

Research article Ερευνητική εργασία

The impact of unemployment on mental health examined in a community mental health unit during the recent financial crisis in Greece

G. Konstantakopoulos,^{1,2} K. Pikouli,¹ D. Ploumpidis,¹ E. Bougonikolou,¹
K. Kouyanou,¹ M. Nystazaki,³ M. Economou¹

¹*Byron-Kessariani Community Mental Health Centre, First Department of Psychiatry,
Athens University Medical School, Eginition Hospital, Athens, Greece,*

²*Department of Psychosis Studies, Institute of Psychiatry, Psychology and Neuroscience, King's College London, UK,*

³*Department of Psychiatry, Athens University Medical School, General Oncology Hospital of Kifissia, Athens, Greece*

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Financial crisis has significant impact on the mental health of the population, resulting in increasing incidence of mental disorders and suicides. Specific social and financial factors mediate the effects of financial crisis on mental health, such as poverty, financial difficulties and unemployment. During the recent international financial crisis, studies in many countries have shown that the worsening of various mental health indicators was related to financial difficulties and unemployment. In Greece, which is one of the countries that experienced intense and prolonged economic and social burden due to the recent crisis, the epidemiological findings were similar and the increase of the prevalence of major depression and suicide was excessive. However, the information about the mental health of the population deriving from health services is limited. The aim of this study was to investigate the impact of the crisis on community mental health –more specifically the rates of mental disorders and suicide, as well as the role of unemployment– among the new cases of a community mental health unit. The sample consisted of 1,865 adult users, men and women, who came seeking for help to the Byron-Kessariani Community Mental Health Centre (CMHC) during the years 2008–2013, i.e. the early years of the current crisis. Regarding the rates of the diagnostic categories in the new cases of CMHC per year, no significant differentiation was observed. There was an increase in the proportion of the unemployed individuals in the total sample of new cases during the study, from 9.65% in 2008 to 26.17% in 2013 and a significant association between unemployment and the occurrence of anxiety and depressive disorders, as indicated by the increase in the proportion of unemployed individuals among new cases with disorders of these categories. There was an upward trend in the rate of new patients referred to CMHC after a suicide attempt, which was doubled during the first years of the crisis. There was also an increase in the rate of unemployed individuals among these cases, from 10% in 2008 to 41.7% in 2009, reaching

the highest level in 2011 (53.3%). The findings of this study suggest that during economic crisis unemployment plays an important role in the development of anxiety and depressive disorders and is closely related to suicide attempts. Our results were derived from a specific catchment area and therefore they have high ecological validity.

Key words: Unemployment, financial crisis, anxiety disorders, depression, suicidality.

Introduction

A great number of previous studies have shown the significant impact of economic crises on the population mental health. Reviewing epidemiological studies carried out during major financial crises, such as the depression of 1929, the economic collapse of the former Soviet countries in the early 1990's and the Asian financial crisis at the end of the 20th century, a general and extensive increase in the prevalence of mental disorders and suicides during the economic crisis is apparent.¹⁻³

The impact of economic crisis on population mental health is mediated by specific socio-economic factors, such as poverty, financial hardship and unemployment.³ The effects of these factors on mental health have also been demonstrated by longitudinal studies concerning the economic cycle, regardless the occurrence of major economic crises. For instance, the important relationship between the fluctuation of unemployment and suicide rates was revealed by Stuckler et al, in 26 countries of Europe during the period 1970–2006.⁴ Meta-analyses have also confirmed that people experiencing unemployment are at greater risk for mental health problems than the general population.^{5,6} During a crisis, many economic and social conditions which are considered to be aggravating factors for mental health are present. Moreover, there are vicious circles of poverty and unemployment on the one hand and mental disorders on the other.³ Therefore, during the recent crisis the World Health Organization has repeatedly warned against the prospect of an increase in the prevalence of mental disorders and suicides, while pointing out that the poor and financially vulnerable will be the first to suffer.⁷ Indeed, studies in various countries during the recent crisis showed worsening of population mental health associated with economic distress and unemployment.⁸

