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SPECIAL ARTICLE

The role of the Mobile Mental Health Units in mental healthcare delivery in rural areas in Greece: current challenges and prospects

A position statement of the Coordinating Committee of the Mobile Mental Health Units

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ABSTRACT

The present paper aims to highlight the importance of Mobile Mental Health Units (MMHUs) in the delivery of mental health services in remote areas in rural Greece. Since the foundation of the first MMHUs in the eighties till nowadays, those services have expanded in many rural areas and there is some evidence that they are effective in the management of patients with severe mental disorders. The care of those patients seems to contribute to a significant reduction in voluntary and involuntary acute admissions and in length of hospital stay. Cost/effectiveness analysis studies have also shown favorable results. Besides their regular clinical work, MMHUs conduct research, such as epidemiologic surveys. Other research explores the care of elderly patients in rural areas and the care of immigrants that permanently reside in Greece. Other research involves the study of psychotic disorders in the rural context, such as the long-term outcome, the patients' functioning, and the long-term treatment with benzodiazepines. Current challenges for MMHUs involve staffing, particularly for those run by public hospitals, and the retainment of highly trained personnel. Other important challenges are related to the aging of the rural population and the refugee/migrant

influx. The MMHUs of the islands that initially accept the refugee flow, have already faced an increased number of new referrals. Given the disparities in mental healthcare between rural and urban areas, further enhancement of the MMHUs' operation is required, as well as continuing training of their workforce. Research at the national level is needed and could be the basis for the design and staffing of new services. The establishment of valid and broadly accepted clinical indices to measure treatment outcomes would facilitate research and ensure the recording and evaluation of the MMHUs' work and their effectiveness as well; and would highlight their utility within the contemporary health system.

KEYWORDS: Community mental health services, mobile mental health units, rural and remote areas, psychotic disorders, schizophrenia.

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Introduction

The contemporary trend in the treatment of mental disorders involves the delivery of easily accessible community-based services, in a non-restrictive environment. Community mental health services offer a broad range of services for all mental disorders, with emphasis being placed on long-term, severe mental illnesses (SMI), such as psychoses. The effectiveness of their interventions for SMI is supported by several studies, which demonstrate that the care provided contributes to the improvement of symptomatology; the reduction of the length of hospital stay; and the management of substance abuse comorbidity. In addition, community interventions improve patients' functioning and treatment adherence.¹ Nevertheless, mental health service delivery in remote rural areas is challenging for the healthcare system. For example, in Eastern European countries, the population of these areas does not receive adequate care, due to socioeconomic and geographical reasons and the lack of local services.² Moreover, there is evidence that the use of community mental health services is significantly affected by the distance that the patients have to travel.³ Similar results have been found in Greece,⁴ where a large part of the population resides in mountainous-rural areas, as well as islands, conditions that adversely affect the accessibility of psychiatric patients to mental health services. The introduction of the Mobile Mental Health Units (MMHUs) in rural regions, seems to contribute to the solution to this problem.⁵

The present paper aims to present the activities of the MMHUs and highlights their prospects for the provision of quality services in remote rural areas. It also refers to the challenges that MMHUs face and puts forward specific proposals for the enhancement of their operation.

The MMHUs in Greece

Historical background

The first two MMHUs in Greece were founded in 1981, in Fokida, Central Greece and Evros, Northeast Greece. The MMHU of Fokida was established by the Society of Social Psychiatry and Mental Health, headed by its President, Panagiotis Sakellaropoulos, who later became Professor of Psychiatry at Democritus University of Thrace. The MMHU in Evros was founded by the University Psychiatric Department of the General Hospital of Alexandroupolis, headed

by its Director, Charalambos Ierodiakonou, who was at the time Professor of Psychiatry at the Alexandroupolis branch of Aristotle University of Thessaloniki. In 1985, Panagiotis Sakellariopoulos who had become by then Professor of Psychiatry at the Democritus University of Thrace, took over the management of the MMHU of the Hospital of Alexandroupolis. Under his scientific responsibility, for almost a decade, these two first MMHUs operated on a converging course, with common aims and similar operation principles.⁶⁻⁸ Later, other MMHUs were established at the areas of Evia and Thessaloniki.

