## Dialogues in Clinical Neuroscience & Mental Health

DOI: 10.26386/obrela.v2i3.126 ISSN 2585-2795

Vaios Peritogiannis

Mental healthcare in rural Greece: an overview

# Mental healthcare in rural Greece: an overview

# **Vaios Peritogiannis**

Mobile Mental Health Unit of the Prefectures of Ioannina and Thesprotia, Society for the Promotion of Mental Health in Epirus, Greece

#### **Abstract**

This article summarizes the current state of mental healthcare delivery in rural areas in Greece. Mental health services for common mental disorders are provided by primary care physicians, whereas local community mental health centers (CMHCs) and the mobile mental health units (MMHUs) deliver services for all mental disorders, including the chronic and severe disorders. There are significant differences among rural mental health services with regard to the patients they treat, depending on local differences and other services' availability. Their clinical work is noteworthy yet research on community mental health services in rural areas is scarce. Those services should be preserved and even expand for the coverage of the needs of special populations such as the elderly, children and adolescents and refugees. Rural community mental health services face challenges such as the increased demand for services, staffing and inadequate resources. These services are low-cost and their contribution to the promotion of mental health in rural areas may be important, still their cost-effectiveness should be assessed.

**Key-words:** community mental health services, community mental health centers, mobile mental health units, rural areas

Corresponding author: Vaios Peritogiannis MD, MSc, PhD, Mobile Mental Health Unit of the prefectures of loannina and Thesprotia, Society for the Promotion of Mental Health in Epirus, 54 T. Pashidi Str, Ioannina, Greece, Email address: vaios.peritogiannis@medai.gr

## Introduction

The prevalence of mental disorders is high and their burden on patients is well recognized [1]. Common mental disorders, such as depression and anxiety disorders are frequently encountered in the primary health setting [2], and usually are treated by primary care physicians. The treatment of severe and chronic mental disorders, such as psychotic disorders, is much more complex and in contemporary health systems it is largely based on community mental health services. The traditional model of generic community mental health teams (CMHTs) and community mental health centers (CMHCs) has gradually evolved to highly specialized and highly resourced facilities, such as the assertive community treatment (ACT), or the early intervention services for young people with a first episode of psychosis. All these services are constituted by multidisciplinary teams and apply multi-level interventions. There is ample evidence that community-based treatments are effective in the management of psychotic disorders [3, 4].

Mental healthcare delivery in rural and remote areas may be challenging, as those areas usually lack adequate services due to socioeconomic and geographical reasons [5]. Moreover, even moderate distance has been adversely associated with the utilization of community-based mental health services [6]. In Greece it has been previously reported that rural areas were mostly uncovered by mental health facilities [7]. This article discusses the current state of mental health delivery in rural areas of Greece; the implementation of community mental health services in those areas; and the challenges for those services in rural areas.

# Mental healthcare delivery in rural Greece

#### Primary care physicians

In Greece the primary care system in rural areas is well-established and organized in local health centers and regional medical offices [8]. Importantly, a recent study in 5 rural health centers in Crete found a significant increase in patients' visits due to neuropsychiatric symptoms over the last years [9]. Primary care physicians may play an important role in the management of mental disorders and it has been pointed out

that Greek primary care physicians are capable in recognizing common mental health morbidity in daily clinical practice [10]. However, the care of patients with mental disorders by primary care physicians has several limitations, such as their reluctance to work with people with mental disorders, reduced time availability and inadequate supervision by mental health professionals [11]. Moreover, the management of severe mental disorders by primary care physicians may not be feasible, unless there is proper supervision by mental health professionals [12].

# General hospital psychiatrists visiting primary healthcare settings

There is a lack of psychiatrists in rural settings in Greece. The necessity of the presence of a psychiatrist in the primary care setting seems rather obvious, and has been recently highlighted in the Greek literature [13]. To address this issue regional general state hospitals have arranged regular visits of their psychiatrists at local primary health centers. This practice is long-standing [14] however its impact on mental healthcare in rural areas has not been studied systematically. Moreover, a single mental health professional may not have the potential for multi-level interventions, as a team has, and may not be able to address the whole range of the patients' needs.

#### Community mental health centers (CMHCs)

Community mental health centers in Greece mostly operate in large cities, and their efficacy in reducing hospitalizations has been previously reported [15]. Few exist in small cities that could be considered as rural areas. Recently, Zyga et al [16] described the operation and utility of a rural CMHC and presented clinical data of a 3-year period (table 1). The authors highlighted the need for further development of community mental health services in rural areas and for the assumption of relevant initiatives by the Greek state.