In the recent international financial crisis, one of the most serious in modern history, Greece has been one of the countries that experienced a very intense and prolonged economic and social burden. Respectively strong negative effects on the mental health of the Greek population were, therefore, expected to be observed. The increase in the prevalence of depression is one of the most frequent and important effects of the financial crisis on the public health, as having repeatedly been found in the past.^{2,3,8} From epidemiological data, it has been found that depression is associated strongly with low income, unemployment, as well as with job insecurity and debt.⁹ During the current crisis in our country, a series of repetitive epidemiological studies conducted by the University Research Institute for Mental Health (URIMH), reflected changes in the prevalence of major depression, generalized anxiety disorder and suicide, as well as their correlation with economic indicators. The first study was conducted in 2008 through telephone interviews across a nationwide sample of population and was repeated with identical methodology in 2009, 2011 and 2013 (see review⁹). The findings of these studies have demonstrated a continuous and great increase in the prevalence of major depression from 3.3% in 2008, when the crisis was not yet manifest, to 6.8% in just one year, and further increase to 8.2% in 2011 and 12.3% in 2013.¹⁰⁻¹² In addition, these studies highlighted the relationship between the prevalence of major depression and severe economic distress and unemployment, especially the long-term unemployment.⁹

Time-series analyses during the recent economic crisis in many European countries and America has confirmed the general trend of increase in the number of suicides and the aggravating role of income reduction and unemployment.¹³ These findings are in line with the findings considering both the

Russian crisis of the early 1990's and the Asian crisis of 1997–1998.^{13,14} In particular, the impact of unemployment on suicide rates in times of financial crisis has been extensively studied in the international literature.¹⁵ In the current crisis, it was specifically found that in every percentage point of increase in unemployment there was an increase in suicide by 0.79% in Europe and 0.99% in the USA.¹⁶ Studies in Greece showed an increase in the total number of suicides in the early years of the economic crisis between 2008 and 2011,^{17,18} and a significant increase in prevalence in reported suicide attempts and suicidal ideation during the same period.^{10,19,20} More specifically, in Greece the number of suicide deaths increased by 55.8% in 2007–2011, although the total mortality rate increased by only 1.1%²¹ in the same period. Concerning the impact of financial conditions on suicide, correlations of changes in suicide rate with the unemployment rate and the amount of the public debt were found²¹ during the same period. A significant impact of unemployment, economic distress and low educational level on suicidal ideation and suicide attempts was also detected by a country-wide epidemiological study in 2013.¹²

Changes in mental health during economic recession have little been studied from the standpoint of mental health services, namely from data concerning the needs of people seeking help from these services. Novel evidence from the recent crisis in Greece indicate deterioration in quality of care by serious shortages of medical staff and burnout among health workers.²² However, during this crisis data from mental health services has been scarcely studied, such as the number of hospitalized patients or visits to the emergencies of psychiatric hospitals²³ and the number of people who attempted suicide and reached for the emergencies²⁴ or were hospitalized.²⁵ To date there is no study with data from community mental health services that can reflect trends and changes in mental health within the community. The aim of this study was to investigate changes in mental health of the community and the impact of unemployment on it during the early years of the Greek financial crisis. In particular, the mental disorders diagnosed, the suicide attempts and the relationship of these clinical characteristics with the unemployment during the first years of the crisis (2008–2013) were investi-

gated among the new cases of a community service with a certain catchment area within Athens (Byron and Kessariani).

Material and method

Population - Collection of data

The study data was obtained from the Byron-Kessariani Community Mental Health Centre (CMHC), by recording information about the adults who first visited the centre during the years 2008–2013. The data of these newcomers were retrieved from their CMHC files at intake. The data collection was carried out through a specially structured questionnaire which included: (a) basic demographics, (b) data on employment and insurance status, (c) data of previous history and hospitalizations, (d) diagnostic category of the applicant's mental health problems according to DSM-IV criteria, (e) type of help offered by the centre. For the purposes of this study, data on unemployment were used in combination with data on diagnosis and previous suicide attempt.