The first two MMHUs, in accordance to the principles of Social and Community Psychiatry, aimed at:⁶⁻⁸ a) overcoming the problems created by traditional psychiatric methods for people with mental health problems, b) the improvement of the accessibility of psychiatric services, for patients and their families, through the decentralization of these services, considering that at the time, remote rural areas lacked any kind of mental health services c) the systematic and consistent patients' follow-up near their place of residence or at their home, with the aim of preventing relapses and reducing hospitalizations d) the management of crises-relapses through home treatment, especially at the MMHU of Fokida, which lacked a psychiatric ward at the local hospital e) cultivating relationships with the community, with the aim of providing information and raising awareness regarding mental health issues (Community Sensitization). The aim of the cooperation with the community was, on one hand, to reduce the effects of stigma toward mental illness and on the other hand, to employ community resources for the support of people with severe psychiatric disorders.^{8,9}

Over the following decades, many more MMHUs were established and became an integral part of mental health services, within the framework of the psychiatric reform. By 2016, 25 MMHUs had been registered in Greece, whose operation was mainly under the responsibility of non-governmental organizations, as well as the psychiatric sectors of general hospitals.¹⁰ In 2019, their number had been reduced to 20.¹¹

Basic operational principles of the MMHUs

In our country, MMHUs are interdisciplinary teams that deliver services according to the principles of Social and Community Psychiatry. Their operation is based on both the Community Mental Health Teams model, which is very common in the UK, and the Assertive Community Treatment, which is the benchmark for community-based treatment of SMI in developed Western countries.¹² MMHUs are a modified version of the above models, adapted to the Greek reality and rural settings. Similar adaptations of the traditional community-based treatment models for mental health disorders in remote areas have been reported internationally.¹³⁻¹⁵

MMHUs deliver services in the non-restrictive context of the community and the Primary Health Care (PHC). Referrals are made by the PHC, the psychiatric wards of general hospitals, and local services, such as the Home Help service, whereas a significant percentage of patients are self-referrals or have been referred by their families. MMHUs undertake the care of all referred cases that require treatment, with emphasis on patients with long-term and severe mental disorders. They offer a wide range of evidence-based therapeutic interventions, such as medication and psychological therapies, along with support and training of the family and other caregivers. The MMHUs use the infrastructures of the local services, of PHC (Health Centers and Regional Medical Offices), whereas they may conduct home visits in selected cases of patients.¹⁶⁻¹⁹

The operation of the MMHUs has been the subject of discussion and reflection. Professor Mavreas' ²⁰ previous remarks are still relevant:

1. Often, the networking of the MMHUs with the rest of the mental health services system does not exist. It is a problem that is directly related to the incomplete implementation of sectorization in Greece ¹⁰
2. The complete implementation of their work, as it has been determined by the relative legislation is difficult.
3. Scientific documentation and evaluation of their work is required.
4. Their operation in changing conditions, such as the current pandemic, must be protected.

Indications-Evidence for the effectiveness of the MMHUs

The small number of studies which have been conducted so far on MMHUs have shown some interesting results. They seem to ensure a significant degree of continuity of care of patients with psychoses, a prerequisite for the treatment of psychotic disorders in the community.²¹ Some studies showed that the operation of the MMHUs contributes to the reduction of hospitalizations, including involuntary hospitalizations, as well as in the reduction of length of hospital stay of patients with schizophrenia-spectrum disorders and bipolar disorder.^{22, 23} A recent study in an island population which was designed to investigate the effectiveness of community interventions, found that the care provided to patients with common psychiatric disorders by the Northeast and Western Cyclades MMHUs, led to a significant reduction in Disability Adjusted Life Years.²⁴ Other research suggests that the cost/effectiveness ratio of the MMHUs interventions at the islands is favorable. According to the authors, the improvement of the patients' mental health, forms the basis for reducing public costs of treatments, and may also be the basis for the improvement of patients' financial status by reducing productivity losses.²⁵ (Table 1).

It is not clear whether the above findings are generalized nationwide. The design of large, multicenter studies with the participation of all MMHUs is necessary in order to produce robust evidence, so as to form conclusions regarding the effectiveness of their interventions.

