of years in episode get higher from 2.1 years for the youngest age group, till 7.5 years for the eldest age group ("65 years and over").

The males appear more affected regarding the time in MDE when they get older.

For the age groups of "35-49" and "50-64", the females show mean number of years in episode larger than the men (6.9 respectively 6.6 years for females versus 5.9 respectively 4.9 years for males).

Symptom severity assessed with the Quick Inventory of Depressive Symptomatology Self Report (QIDS-SR), revealed that almost two thirds of cases with MDE were "severe" or "very severe" from clinical point of view.

Almost half of those with MDE (45.6%) met the clinical category "very severe", one sixth (16.5%) "severe".

Number of weeks depressed in the 365 days before the interview, expressed as mean was 18.0 for all 45 respondents, but varied by symptom severity, being 15.7-16.0 for those with "moderate" and "very severe" categories and 30.8 for those with "severe" symptoms/domain.

The mean number of "days totally unable to work or carry on usual activities because of depression" in the 365 days prior to the interviews was 45.8 for all 45 respondents with MDE but varied progressively with symptom severity from less than 1 day for "mild" severity, till 82.7 days for those with "very severe" symptoms.

The percent of those who reported "severe" or "very severe" impairment in at least one SDS role domain was about was 80.5% for those with "very severe" category and almost 50% (49.7%) for all cases.

The highest percent of co morbid disorders is met among those with "very severe" symptoms (27.8%).

All respondents completed the WHO Disability Assessment Schedule (WHO-DAS) to assess functional impairments in 6 domains during the past 30 days: in the past 30 days, the highest score WHO-DAS was for out of role domain (36.2), then for mobility (14.6).

Regarding the "global" role functioning, the most impaired, being in "severe" category appeared "all cases" and the males from the age group "35-49" (score 7.3, 8.8) and the females from the age group "50-64" (score of 7.5); for males was found significant difference across cohorts.

Regarding the "close relationship", the "home", "work", "social" functioning roles the most impaired appeared the males in the "35-49" age group with scores over 7 till 8.

Regarding "the days out of role", if the youngest age group had 1.8 days out of role in the last year due to depression, this increased to 20.5 for those of "35-49", to 82.1 for the age group "50-64" and 63.5 for those of "65 years old and over".

Major Depression Episode is a seriously impairment condition: nearly all respondents with 12-months MDE reported at least some role impairment associated with their depression in at least 1 of 4 Sheehan Disability Scale role domains.

The severe consequences of the depression on functioning in labour and social areas call attention to the need for early diagnostic, proper treatment and intervention [5].

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