Statistical analysis

The IBM SPSS Statistics version 22 for Windows software was used to analyze the data. 2008 was considered the baseline year because it is the year just before the beginning of the current financial crisis. For the comparison of the frequencies between each year and the baseline, the Odds Ratios (OR) were calculated and evaluated by the z test as for their statistical significance. The relationship between diagnoses and previous suicide attempts and unemployment was examined with the χ^2 test. For all tests the level of statistical significance was set to $p < 0.05$.

Results

Sample characteristics

The total population of the study was 1,865 adults (ranging from 227 to 360 individuals per year). In terms of gender, the percentage of women ranged from 65.9% (in 2008) to 71.9% (in 2013). The mean age of the new cases each year ranged from 43.9 to 46.4 years, and the mean of the years of education ranged from 10.9 to 11.4. The sample differences among the study years in gender, age and years of education were not statistically significant. Table 1

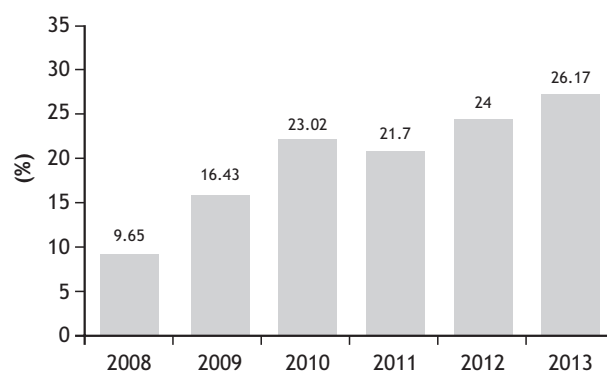
Table 1. Diagnosis and suicide attempts at intake during the first years of the financial crisis.

Diagnosis	2008		2009		2010		2011		2012		2013	
	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)	n	(%)
No of cases	360	-	356	-	299	-	321	-	227	-	302	-
Psychotic disorders	24	6.8	15	4.4	19	6.6	27	8.5	8	3.5	23	7.8
Bipolar disorder	13	3.7	18	5.2	12	4.1	15	4.7	11	4.9	15	5.1
Anxiety disorders	63	17.9	63	18.4	61	21.0	64	20.2	41	18.1	58	19.7
Depressive disorders	83	23.6	81	23.6	66	22.8	74	23.3	56	24.8	65	22.0
Substance use disorders	5	1.4	5	1.5	5	1.7	8	2.5	1	0.4	9	3.1
Personality disorders	8	2.3	6	1.7	5	1.7	2	0.6	8	3.5	0	0.0
Dementia	11	3.1	10	2.9	10	3.4	12	3.8	12	5.3	12	4.1
Other	144	41.0	145	42.3	113	39.0	115	36.3	89	39.4	109	36.9
Suicide attempt	10	2.9	12	3.5	16	5.5	15	4.7	13	5.8	7	2.4

shows the number of new cases per year, the number and frequency of diagnosis falling into the main diagnostic categories and the number and frequency of patients referred to CMHC after a suicide attempt. Differences in the rates of diagnostic categories per year were not statistically significant, as well as the rates of patients admitted after a suicide attempt ($\chi^2=7.32$, $p=0.198$). However, regarding to the latter, it has to be taken into account that the number of these cases was small, and differences cannot reach statistical significance, although they are large in terms of effect size (from 2.9% in 2008 to 5.8% in 2012, the highest). Finally, a large number of newcomers each year was classified as diagnostic category "other" because this category includes cases with interpersonal relationship problems or subclinical mental symptoms and requests for medical certificates.