Other research work of the MMHUs

Individual MMHUs' practices, such as home visits, appear to be useful for the care of elderly patients,^{26, 27} who comprise a large proportion of the rural population and have increased needs. In a previous epidemiologic study by the MMHU of Northeastern Cyclades, the prevalence of common mental disorders in islands was assessed.²⁸ Other research projects of the MMHUs include the study of long-term outcome in psychotic disorders in rural areas²⁹, the study of functioning in patients with psychosis in these areas³⁰ and the study of the use of telepsychiatry for the treatment of patients in remote areas.³¹ In addition, more specific issues have been studied concerning patients with psychotic disorders, such as chronic treatment with benzodiazepines³² and gambling problems³³. Very recently, the nutritional habits and obesity among patients with schizophrenia-spectrum disorders in parts of Epirus have been studied.³⁴ Other recent studies report on the correlation of depressive symptoms and family functioning among immigrants from Albania, who live permanently in Northwest Aegean islands³⁵ and the use of community mental health services by this population.³⁶ The most recent research by the MMHUs concerns the COVID-19 vaccination rates of patients with SMI, which were found to be similar to those of the general population.³⁷

Differences among MMHUs

As mentioned above, the operation of the MMHUs in Greece is determined by Social and Community Psychiatry principles and aspirations. Nevertheless, there may be significant differences between MMHUs.³⁸ Very recently, a systematic recording of the differences between the MMHU of the University General Hospital of Alexandroupolis (MMHU UGHA),

and the MMHU of Ioannina and Thesprotia Prefectures (MMHU I-T) was attempted. The comparison revealed significant differences with regards to the units' staffing and the service users' demographic and clinical characteristics.³⁹ Moreover, the MMHUs on the islands deal with all kinds of referrals, in the absence of other mental health services. As a result, the proportion of patients with SMI receiving treatment by these units is relatively small, compared to the total number of cases treated.⁴⁰ Differences between MMHUs could be attributed to local factors, such as the availability of other services and access to other specialized services, or to whether the MMHU is run by a hospital or a non-governmental organization (NGO).

Other differences between MMHUs in our country have not been adequately recorded. For instance, some of them provide children and adolescent care services, whereas others do not. Moreover, some of the MMHUs were selected to implement new programs for children and adolescents as well as the assertive community treatment program, funded by the National Strategic Reference Framework (NSRF).⁴¹ It is still unknown how many of the MMHUs that were selected to implement the above programs managed to adequately staff and operate the new services.

Challenges in the current situation

Refugees and immigrants

Refugees and immigrants, whose population is gradually increasing in our country, are at increased risk of developing psychiatric symptoms. These people are subject to intense mental strain due to their expatriation and various losses. In addition to the physical and emotional trauma they have experienced, refugees and migrants face poverty, hostility and racism in the host country. Other factors that contribute to the development of psychiatric symptoms are poor living conditions, lack of support and detention, as well.⁴²

On islands with large reception centers and camps, local MMHUs have already been involved in the mental healthcare of refugees, especially over the last five years. Referrals of these individuals come from multiple sources, such as hospitals, accommodation structures, identification centers, the police, and non-governmental organizations operating in the camps. According to a recent study at the Reception and Identification Center in Chios, high rates of self-destructive behavior were observed among refugees and migrants, as well as high dropout rates, both in adults and children/adolescents. The most common diagnoses in adults were anxiety and stress-related disorders, as well as emotional disorders. In minors, the most common diagnoses were anxiety as well as stress-related disorders and developmental disorders.⁴³

Aging of the rural population

The population of our country is constantly aging and the phenomenon is more evident in the Greek countryside. This already affects the patient population profile treated by certain MMHUs, which deal with age-related mental disorders, such as dementia and other organic brain syndromes. In the absence of specialized psychogeriatric services, especially in the province, the best prospects for the diagnosis and treatment of mental disorders in the elderly are the MMHUs, in close cooperation with the PHC.⁴⁴

Suggestions

Staffing

Working in rural areas presents significant challenges and is generally not considered attractive for health professionals.⁴⁵ Additionally, a shortage of qualified mental health

professionals has been identified in Greek rural areas.⁴⁶ In terms of the MMHUs' understaffing, it may be even more obvious for units run by general hospitals. The bureaucratic procedures of hiring and replacing staff place obstacles in the staffing process. At the same time, the employment conditions of psychiatrists in the public sector MMHUs may not be attractive. Liaison with universities and access to research activities, financial incentives and other work-professional incentives could be ways to strengthen the scientific staffing of the MMHUs.