Vaios Peritogiannis

Mental healthcare in rural Greece: an overview

## Mobile mental health units (MMHUs)

The model of generic CMHTs in rural Greece has been mostly implemented through the introduction of the so-called mobile mental health units over the last decades. Those units deliver services in rural and remote areas of the mainland and in numerous Greek islands [17]. Early efforts had been made in the 80s, but it was not until the last two decades that those efforts were intensified [18]. According to the evaluation report of the Psychargos program for the psychiatric reform, there are currently 29 MMHUs in Greece [19]. These services are low-cost, because they use the infrastructures of the well-established primary healthcare system, and they also have the potential for domiciliary visits [17].

There is some evidence that treatment with the MMHUs may reduce hospitalizations [20] and facilitates treatment engagement of patients with psychotic disorders [21]. Notably, the potential of the MMHUs to conduct domiciliary visits contributes greatly to the care of older adults with mental disorders [22, 23]. To achieve the goal of care delivery in most inaccessible areas, some MMHUs employ recent advances in technological resources, such as telepsychiatry [24]. The impact of the MMHUs on the promotion of mental health in rural, remote and deprived areas is also worth mentioning. Those services closely co-operate with local authorities and regularly assume educational activities [25].

It should be noted that there are significant differences among the MMHUs with regard to the treated patients. For instance, diagnoses of patients receiving care by the MMHU of loannina and Thesprotia (MMHU I-T) were substantial different than those of patients attending the MMHU of Northeastern and Western Cyclades (MMHU NWC). The rate of psychotic patients that received treatment by the MMHU I-T was ten-fold the rate of those patients attending the MMHU NWC (27.3% vs 2.8%) [26, 27]. On the other hand, a large proportion (38.5%) of the clientele of the MMHU NWC, were not clinical cases but rather sought help by the unit for factors that affect health status and also counseling (Table 1). Regional variations probably account for these differences. In the case of the MMHU NWC there were few alternatives for people in need for mental health services, due to geographical reasons

and lack of facilities. This is probably the reason for so many people that sought counseling who were not rated as mentally ill. On the other hand, in the case of MMHU I-T, patients with less severe mental disorders and minimal disability, and people in need for counseling might prefer not to visit a locally-based mental health facility, but rather examined in the well organized public psychiatric sector, or the well-developed private psychiatric sector in the city of loannina [28], because transportation within the mainland is much easier than from islands.

#### **Discussion**

There are several community mental health services in rural Greece, which operate according to the principles of social and community psychiatry. Yet, there are notable differences among the services, in terms of patients' diagnoses, staffing and even the implementation institution. Most are implemented by non-governmental organizations (NGOs), whereas others are part of the psychiatric departments of regional general hospitals. Some of those services may not provide mental healthcare for children and adolescents, and even there may be differences in their workforce, according to availability of certain disciplines. With regards to the patient population, some services are the only available in a whole region, thus their clientele is representative of the population's mental health morbidity and psychosocial difficulties. This is particular the case of MMHUs in islands [27]. In other cases, due to the availability of several other services and the easiness in transportation, the MMHUs and CMHCs are able to prioritize patients with severe and chronic mental disorders [16, 26]. The characteristics of different areas' populations may also be reflected on the served population of an individual service. For instance, the mean age of the patients that visit the MMHU NWC (49.7 years) is much lower than the mean age of patients who receive care by the MMHU I-T (63 years) (Table 1). This is probably explained by the population composition in Epirus, Northwest Greece, which is the catchment area of the MMHU I-T where a large proportion of the population is older adults [29].

A replicable finding among the reports of those services is that women are over-represented in the patients' samples (Table 1). This finding is consistent with the latest epidemiologic research in Greece [30, 31]. The rates of patients with affective disorders that were treated by those community mental health services are also in line with recent epidemiologic studies in Greece [32, 33]. Referrals from primary care physicians were somewhat different among the MMHU I-T and the MMHU NWC (29% and 18.8%, respectively) [26, 27]. This may be explained by differences in the way primary care physicians in those two areas perceive mental health problems, their ability to diagnose mental disorders and their willingness to treat such patients. Interestingly, it seems that a large proportion of patients that seek mental health treatment by a MMHU are self-referred. As high as 44.4% of patients were self-referred to the MMHU NWC over a decade (2003 to 2013) [18], whereas the rate of self-referred patients to the MMHU I-T increased from 24% during the first two years (2007 & 2008) to 60% at 2017 [26]. This is important, given the stigma that is associated with mental illness. However, there is some evidence that rural residents may have a more positive attitude toward mental illness [34, 35], and this may facilitate self-referral to community mental health services when needed.