Rate of unemployed individuals among the new cases

A strong increasing trend was found in the rates of the unemployed individuals among the cases seeking assistance in the centre for the first time, which is shown in figure 1. This increase was statistically significant ($\chi^2=37.66$, $p<0.001$). In particular, the rate increase was significant between 2008 and 2009 (OR=1.84, $p=0.009$) and another significant increase occurred from 2009 to 2010 (OR=1.52, $p=0.036$). Moreover, the rate of the unemployed individuals among the new cases increased further during 2012 and 2013.

**Figure 1.** Unemployment rate in new clients of the Byron-Kessariani Mental Health Centre during the first years of the recent financial crisis.

Relationship between unemployment and clinical features in the new clients of CMHC

Examining the diagnostic categories, it was found that the proportion of the unemployed individuals increased among the patients with anxiety and depressive disorders during the study period ($\chi^2=20.27$, $p<0.001$ and $\chi^2=19.74$, $p<0.001$, respectively). These rates per year are shown in the graphs of figures 2 and 3. In no other diagnostic category (such as psychotic disorders, bipolar disorder, substance abuse disorders, personality disorders, etc.) significant differences in unemployment rates were observed. Compared to the baseline year, the rate of unemployed individuals among patients with anxiety disorders was significantly increased in 2010 (OR=3.89, $p=0.014$), 2011 (OR=3.19, $p=0.037$), 2012 (OR=6.58, $p<0.001$), and 2013 (OR=7.49, $p<0.001$). Among new patients with depressive disorders, the rate of the unemployed individuals increased significantly compared to the baseline year in 2010 (OR=2.86, $p=0.026$), 2012 (OR=4.14, $p=0.002$), and 2013 (OR=4.58, $p<0.001$).

As shown in table 1, during the study years, the new clients with an anxiety disorder varied from 41 to 68 per year and their rates in the total number of new cases in each year ranged from 18.1% to 20.2%. The new clients with a depressive disorder varied from 56 to 83 per year and their rates in the total number of new cases in each year ranged from 22.0% to 24.8%. It is apparent that these are the two most common diagnostic categories, which, in total,

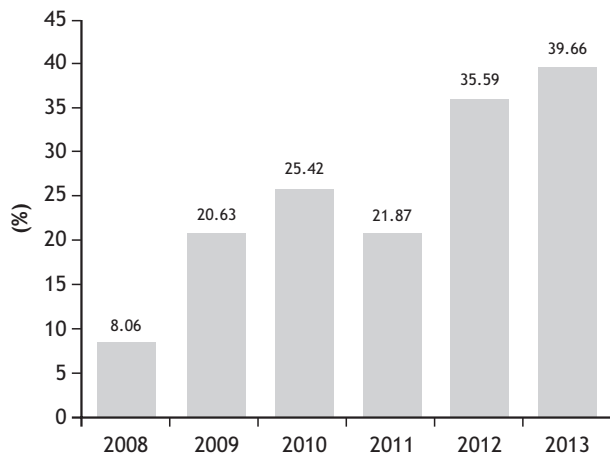


Figure 2. Unemployment rate in new patients with anxiety disorders.

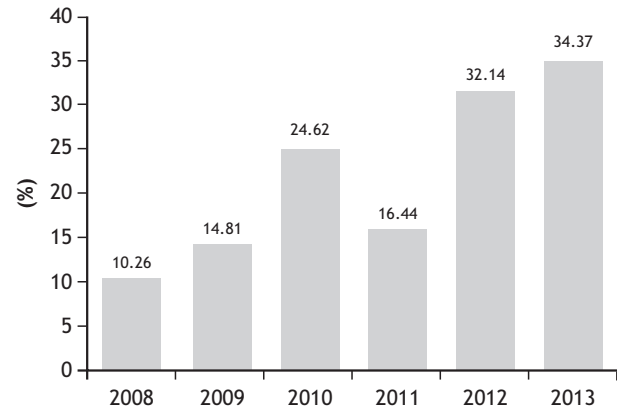


Figure 3. Unemployment rate in new patients with depressive disorders.

account for the diagnosis of about one-half of the newcomers to the CMHC. However, no statistically significant difference in the rates of the diagnostic categories was found in the total sample.