Active participation in decision-making

The MMHUs' experience and expertise in providing mental health services in remote areas are remarkable and can be utilized by scientific organizations and state institutions. The extent to which this happens is not clear, but there are some negative examples, such as the recent drafting of guidelines for the community treatment of schizophrenia⁴⁷, in which the MMHU representatives' participation was low. A more active participation in the decision-making concerning the MMHUs is proposed, through their representation in bodies such as the Hellenic Psychiatric Association (community psychiatry branch) and the Sectoral Scientific Committees of Adult and Child-Adolescent Mental Health (ΤΕΠΕΨΥΕ-ΤΕΠΕΨΥΠΕ).

Research

The research conducted by the MMHUs can contribute to the collection of epidemiological data, which is lacking in the Greek literature, especially for the provincial regions. In addition, conducting research is the most appropriate way to highlight the work of the MMHUs and document their effectiveness.

It is encouraging that, according to a relatively recent ministerial decision⁴⁸, new funding is expected to be allocated to Community Mental Health Services for "conducting organized research initiatives". This would be a strong incentive for the personnel of the MMHUs to participate in research activities. A question that arises, however, is the extent to which this opportunity has been utilized until today, and whether research proposals have been submitted to the Ministry of Health, as well as how many of them have already been approved and funded.

MMHUs Evaluation

In recent years, there has been an international trend towards the reduction of available mental health resources⁴⁹. In an era of changing economic conditions in our country, due to the financial crisis and the current COVID-19 pandemic, linking funding to service effectiveness, as proposed by some experts¹⁰, seems likely. Consequently, the need for a valid evaluation of MMHUs is emerging. Currently, there is only a rough link between funding and the number of monthly therapeutic sessions carried out by MMHUs run by NGOs, based on a controversial costing method. This method may distort the evaluation of the quality of the services provided and runs the risk of creating an artificial demand for services, such as, the extension of treatment in cases where it is no longer necessary.

Some issues that are involved in research and evaluation, and need to be resolved, are highlighted below:

- A. The necessity for an extended (nationwide) population needs assessment survey, which should form the basis for sectorization, the design of new mental health services, including MMHUs, as well as their staffing.
- B. The need for the systematic use of widely accepted clinical indices regarding treatment, for the measurement and evaluation of the work of the MMHUs, as well as all the mental health units. Such indices could include the percentage of patients receiving treatment in

relation to the total referrals and requests; the hospitalizations (voluntary and involuntary) of patients with SMI receiving care; patients' symptomatology and functioning; patients' satisfaction with the services provided etc.

- C. The need for targeted research to evaluate the effectiveness of the MMHUs, as well as relevant external evaluation (with cost/effectiveness indices, SWOT analysis, etc.).
- D. The need to fill the gap of systematic and valid recording of the work of the MMHUs, as well as the entire system of mental health units in the country, which limits research and evaluation of all the issues listed above.

Staff training

The ongoing training of the MMHUs' staff is a key prerequisite for strengthening their skills and the prevention of burnout, in order to provide effective services.⁵⁰ Recognizing the need for specialized training for the staff working in the community mental health services, Aris Liakos, Professor of Psychiatry at the University of Ioannina, in collaboration with Professor Panagiotis Sakellaropoulos and the Society of Social Psychiatry and Mental Health, founded the Postgraduate Program in Social Psychiatry-Child Psychiatry, in the Department of Medicine of the University of Ioannina, which operated for a number of years. This program contributed significantly to the training of young professionals and to the promotion of the psychiatric reform. Since 2008, a Postgraduate Program with similar educational goals, operates at the Department of Medicine of the Democritus University of Thrace, founded by Miltos Livaditis, Professor of Social Psychiatry.

The challenges regarding the treatment of the growing number of elderly patients by the MMHUs, require further training in psychogeriatrics. At the same time, due to the high rate of physical comorbidities in patients with psychosis, the long-term training of MMHUs' staff in general medicine is considered essential.⁵¹ In addition, training in cross-cultural psychiatric issues is necessary for the MMHUs of those islands that shelter an increased number of refugees and immigrants.

Inequalities regarding the access to mental health services in remote rural areas, have been highlighted in detail in the international and the Greek literature.^{4, 52} Undoubtedly, MMHUs as secondary care services which have the potential to deliver interdisciplinary interventions, can meet most of the needs of the population in rural areas. On the other hand, expectations regarding the operation of the MMHUs should always be adjusted to their existing capabilities and available resources. For instance, if the demanding care of migrants/refugees is allocated to the MMHUs, they should be further supported and appropriately funded.