The scarce available data suggest that MMHUs and CM-HCs in rural areas mostly treat the so-called common mental disorders (Table 1). However, there is some evidence that questions the efficacy of those services in the treatment of the less severe mental disorders [36] that should not be ignored. Perhaps community mental health services should prioritize patients with severe and chronic mental disorders, such as psychotic disorders and bipolar disorder. On the other hand, there are no data on the severity of common mental disorders that those rural units actually treat. It is possible that community mental health services in rural areas treat the most severe and complicated cases of patients with common mental disorders. Clearly, future research should address this issue in order to clarify what patients are best eligible for such treatment. Nevertheless, from an administrative perspective it may not be feasible to exclude patients with less severe disorders from treatment in specialized services, as there are almost no other alternatives except the primary healthcare.

## Care for special populations

The ongoing ageing of the population in Greece, especially in rural areas is a major challenge for the health system and the mental health services in those areas. Several Western countries have launched specialized and highly resourced CMHTs for older people [37, 38], yet this practice is currently unlikely in Greece, due to the ongoing austerity and the limited resources. It seems that the best option for mental healthcare delivery for this population is through the existing CMHCs and MMHUs. The potential role of the community mental health services in the management of psychogeriatric syndromes, such as dementia, has been highlighted in the Greek literature [39]. The need for training in psychogeriatrics and in physical morbidity, as it is commonly encountered in the elderly, has been also highlighted [26].

A major limitation of several community mental health services in rural Greece is that they do not have the potential to deliver services for children and adolescents. This is in contrast to the increased need for such services that has been reported in the Greek literature [40]. Conceivably, adequate staffing in CMHCs and MMHUs so as to provide services for this population should be a priority for the Greek state.

Finally, some of the community mental health services, mostly the MMHUs in islands with large refugee camps, may have to deal with increasing demand for mental health services in refugees. The extent of the problem of psychopathology in refugees has been recently highlighted and it is encouraging that a number of important declarations on refugee mental health and related issues have been produced recently [41]. The workforce of MMHUs that treat refugees is in obvious need for training on transcultural psychiatry and should be further supported with adequate resources.

# Challenges for community mental health services

The ongoing financial crisis has led to increased demand for services [42, 43] and to increased caseloads in community mental health services [26] that needs to be addressed by the CMHCs and the MMHUs. This would be feasible by discharging stabilized patients and patients with less severe disorders

to the primary care. However, primary care physicians may be unwilling to treat patients with mental disorders, and even patients may be reluctant for such a referral and change of treatment setting. Close co-operation of the mental health teams with the primary care staff and ongoing supervision will be warranted if discharge is to succeed. In the case of MMHUs it has to be noted that they are fully integrated within the primary healthcare system and this could facilitate referrals to primary care and ongoing support and supervision of primary care physicians [44].

Another important issue for mental health services in rural areas is staffing. Rural working has been associated with many perceived adversities by clinicians [45] and this raises obstacles in recruitment and retention of highly trained staff in rural areas of Greece [46]. It is not clear what incentives would facilitate staffing with highly trained and competitive workforce in rural community mental health services, but the

need for revision and renewal of current legislation has been recently pointed out (46).

Another challenge that community mental health services face is the communication within the network of mental health facilities in a defined area. Recently, it has been shown that interconnection is moderate among mental health facilities and is limited to some of the patients' characteristics [47]. This is in line with the notion that inter-sectoral coordination among mental health services in Greece is rather poor [43]. Although some local efforts have yielded positive results [48] there are still a lot to be done. A recent suggestion that could improve interconnection and the quality of the delivered care is the creation of electronic patient's file that would contain all the details about the history and the mental state of the patients [16, 47].