The proportion of the unemployed individuals among the patients referred to CMHC after a suicide attempt increased significantly after the onset of the economic crisis in comparison to the baseline year, as shown in figure 4. However, due to the relatively small sample size, this difference was not statistically significant ($\chi^2=5.57$, $p=0.350$), except for the year 2011 compared to baseline (OR=19.29, $p=0.047$). However, the effect size of the increase was already large since 2009 compared to 2008 (41.67% from 10%). The new patients admitted after a suicide attempt showed an increase, both in absolute numbers and as a proportion of all the new cases, from 2008 to 2010, but this was not statisti-

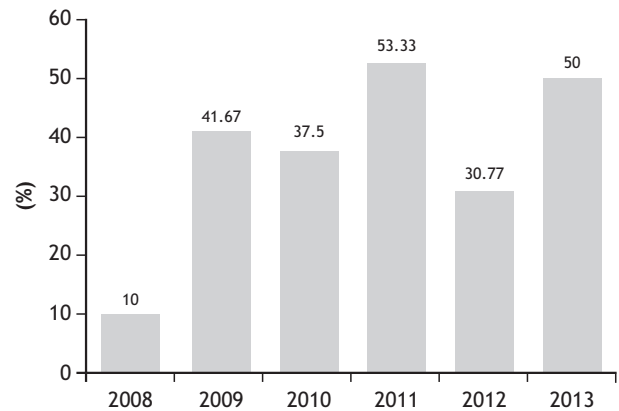


Figure 4. Unemployment rate in new patients after a suicide attempt.

cally significant due to the small sample size (table 1). Similarly, this rate further increased in 2012, and another but slight increase was observed in 2013.

Discussion

Our findings confirmed that there was an increase in the proportion of the unemployed individuals in the new cases during the study years, from 9.65% in 2008 to 26.17% in 2013. The upward trend was continuous; yet, statistically significant increase was observed only in 2009 and 2010. Despite this trend, the rate of the unemployed individuals among the new cases is not significantly different from the increase in the unemployment rate in the general population in Greece over the same period, i.e. from 7.8% at the beginning of 2008 to 27.5% at the end of 2013.²⁶ Accordingly, there was not *prima facie* increase in mental morbidity among the unemployed individuals, because in this case their rate in the new cases should well exceed the overall unemployment rate in the population. However, it should be taken into account that a number of reasons may prevent the unemployed individuals who experience psychological problems for the first time, from seeking help at mental health services, such as stigmatization, ignorance of the help they can receive, and insurance or financial problems that may prevent them from doing so. In addition, the unemployment rates in the new cases would have to be compared with the unemployment rates in the population of the catchment area of the CMHC, but we do not obtain relevant data. Therefore, the number of unemployed individuals seeking for help might be found significantly increased if the unemployment rates in the catchment area were lower than the national rates, which is likely since this area (Byron and Kessariani) is one of the middle-class regions of Athens.

Regarding the frequency of the diagnostic categories in the new cases in CMHC per year, there was no significant increase in the frequency of anxiety and affective disorders. According to the relevant literature, an increase in anxiety and depressive disorders, mostly related to unemployment, job insecurity as well as social exclusion, are usually present in every crisis.³ Especially during the current