Conclusion

As Professor Sakellaropoulos has aptly stated regarding community mental health services, "We do not change the diagnosis; we change the person's fate". This statement summarizes the history and operation of the MMHUs. Initially, the MMHUs were an important initiative in the context of the country's psychiatric reform, while in recent decades they have faced various challenges, such as the financial crisis and the refugee-migrant flow. Recently, their operation has expanded, with increasing expectations. MMHUs need to be further strengthened in order to continue to meet their demanding role, while at the same time it is necessary to evaluate their effectiveness, through organized research initiatives.

References

1. Armijo J, Méndez E, Morales R, Schilling S, Castro A, Alvarado R, et al. Efficacy of community treatments for schizophrenia and other psychotic disorders: A literature review. *Front Psychiatry* 2013, 4:116, doi: 10.3389/fpsyt.2013.00116
2. Thornicroft G, Semrau M, Alen A, Drake RE, Ito H, Mari J, et al. *Community Mental Health: Putting Policy into Practice Globally*. Willey-Blackwell, New York, 2011
3. 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
4. Madianos MG, 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, doi: 10.1002/(sici)1099-176x(199912)2:4
5. Sakellaropoulos P. Introduction to: T. Lemperiere, A. Feline, A. Gutman, J. Ades, C. Pilate: Manual of Adult Psychiatry – Social Psychiatry Elements and Applications in Greece, Papazisis, Athens, 1995 [In Greek]
6. Ierodiakonou CS. Mobile Unit within the framework of a Community Mental Health Central in the Province – Experience and results of the first year. *Medicine* 1983, 44: 225-232 [In Greek]
7. Ierodiakonou CS. Psychotherapeutic Possibilities in a Rural Community Mental Health Centre in Greece. *Am J Psychother* 1983, 37: 544-551, doi: 10.1176/appi.psychotherapy.1983.37.4.544.
8. Frangkouli – Sakellaropoulou A. *The Mobile Psychiatric Units of the Prefecture of Fokida*. Papazisis, Athens, 2008 [In Greek]
9. Sakellaropoulos P, Tsilikas S. Psychosis, Psychoanalytic Prism and Public Care. *Psychoanalysis and Psychotherapy* 1995, 4: 161 [In Greek]
10. Giannakopoulos G, Anagnostopoulos D. Psychiatric reform in Greece: an overview. *BJPsych Bull* 2016, 40: 326-328, doi: 10.1192/pb.bp.116.053652
11. Madianos M. The adventures of psychiatric reform in Greece: 1999–2019. *BJPsych Int* 2020, 17: 26-28, doi:10.1192/bji.2019.30
12. Burns T. *Community Mental Health Teams*. Oxford University Press, New York, 2004
13. Meyer P, Morrissey J. A Comparison of Assertive Community Treatment and Intensive Case Management for Patients in Rural Areas. *Psychiatr Serv* 2007, 58: 121–127, doi: 10.1176/ps.2007.58.1.121
14. Bonsack C, Holzer L, Stancu I, Baier V, Samitca M, Charbon Y, Koch N. Psychiatric Mobile Teams for the Three Ages of Live: The Lausanne Experience. *Rev Méd Suisse* 2008, 4: 1960-1969, PMID: 18847128
15. Spivak S, Mojtabai R, Green C, Firth T, Sater H, Cullen B. Distribution and Correlates of Assertive Community Treatment (ACT) and ACT-Like Programs: Results From the 2015 N-MHSS. *Psychiatr Serv* 2019, 70: 271–278, doi: 10.1176/appi.ps.201700561