Several proposals have been recently made for the improvement of mental health policy in Greece that are the preserva-

Service	Patients' gender	Mean patients' age	Patients' diagnoses	Services for children	Institution
	(female, %)	(years)	(ICD-10, %)	and adolescents	
CMHC of the			F00-F09: 4.8		
General Hospi- tal of Sparta	61.8	Male 53.1	F20-F29: 22.1	No	General State Hospital
		Female 55.9	F30-F39: 44		
			F40-F48: 16.3		
MMHU NWC	60.9		F00-F09: 5.4		
			F20-F29: 2.8		
		49.7	F30-F39: 18	Yes	NGO
			F40-F48: 17.5		
			Z03-Z99: 38.5		
MMHU I-T	56.3	63	F00-F09: 13.7	No	NGO
			F20-F29: 27.3		
			F30-F39: 29		
			F40-F48: 16		

ICD-10: International Classification of Diseases-10<sup>th</sup> revision

NGO: Non-Governmental Organization

CMHC: Community Mental Health Center

MMHU NWC: Mobile Mental Health Unit of Northeastern and Western Cyclades

MMHU I-T: Mobile Mental Health Unit of the prefectures of Ioannina and Thesprotia

**Table 1.** Main characteristics of 3 rural community mental health services

Vaios Peritogiannis

tion of the existing services, the optimal usage of the available limited resources and the linking of funding to service performance [43]. The issue of comprehensive evaluation emerges as critical for community mental health services, but exact definitions of "service performance" are yet to be set. A plausible way to evaluate those services would be through research. It is unfortunate that while the clinical work and the contribution of community mental health services to the promotion of mental health in rural areas in Greece are important, their research record is rather poor. Research should be multi-sited and focus on the implemented treatments and the measurable results of the interventions, but also on the cost-effectiveness of services. The findings could enhance the arguments toward the preservation, expansion and adequate funding of MMHUs and CMHCs in rural areas in Greece.

#### **Conclusion**

Community mental health services in rural Greece are well established and may contribute to the management of mental health disorders and the promotion of mental health in remote and deprived areas. Currently they are the best option for treatment delivery in those areas, even for special populations such as the elderly, children and adolescents and refugees. Research is urgently needed to clarify their effectiveness and establish their role as reliable alternatives to hospital-based treatments.

#### References

- World Health Organization. Depression and Other Common Mental Disorders: Global Health Estimates. Geneva: 2017.
- Grandes G, Montoya I, Arietaleanizbeaskoa MS, Arce V, Sanchez A. The burden of mental disorders in primary care. Eur Psychiatry 2011; 26: 428–435. doi: 10.1016/j.eurpsy.2010.11.002.
- 3. Armijo J, Méndez E, Morales R, Schilling S, Castro A, Alvarado R, Rojas G. Efficacy of community treatments for

- schizophrenia and other psychotic disorders: a literature review. Front Psychiatry 2013; 4: 116. doi: 10.3389/fp-syt.2013.00116.
- Asher L, Patel V, De Silva M. Community-based psychosocial interventions for people with schizophrenia in low and middle-income countries: systematic review and meta-analysis. BMC Psychiatry 2017; 17:355. doi: 10.1186/s12888-017-1516-7.
- 5. Thornicroft G, Semrau M, Alen A, Drake RE, Ito H, Mari J et al., (Eds.). Community Mental Health: Putting Policy into Practice Globally, Willey-Blackwell, New York, NY, USA, 2011.
- 6. Zulian G, Donisi V, Secco G, Pertile R, Tansella M, Amaddeo F. How are caseload and service utilisation of psychiatric services influenced by distance? A geographical approach to the study of community-based mental health services. Soc Psychiatry Psychiatr Epidemiol 2011; 46: 881-891. doi: 10.1007/s00127-010-0257-4.
- 7. Madianos M, Zacharakis C, Tsitsa C, Stefanis C. The mental health care delivery system in Greece: regional variation and socioeconomic correlates. J Ment Health Policy Econ 1999: 2: 169–176.
- 8. Economou C. Greece: Health system review. Health Syst Transit 2010; 12: 7.
- Patelarou A, Kleisiaris C, Androulakis E, Tsirakos D, Kritsotakis G, Konstantinidis T et al. Use of primary health care services in Southern Greece during a period of economic crisis. Arch Hell Med 2016; 33: 84-89
- 10. Argyriadou S, Lionis C. Research in primary care mental health in Greece. Ment Health Fam Med 2009; 6:229–231
- 11. Anonymous. What is primary care mental health? WHO and Wonca Working Party on Mental Health. Ment Health Fam Med 2008; 5: 9–13
- 12. Peritogiannis V, Lixouriotis C, Mavreas V. The patient with psychosis in the primary health care setting. Arch Hell Med 2018; 35: 446-453
- 13. Souliotis K, Agapidaki E, Tzavara C, Economou M. Psychiatrists role in primary health care in Greece: findings from a