economic crisis in Greece, a great increase in the prevalence of major depression was found.^{10-12,27} On the contrary, the only data available on anxiety disorders is that the prevalence of generalized anxiety disorder between 2009 and 2011 did not show any statistically significant difference.²⁷ However, there are a number of reasons why this trend in the prevalence of depression may not be reflected in the new referrals to the CMHC, and other community units as well. First, those identified to meet the criteria of a disorder in epidemiological studies do not necessarily seek help in mental health units. A large number of people suffering from common mental disorders, i.e. anxiety and depressive disorders, never turn to specialists for help, and they often find it difficult to report their psychiatric symptoms to primary health care physicians.²⁸ Second, it is likely that many of the individuals experiencing depression for the first time amidst economic crisis, will not seek assistance in mental health services due to other barriers, such as lack of insurance cover or inadequate information on help offered by public services, or aggravation of the stigma for the mental illness that may exist in these periods. Finally, due to the high workload of the public services, it is expected that part of the growing needs for mental health care will be covered by the private sector (psychiatrists and psychologists), which is easily accessible and affordable for a large part of the population in our country.

The main finding of the present study was the significant association of unemployment with the occurrence of anxiety and depressive disorders during the economic crisis, as indicated by the increase in the rate of the unemployed individual in the new cases diagnosed with disorders of these categories.

An important relationship between unemployment and the prevalence of depression in our country during the same crisis period was also found in epidemiological studies. More specifically, there was a significant correlation of unemployment with the rise in depression prevalence between 2008 and 2009,¹⁰ which was not found between 2008 and 2011,¹¹ apparently because the increase in the prevalence of major depression between 2009 and 2011 was significant in both the unemployed and the economically active population.²⁷ However, in a simi-

lar epidemiological study in 2013, the unemployed people were found to have increased prevalence of major depression by 58% and 53%, compared to the economically active and economically inactive population, respectively.¹² This relationship may explain the fact that in this study, men of working age showed significantly greater prevalence of major depression than women, unlike the usual epidemiology of the disorder.¹² In our study, a significantly stronger association between unemployment and depressive disorder compared to 2008 occurred in the years 2010, 2012 and 2013. Our findings are therefore consistent with those of the aforementioned epidemiological surveys, because the increased rates of depression among the unemployed people in the general population is expected to lead to a higher number of unemployed individuals seeking treatment for depression in community mental health services.

Regarding the relationship of unemployment with the prevalence of anxiety disorders in our country during the crisis period, the data from epidemiological studies is scarce. The only relevant finding is that, unlike major depression, no significant increase was found in the rate of generalized anxiety disorder among the unemployed between 2009 and 2011, while an increase was found in the economically active and inactive population over the same period.²⁷ On the contrary, in our study, a significantly stronger association between unemployment and anxiety disorders, compared to 2008, occurred in the years 2010, 2011, 2012 and 2013. The fact that our study concerns a population coming to help rather than trends in the general population should certainly be considered.

There was a clear upward trend in the number of new patients who had attempted suicide, which even reached the doubling of their rate among new cases during the first years of the crisis. This trend was not found to be statistically significant, but this is due to methodological inability to detect differences in relatively small rates in our sample size (statistical error type I). The tendency of increase in the rate of suicide attempts is in line with data from the general population in Greece showing an increase in the total suicide rate during the first years of the economic crisis (2008–2011),^{17,18} and particu-

larly consistent with the findings from other studies similarly demonstrating a significant increase in the prevalence in reported suicide attempts and suicidal ideation in Greece during the same period.^{10,19,20} An increase in admissions at mental health services following an attempted suicide was also reported in the study by Stavriakos et al²⁵ in patients admitted at a general hospital of Athens.

On the other hand, in our study the increasing trend in attempted suicides appears to be decelerating in the final year of the study (2013). This finding is in line with the epidemiological data for 2013, showing a decline in suicidality, almost reaching the pre-crisis levels, with the monthly suicidal ideation rate falling to 2.6% and the monthly rate of suicide attempts to 0.9%.^{12,29} This trend has to be confirmed by epidemiological data and data collected from the CMHC within the next years. In this case, it appears that suicides are likely to increase while the population is adjusting to new conditions during the early years the economic crisis, but not when the problems of the crisis become permanent. Data for deaths due to suicide in 2013 and the following years indicate that there is no further increase in suicide rates. However, the increase observed in the early years of the crisis does not appear to have been a random fluctuation. Time-series analysis of long periods, before and after the crisis, have confirmed that this increase was not accidental and was related to the current crisis³⁰ as well as to the increased unemployment and the austerity measures.^{31,32}