16. Stylianidis S, Pantelidou S, Poullos 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, Switzerland, 2016
17. 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
18. Peritogiannis V, Mavreas V. Community mental health teams in Greece: The paradigm of mobile mental health units. *Arch Hell Med* 2014, 31:71–76 [In Greek]
19. Peritogiannis V, Gioti P. The scope of the interventions of an interdisciplinary mental health service in the treatment of psychotic disorders in rural Greece. *Dialogues in Clinical Neuroscience & Mental Health* 2021, 4: 225-231, doi: 10.26386/obrela.v4i4.120
20. Mavreas V. The mobile mental health units in a contemporary mental health system. Proceedings of the 4th Panhellenic Mobile Mental Health Units Congress, University of Ioannina, 2012:7–11 [In Greek]
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 Treat* 2013, Article ID 613956, doi: 10.1155/2013/613956
22. Peritogiannis V, Gioti P, Gogou A, Samakouri M. Decrease of hospitalizations and length of hospital stay in patients with schizophrenia spectrum disorders treated in a community mental health service in rural Greece. *Int J Soc Psychiatry* 2020, 66: 693-699, doi: 10.1177/0020764020924462
23. Garbi A, Tiniakos I, Mikelatou Z, Drakatos I. Decrease of Hospitalizations and Length of Hospital Stay in Patients with Schizophrenia Spectrum Disorders or Bipolar Disorder Treated in a Mobile Mental Health Service in Insular Greece. *Psych* 2021, 3: 780–791. doi: 10.3390/psych3040049
24. Lykomitrou A, Stylianidis S, Geitona M, Pantelidou S, Souliotis K. Assessment of the Mobile Mental Health Units' effectiveness in Cyclades islands. *Psychiatriki* 2021, 32:199–207, doi: org/10.22365/jpsych.2021.031
25. Lykomitrou A, Geitona M, Stylianidis St, Pantelidou St, Souliotis K. Economic Evaluation of Mobile Mental Health Units in Greece: The Case of Cyclades Islands. *Health* 2020, 12:12:891–903, doi: 10.4236/health.2020.127066
26. Peritogiannis V, Lekka M, Grammeniati A, Gogou A, Fotopoulou V, Tatsioni A, Mavreas V. 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
27. Peritogiannis V, Tatsioni A, Manthopoulou T, Mavreas V. Mental healthcare for older adults in rural Greece. *Int Psychogeriatr* 2016, 28:698–700, doi: 10.1017/S1041610215001829
28. Stylianidis S., Skapinakis P, Pantelidou S, Chondros P, Avgoustaki A, Ziakoulis M, Prevalence of mental disorders in a Greek island. Needs evaluation and mental health actions design. *Arch Hell Med* 2010, 27:675–683 [In Greek]

29. Peritogiannis V, Grammeniati A, Gogou A, Gioti P, Mavreas V. Very long-term outcome of community-dwelling patients with schizophrenia spectrum disorders in rural Greece. *J Nerv Ment Dis* 2019, 207:1012–1018, doi: 10.1097/NMD.0000000000001068
30. Peritogiannis V, Nikolaou P. Functioning in community-dwelling patients with schizophrenia spectrum disorders in rural Greece. *Int J Soc Psychiatry* 2020, 66: 111-117, doi: 10.1177/0020764019882709
31. 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
32. Peritogiannis V, Manthopoulou T, Mavreas V. Long-term benzodiazepine treatment in patients with psychotic disorders attending a mental health service in rural Greece. *J Neurosci Rural Pract* 2016, 7: S26-30, doi: 10.4103/0976-3147.196447
33. Peritogiannis V, Gioti P, Gogou A. Gambling Problems in Patients with Psychotic Disorders in Rural Greece. *J Neurosci Rural Pract* 2020, 11:333-336, doi: 10.1055/s-0040-1709262
34. Bakola M, Manthopoulou T, Bonotis K, Peritogiannis V. Dietary Habits and Obesity in Patients with Psychotic Disorders in Rural Areas in Northwestern Greece. *Psych* 2022, 4:1-9, doi: 10.3390/psych4010001
35. Pantelidou S, Stylianidis S, Manolesou S. Family functioning and depression among Albanian migrants and Greeks in a rural area in Greece. *Dialogues in Clinical Neuroscience & Mental Health* 2019, 2: 206-219, doi: 10.26386/obrela.v2i4.134
36. Pantelidou S, Manolesou S, Apostolopoulou A, Giannakopoulou K, Stylianidis S. Albanian Migrants in Cyclades: Contact with Mental Health Services and Implications for Practice. *Psych* 2021, 3: 916-930, doi: 10.3390/psych3040057
37. Peritogiannis V, Drakatos I, Gioti P, Garbi A. Vaccination rates against COVID-19 in patients with severe mental illness attending community mental health services in rural Greece. *Int J Soc Psychiatry* 2022, doi: 10.1177/00207640221081801, online ahead of print
38. Peritogiannis V. Mental healthcare in rural Greece: An overview. *Dialogues in Clinical Neuroscience & Mental Health* 2019, 2: 155–162, doi: 10.26386/obrela.v2i3.126
39. Peritogiannis V, Rousoudi S, Vorvolakos T, Gioti P, Gogou A, Arre A, Samakouri M. A comparative study of two Mobile Mental Health Units in different catchment rural areas in Greece. *Int J Soc Psychiatry* 2022, 68: 324–333, doi: 10.1177/0020764020985896
40. 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
41. Peritogiannis V, Tsoli F. The Greek Hybrid Version of the Assertive Community Treatment Model: A Perspective View between Challenges and Limitations. *Psych* 2021, 3:792-799, doi: 10.3390/psych3040050
42. Christodoulou G, Abou-Saleh M. Greece and the refugee crisis: mental health context. *BJPsych Int* 2016, 13: 89-91, doi: 10.1192/s2056474000001410