- quantitative study. Int J Ment Health Syst 2017; 11:65. doi: 10.1186/s13033-017-0172-0.
- 14. Fotiadou A, Priftis P, Kiprianos S. Primary health care role in the management of persons with mental disorder. Encephalos 2004; 41 (1)
- Madianos M, Economou M. The Impact of a Community Mental Health Center on Psychiatric Hospitalizations in Two Athens Areas. Community Ment Health J 1999; 35: 313-323
- Zyga S, Mitropoulou E, Alikari V, Prezerakos P, Tsironi M, Andriopoulos P et al. Primary Mental Health Care in Rural Greece: A Single Center Experience. American Journal of Nursing Science 2018; 7: 1-6. doi: 10.11648/j. ajns.s.2018070301.11
- 17. Peritogiannis V, Mavreas V. Community mental health teams in Greece: The paradigm of Mobile Mental Health Units. Arch Hell Med 2014; 31: 71-76.
- 18. Stylianidis S, Pantelidou S, Poulios A, Lavdas M, Lamnidis N. Mobile Mental Health Units on the Islands: The Experience of Cyclades. In: Stylianidis S, editor. Social and Community Psychiatry. Springer; 2016. p. 167-191.
- Bouras N, Braoudakis G, Mastrogiannakis A, Nikolakopoulos J, Markatou A, Braoudaki E et al. Evaluation report of the interventions for the implementation of Psychiatric Reform. 2015. Available at: https://www.psychargos.gov.gr/ Documents2/ON-%20GOING/Eval\_Report\_2014.pdf
- 20. Peritogiannis V, Mantas C, Alexiou D, Fotopoulou V, Mouka V, Hyphantis T. The contribution of a mobile mental health unit in the promotion of primary mental health in rural areas in Greece: a two-year follow-up. Eur Psychiatry 2011; 26: 425-427. doi: 10.1016/j.eurpsy.2010.07.001
- 21. Peritogiannis V, Tatsioni A, Menti N, Grammeniati A, Fotopoulou V, Mavreas V. Treatment engagement of psychotic patients with a mobile mental health unit in rural areas in Greece: a five-year study. Schizophr Res Treatment 2013; Article ID 613956. doi: 10.1155/2013/613956.
- 22. Peritogiannis V, Lekka M, Grammeniati A, Gogou A, Fotopoulou V, Tatsioni A et al. Home-based mental health

- care for the elderly in a rural area in Greece. Psychiatry Clin Neurosci 2013; 67: 458–459. doi: 10.1111/pcn.12068.
- 23. Peritogiannis V, Tatsioni A, Manthopoulou T, Mavreas V. Mental healthcare for older adults in rural Greece. Int Psychogeriatrics 2016; 4: 698-700. doi: 10.1017/S1041610215001829.
- 24. Garoni D, Sarantidis D, Katsadoros K. Utilization of technological resources within the framework of operation of a Mobile Mental Health Unit. Psychiatriki 2016; 27: 287-295. doi: 10.22365/jpsych.2016.274.287.
- Dimopoulou M., Fanti R., Kiourktsi B., Louvros K., Zennetou I., Kavvadia A. et al. Implementation of the Mobile Mental Health Unit of Corfu-Lefcada. Medical Annals of Northwestern Greece 2011; 8: 44-48
- Peritogiannis V, Manthopoulou T, Gogou A, Mavreas V. Mental healthcare delivery in rural Greece: A 10-year account of a Mobile Mental Health Unit. J Neurosci Rural Pract 2017; 8: 556-561. doi: 10.4103/jnrp.jnrp\_142\_17.
- 27. Lykomitrou A, Saridi M, Stylianidis S, Souliotis K. The Mobile Mental Health Units Services Utilization in the Northeastern and Western Cyclades, Greece. International Journal of Caring Sciences 2019; 12: 40-48.
- 28. Peritogiannis V, Mantas C, Tatsioni A, Mavreas V. Rates of First Episode of Psychosis in a Defined Catchment Area in Greece. Clin Pract Epidemiol Mental Health 2013; 9: 251-254. doi: 10.2174/1745017901309010251.
- 29. Hellenic Statistical Authority. Available from: http://www.statistics.gr/. [Last accessed on 2019 June 16].
- 30. Stylianidis S, Skapinakis P, Pantelidou S, Chondros P, Avgoustaki A, Ziakoulis M. Prevalence of common psychiatric disorders in an island region. Arch Hell Med 2010; 27:675–683
- 31. Skapinakis P, Bellos S, Koupidis S, Grammatikopoulos I, Theodorakis PV, Mavreas V. Prevalence and sociodemographic associations of common mental disorders in a nationally representative sample of the general population of Greece. BMC Psychiatry 2013; 13:163. doi: 10.1186/1471-244X-13-163.
- 32. Andriopoulos P, Lotti-Lykousa M, Pappa E, Papadopoulos