Of particular importance are our results on the relationship between unemployment and suicide attempts. The rate of the unemployed individuals among the patients referred to CMHC following a suicide attempt increased significantly from 2008 to 2009 (from 10% to 41.7%) and reached the highest level in 2011 (53.3%). Because of the relatively small sample size, only the difference between 2011 and 2008 was statistically significant, but the effect sizes observed indicate the importance of the increase. We could assume the possible contribution of unemployment to suicide attempts during the economic crisis to the extent that a great number of them can be attributed to conditions related to unemployment. This finding, which is crucial for the preven-

tion of suicide during periods of economic recession, agrees with epidemiological data of the same period. Specifically, significant correlation of unemployment with the increase in suicide attempts was also found in epidemiological studies between 2008, 2009, 2011 and 2013.^{10,19,33} Moreover, a significant association between unemployment and suicide attempts was found in patients admitted at a general hospital of Athens between 2007 and 2011.²⁵

In conclusion, data from CMHC new referrals indicate that unemployment contributes to a significant extent to anxiety and depressive disorders and is strongly associated to suicide attempts during the

financial crisis. Although similar findings have been obtained from previous epidemiological studies, the present study is the first to confirm the effects of unemployment on the population treated in a community mental health service in a specific catchment area. Thus, our findings have a specific ecological validity regarding populations in clinical context. In this respect, it would be important to extend our study including the years that followed, in order to investigate the long-term impact of the crisis and of the steadily high unemployment rate on mental disorders and suicide.

Η επίδραση της ανεργίας στην ψυχική υγεία μέσα από μία κοινοτική μονάδα ψυχικής υγείας κατά τη διάρκεια της πρόσφατης οικονομικής κρίσης στην Ελλάδα

Γ. Κωνσταντακόπουλος,^{1,2} Κ. Πικούλη,¹ Δ. Πλουμπίδης,¹ Ε. Μπουγιονικολού,¹ Κ. Κουγιανού,¹ Μ. Νυσταζακή,³ Μ. Οικονόμου¹

¹Κέντρο Κοινοτικής Ψυχικής Υγιεινής Βύρωνα-Καισαριανής, Α΄ Ψυχιατρική Κλινική, Ιατρική Σχολή Πανεπιστημίου Αθηνών, Αιγινήτειο Νοσοκομείο, Αθήνα,

²Department of Psychosis Studies, Institute of Psychiatry, Psychology and Neuroscience, King's College London, UK,

³Πανεπιστημιακή Ψυχιατρική Κλινική, Ιατρική Σχολή Πανεπιστημίου Αθηνών, Γενικό Ογκολογικό Νοσοκομείο Κηφισιάς, Αθήνα