43. Fylla I, Fousfouka E, Kostoula M, Spentzouri P. The Interventions of a Mobile Mental Health Unit on the Refugee Crisis on a Greek Island. *Psych* 2022, 4: 49–59, doi: 10.3390/psych4010004
44. Peritogiannis V, Lixouriotis C. Mental health care delivery for older adults in rural Greece: Unmet needs. *J Neurosci Rural Pract* 2019, 10:721–724, doi: 10.1055/s-0039-3399603
45. Moore T, Sutton K, Maybery D. Rural mental health workforce difficulties: A management perspective. *Rural Remote Health* 2010, 10:1519, PMID: 20932079
46. Loukidou E, Mastroyiannakis A, Power T, Craig T, Thornicroft G, Bouras N. Greek mental health reform: Views and perceptions of professionals and service users. *Psychiatriki* 2013, 24:37-44, PMID: 23603267
47. Margariti M, Chatzoulis M, Lazaridou M, Aggelidis G, Fotopoulos V, Markaki L, Koulouri F. Clinical guidelines for the management of schizophrenia (II): Community service-level interventions and the role of Primary Care. *Psychiatriki* 2018, 29: 118-129, doi: 10.22365/jpsych.2018.292.118 [In Greek]
48. Greek Government Gazette, Vol. B, Issue Number 2809, Number.C3α,b/GP oik.49291, 2019, page. 34479 [In Greek]
49. Docherty M, Thornicroft G. Specialist mental health services in England in 2014: Overview of funding, access and levels of care. *Int J Ment Health Syst* 2015, 9:34, doi: 10.1186/s13033-015-0023-9
50. Sakellaropoulos P. Psychoanalytic Psychotherapy and Public Care. *Psychological Issues* 1989, 1: 1-12 [In Greek]
51. 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/jnnp.jnnp_142_17
52. Morales DA, Barksdale CL, Beckel-Mitchener AC. A call to action to address rural mental health disparities. *J Clin Transl Sci* 2020, 4:463-467, doi: 10.1017/cts.2020.42

PSYC

Table 1. Studies that are suggestive of the effectiveness of the MMHUs

Study	MMHU	N	Research questions	Method	Results
Peritogiannis et al, 2013	Ioannina & Thesprotia	74 patients with psychotic disorders	Treatment engagement rates	Retrospective study, 5-year follow-up	The treatment engagement rate was 67.2%. treatment engagement was not correlated to clinical or demographic variables
Lykomitrou et al, 2020	Northeastern & Western Cyclades	724 (604 clinical cases and 120 certificates etc)	Evaluation of the operation of the MMHU	Economic analysis of cost/effectiveness	The operation of the MMHU reduced the treatment costs by almost 50%
Peritogiannis et al, 2020	Ioannina & Thesprotia	76 patients with psychotic disorders	The impact of the interventions of the MMHU on hospital admissions and on length of hospital stay in patients with psychoses	Retrospective study, pre/post intervention mirror design (mean follow-up duration 5.3 years)	Reduction of hospitalizations by 80%, 2.6-fold reduction of length of hospital stay. 6-fold reduction in involuntary admissions

Lykomitrou et al, 2021	Northeastern & Western Cyclades	724 (604 clinical cases and 120 certificates etc)	Assessment of the effectiveness of the MMHU	Measurement of the outcome of the interventions with the use of the DALYs Index	6.4-fold reduction in DALYs, through the interventions of the MMHU. Over a year, 98 DALYs were averted, due to the prevention of premature mortality and the reduction of the mental health burden
Garbi et al, 2021	Kefalonia, Zakynthos & Ithaca	108 patients with psychotic or bipolar disorders	The impact of the interventions of the MMHU on hospitalizations and on length of hospital stay	Retrospective study, pre/post intervention mirror design (mean follow-up duration 6.7 years)	Reduction of hospitalizations by 45.9% and reduction of involuntary admissions by 51%. Reduction of hospital stay by 54.4%