DOI: 10.26386/obrela.v2i3.126 ISSN 2585-2795

Vaios Peritogiannis

- A, Niakas D. Depression, quality of life and primary care: A cross-sectional study. J Epidemiol Glob Health 2013; 3:245–252. doi: 10.1016/j.jegh.2013.06.004.
- 33. Argyropoulos K, Bartsokas C, Argyropoulou A, Gourzis P, Jelastopulu E. Depressive symptoms in late life in urban and semi-urban areas of South-West Greece: An undetected disorder? Indian J Psychiatry 2015; 57: 295-300. doi: 10.4103/0019-5545.166617.
- 34. Ta TM, Zieger A, Schomerus G, Cao TD, Dettling M, Do XT et al. Influence of urbanity on perception of mental illness stigma: a population based study in urban and rural Hanoi, Vietnam. Int J Soc Psychiatry 2016; 62: 685-695. doi:10.1177/0020764016670430
- 35. Mutiso V, Musyimi C, Tomita A, Loeffen L, Burns JK, Ndetei D. Epidemiological patterns of mental disorders and stigma in a community household survey in urban slum and rural settings in Kenya. Int J Soc Psychiatry 2018; 64: 120-129. doi: 10.1177/0020764017748180.
- 36. Laugharne R, Eaves S, Mascas A, Psatha K, Dinnis G, Trower J et al. Desperately seeking outcomes: quantifying the effectiveness of community mental healthcare using Health of the Nation Outcome Scales. BJPsych Open 2018; 4: 91–94. doi: 10.1192/bjo.2018.3.
- 37. Loi S, Hassett A. Evolution of aged persons mental health services in Victoria: The history behind their development. Australas J Ageing 2011; 4: 226–230. doi: 10.1111/j.1741-6612.2011.00529.x.
- 38. Reifler B, Bruce M. Home-Based Mental Health Services for Older Adults: A Review of Ten Model Programs. Am J Geriatr Psychiatry 2014; 22: 241–247. doi: 10.1016/j. jagp.2012.12.002.
- 39. Vorvolakos T. Dementia: Management by community psychiatry services. Encephalos 2012; 49: 55-59

- 40. Anagnostopoulos DC, Soumaki E. The state of child and adolescent psychiatry in Greece during the international financial crisis: a brief report. Eur Child Adolesc Psychiatry 2013; 22: 131-134. doi: 10.1007/s00787-013-0377-y.
- 41. Christodoulou GN, Abou-Saleh MT. Greece and the refugee crisis: mental health context. BJPsych Int 2016; 13:89-91.
- 42. Giotakos O, Karabelas D, Kafkas A. Financial crisis and mental health in Greece. Psychiatriki 2011; 22: 109-119.
- 43. Giannakopoulos G, Anagnostopoulos D. Psychiatric reform in Greece: an overview. BJPsych Bulletin 2016; 40: 326-328. doi: 10.1192/pb.bp.116.053652.
- 44. Peritogiannis V, Lixouriotis C, Mavreas V. The integration of mental health services into primary health care in Greece. Arch Hell Med 2014; 31: 669–677.
- 45. Moore T, Sutton K, Maybery D. Rural mental health workforce difficulties: A management perspective. Rural Remote Health 2010; 10: 1519.
- 46. Vardiampasis V, Tsironi M, Nikolentzos A, Moisoglou I, Galanis P, Stavropoulou H et al. Health services staffing with physicians in the remote areas: Recruitment and retention incentives. Arch Hell Med 2014; 31:48–54
- 47. Grigorakou S, Panagiotou A, Kolovos P, Prezerakos P. Investigation of the Communication Network Among Mental Health Services: The Case of a Community Mental Health Care Center in Attica. Ment Health Fam Med 2017; 13: 459-464
- 48. Mantas C, Mavreas V. Establishing and operating an early intervention service for psychosis in a defined catchment area of northwestern Greece within the context of the local mental health network. Early Interv Psychiatry 2012; 6: 212-217. doi: 10.1111/j.1751-7893.2012.00358.x.