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Οι οικονομικές κρίσεις έχουν σημαντικό αντίκτυπο στην ψυχική υγεία του πληθυσμού με αποτέλεσμα τη μεγάλη αύξηση στη συχνότητα των ψυχικών διαταραχών και των αυτοκτονιών. Σε αυτές τις επιδράσεις της κρίσης διαμεσολαβούν συγκεκριμένοι κοινωνικο-οικονομικοί παράγοντες, όπως η φτώχεια, η οικονομική δυσχέρεια και η ανεργία. Κατά την πρόσφατη διεθνή οικονομική κρίση οι μελέτες σε διάφορες χώρες έδειξαν επιδείνωση ποικίλων δεικτών ψυχικής υγείας, που σχετίζεται με την οικονομική δυσπραγία και την ανεργία. Παρόμοια ήταν τα ευρήματα στην Ελλάδα, που είναι μία από τις χώρες με πολύ έντονη, βαθιά και παρατεταμένη επιβάρυνση από την πρόσφατη κρίση, με προεξάρχοντα χαρακτηριστικά την αύξηση του επιπολασμού της μείζονος κατάθλιψης και της αυτοκτονικότητας. Ωστόσο, ελάχιστα είναι τα δεδομένα για την ψυχική υγεία του πληθυσμού μέσα από τις υπηρεσίες υγείας. Η παρούσα μελέτη είχε στόχο να διερευνήσει την επίδραση της κρίσης στην ψυχική υγεία της κοινότητας, πιο συγκεκριμένα στη συχνότητα των ψυχικών διαταραχών και στην αυτοκτονικότητα, καθώς και τον ρόλο της ανεργίας μέσα από τα νεο-εισερχόμενα περιστατικά μιας κοινοτικής υπηρεσίας ψυχικής υγείας. Το δείγμα αποτελείται από 1.865 ενήλικους χρήστες, άνδρες και γυναίκες, που προσήλθαν αναζητώντας βοήθεια στο Κέντρο Κοινοτικής Ψυχικής Υγιεινής (ΚΚΨΥ) Βύρωνα-Καισαριανής κατά τη διάρκεια των ετών

2008–2013, δηλαδή τα πρώτα χρόνια της τρέχουσας κρίσης. Όσον αφορά στη συχνότητα των διαγνωστικών κατηγοριών στα νεο-εισερχόμενα περιστατικά στο ΚΚΨΥ ανά έτος, δεν παρατηρήθηκε σημαντική διαφοροποίηση αύξηση στη συχνότητα των διαταραχών. Βρέθηκε αύξηση του ποσοστού των ανέργων στο σύνολο των νεο-εισερχόμενων περιστατικών κατά τη διάρκεια της μελέτης, από 9,65% το 2008 σε 26,17% το 2013 και σημαντική συσχέτιση της ανεργίας με την εκδήλωση αγχώδων και καταθλιπτικών διαταραχών, όπως συνάγεται από την αύξηση του ποσοστού των ανέργων εντός των νεο-εισερχομένων περιστατικών με διαταραχές αυτών των κατηγοριών. Βρέθηκε μια σαφώς ανοδική τάση στη συχνότητα των ατόμων που είχαν αποπειραθεί να αυτοκτονήσουν, η οποία έφτασε μέχρι και στον διπλασιασμό του ποσοστού τους μεταξύ των νέων περιστατικών κατά τα πρώτα χρόνια της κρίσης. Παρατηρήθηκε επίσης αύξηση του ποσοστού των ανέργων ανάμεσα σε αυτά περιστατικά, ήδη από το 2008 στο 2009 (από 10% σε 41,7%), που έφτασε στο ανώτερο επίπεδο το 2011 (53,3%). Τα ευρήματα της παρούσας έρευνας υποστηρίζουν ότι σε περιόδους οικονομικής κρίσης η ανεργία διαδραματίζει σημαντικό ρόλο στην εκδήλωση αγχώδων και καταθλιπτικών διαταραχών και σχετίζεται στενά με τις απόπειρες αυτοκτονίας. Τα ευρήματά μας προκύπτουν μέσα από τον πληθυσμό εξυπηρετούμενων από μια κοινοτική δομή σε συγκεκριμένη περιοχή αναφοράς και γι' αυτό έχουν ιδιαίτερη οικολογική εγκυρότητα.

Λέξεις ευρετηρίου: Ανεργία, οικονομική κρίση, αγχώδεις διαταραχές, κατάθλιψη, αυτοκτονικότητα.

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Corresponding author: G. Konstantakopoulos, Byron, Kessariani Community Mental Health Center, 1st Department of Psychiatry, Athens University Medical School, 14 Dilou street, GR-161 21 Vironas, Athens, Greece, Tel: (+30) 210-76 40 111, e-mail: gekonst@otenet.gr, george.konstantakopoulos@kcl.ac.uk