MMHU: Mobile Mental Health Unit
DALYs: Disability-Adjusted Life Years

ΕΙΔΙΚΟ ΑΡΘΡΟ

Ο ρόλος των Κινητών Μονάδων Ψυχικής Υγείας στην παροχή φροντίδας ψυχικής υγείας σε περιοχές της επαρχίας: τρέχουσες προκλήσεις και προοπτικές

Διακήρυξη της Συντονιστικής Επιτροπής των Κινητών Μονάδων Ψυχικής Υγείας

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ΠΕΡΙΛΗΨΗ

Το παρόν κείμενο έχει σκοπό να αναδείξει τη σημασία των Κινητών Μονάδων Ψυχικής Υγείας (ΚΜΨΥ) στην παροχή υπηρεσιών ψυχικής υγείας σε απομακρυσμένες περιοχές της ελληνικής επαρχίας. Από την ίδρυση των πρώτων ΚΜΨΥ στη δεκαετία του '80 ως τις μέρες μας, οι υπηρεσίες αυτές εξαπλώθηκαν σε πολλές περιοχές και υπάρχουν ισχυρές ενδείξεις πως είναι αποτελεσματικές στη φροντίδα ασθενών με σοβαρές ψυχικές διαταραχές. Η φροντίδα ασθενών με τέτοιες διαταραχές φαίνεται να επιφέρει σημαντική μείωση των νοσηλείων, ακούσιων και εκούσιων και των ημερών νοσηλείας. Η σχέση κόστους/αποτελεσματικότητας επίσης δείχνει να είναι ευνοϊκή. Παράλληλα με το κλινικό έργο, κάποιες ΚΜΨΥ έχουν αναπτύξει ερευνητική δραστηριότητα, όπως διεξαγωγή επιδημιολογικών μελετών. Αντικείμενο μελέτης αποτελούν ακόμη η φροντίδα των ηλικιωμένων ασθενών και των μεταναστών που κατοικούν μόνιμα στη χώρα. Το ερευνητικό έργο των ΚΜΨΥ περιλαμβάνει και τη μελέτη των ψυχωτικών διαταραχών στο πλαίσιο της επαρχίας, όπως τη μακροχρόνια έκβαση, τη λειτουργικότητα των ασθενών και τη χρόνια θεραπεία με βενζοδιαζεπίνες. Οι τρέχουσες προκλήσεις για τις ΚΜΨΥ αφορούν στη στελέχωση τους, ειδικά εκείνων που υπάγονται σε δημόσια νοσοκομεία και στη διατήρηση επιστημονικού προσωπικού υψηλής κατάρτισης. Άλλες σημαντικές προκλήσεις τίθενται λόγω της γήρανσης του πληθυσμού της επαρχίας και του προσφυγικού/μεταναστευτικού προβλήματος. Οι ΚΜΨΥ των νησιών

υποδοχής προσφύγων δέχονται ήδη αυξημένο αριθμό αιτημάτων για περίθαλψη αυτού του πληθυσμού. Δεδομένων των ανισοτήτων στην φροντίδα ψυχικής υγείας μεταξύ της επαρχίας και των αστικών κέντρων, επιβάλλεται η περαιτέρω ενίσχυση της λειτουργίας των ΚΜΨΥ και η συνεχής εκπαίδευση του προσωπικού. Η έρευνα των αναγκών του πληθυσμού σε όλη τη χώρα θα μπορούσε να αποτελέσει τη βάση για έναν περισσότερο ορθολογικό σχεδιασμό και στελέχωση νέων υπηρεσιών. Η με συστηματικό τρόπο χρησιμοποίηση κλινικών δεικτών θεραπευτικού αποτελέσματος κοινής αποδοχής θα διευκόλυνε την έρευνα και θα επέτρεπε την καταγραφή και αξιολόγηση του έργου των ΚΜΨΥ και της αποτελεσματικότητας τους, ώστε να αναδειχθεί η χρησιμότητα τους στο σύγχρονο σύστημα υγείας.

ΛΕΞΕΙΣ ΕΥΡΕΤΗΡΙΟΥ: Απομακρυσμένες περιοχές, επαρχία, κινητές μονάδες ψυχικής υγείας, κοινοτικές υπηρεσίες ψυχικής υγείας, σχιζοφρένεια, ψυχωτικές διαταραχές.

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