

The challenges of Teaching Psychiatric Emergencies in situations of natural disasters and armed conflicts

Os desafios para o ensino de emergências de psiquiatria em desastres e conflitos armados

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ABSTRACT

Introduction: The Mozambican population has been recurrently affected by traumatic situations due to natural (cyclones, droughts, floods) or man-made (armed conflicts) catastrophes, which can lead to the development of mental disorders that, if not identified and treated, result in severe sequelae and cause chronicity.

Objectives: To promote a reflection on the inclusion of emergency psychiatric topics in natural disasters and armed conflicts in the disciplines or modules of psychiatry in undergraduate medical school courses in Mozambique.

Methods: Narrative literature review carried out between April and June 2021, focusing on the research of articles and documents published on the virtual platforms Research4life, PubMed, Hifa-PT, Google Scholar and that address the topics of natural disasters and armed conflicts and the teaching of these topics to medical students in the discipline of psychiatry.

Results: The inclusion of psychiatric emergencies in situations of natural disasters and armed conflicts in the medical course can provide general practitioners who work in primary health care with knowledge and skills to recognize and act in psychiatric emergencies caused by natural disasters and armed conflicts, taking into account the fact that the country currently has few doctors specialized in psychiatry.

Final considerations: The adequacy of the organization and assistance in psychiatric emergencies to the population exposed to natural disasters and armed conflicts contributes to the resilience and protection of the mental health of the communities. In this article, we reflect on the challenge of incorporating the topics of psychiatric emergencies caused by exposure to natural disasters and armed conflicts as a contribution to improving the skills of general practitioners in responding to the pressing mental health demands of this vulnerable population.

Keywords: medical education, psychiatry teaching, psychiatric emergencies, natural disasters, armed conflicts

RESUMO

Introdução: A população moçambicana tem sido recorrentemente afectada por situações traumáticas devido a catástrofes naturais (ciclones, secas, inundações) ou provocadas pelo homem (conflitos armados), que podem levar ao desenvolvimento de perturbações mentais que, se não identificadas e tratadas, deixam sequelas graves e causar cronicidade.

Objetivos: Promover uma reflexão sobre a inclusão de temas psiquiátricos de emergência em desastres naturais e conflitos armados nas disciplinas ou módulos de psiquiatria nos cursos de formação de graduação nas escolas médicas de Moçambique.

Métodos: Revisão narrativa da bibliografia, realizada entre abril e junho de 2021, com foco na pesquisa de artigos e documentos publicados nas plataformas virtuais Reserach4life, PubMed, Hifa-PT, Google Scholar e que abordam o tema desastres naturais e conflitos armados e seu ensino para estudantes de medicina na disciplina de psiquiatria.

Resultados: A inclusão das emergências psiquiátricas em desastres e conflitos armados no curso de medicina pode proporcionar aos clínicos gerais que atuam na atenção primária à saúde conhecimentos e habilidades para reconhecer e atuar em emergências psiquiátricas causadas por desastres naturais e conflitos armados levando em consideração que o país atualmente tem poucos médicos especializados em psiquiatria.

Considerações finais: A adequada organização e assistência em emergências psiquiátricas à população exposta a desastres naturais e conflitos armados contribui para a resiliência e salvaguarda da saúde mental das comunidades. Neste ensaio, refletimos sobre o desafio de incorporar os temas das emergências psiquiátricas causadas pela exposição a desastres naturais e conflitos bélicos como contribuição para melhorar as habilidades dos médicos generalistas na resposta às demandas prementes de saúde mental dessa população vulnerável.

Palavras-chave: educação médica, ensino de psiquiatria, emergências psiquiátricas, desastres naturais, conflitos armados

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INTRODUCTION

Mozambique is one of the African countries that is most vulnerable to natural disasters as a result of its geographical location, climatic characteristics and level of poverty¹. Due to the high levels of poverty, the population uses the few natural barriers of the savannah and increases their vulnerability to these phenomena².

In a study carried out in a province of the Inhambane district, southern Mozambique, it was observed that the communities' vulnerability to climatic events was linked to the degree of exposure to the risks and the level of fragility of these communities, namely, the overlapping of physical, socioeconomic and environmental factors³.

According to the world report on natural disasters, more than eight million Mozambicans were affected by natural disasters in the 80's and 90's⁴. The victims of these climatic phenomena have only increased and, in the present period, it is worth mentioning, among others, the floods of 2000, the cyclones Idai and Kenneth in 2019, which left a trail of devastation, with more than one and a half million affected individuals and over a thousand deaths^{5,6}.

In addition to the natural phenomena, in the last five years, Mozambique has been the target of military attacks in the North and Central areas, Cabo Delgado and Manica provinces, with reports of the loss of more than 3,000 lives and displacement of hundreds of thousands of people⁷.

Data from the United Nations International Organization for Migration (IOM) show that, in the first quarter of 2021 alone, with the increase in armed conflicts in Mocímboa da Praia, Palma, Macomia, Ibo Island, Metuge, approximately 17,000 people were displaced from their areas of origin, with women and children representing almost 74% of the displaced population. These situations have made around 800,000 Mozambican citizens to internally migrate in the provinces of Cabo Delgado, Niassa and Nampula since 2017⁸.

To ensure assistance to this population, it is necessary, on the one hand, to assess the psychological impact of trauma and, on the other hand, to communicate how the mental health system will respond in these post-disaster situations⁹. The organization of these services depends on the physicians' knowledge, through the teaching of psychiatry in disaster situations, so that the methods of approach, the evaluation content and implementation mechanisms are in accordance with the target population^{10,11}.

Several studies have reported the occurrence of a wide variety of psychological symptoms and psychiatric syndromes in populations in disaster and conflict situations⁹ but the way these phenomena are said to cause psychiatric disorders, it is

not known whether the psychological effects and their clinical manifestations are universal, what kind of mental alterations they cause, how they should be addressed in terms of medical interventions and, last but not least, why the majority of the exposed population does not develop mental illness¹².

In the analysis of the study carried out with Syrian children displaced by war and assisted by the Mental health psychosocial support (MHPSS) Project, the support tools in Mental Health and Psychosocial Support, used to support this population, were evaluated, and it was verified that the prevalent pathologies among the children were the depressive disorders, post-traumatic stress disorders, anxiety disorders, conduct disorders and phobias. It was observed a significant improvement in most of the children in the sample after the implementation of support activities in Mental Health and Psychosocial Support, although the development of models according to the context of each conflict zone was recommended¹³.

OBJECTIVES

This article aims at promoting an academic reflection in medicine, regarding the inclusion of seminars and topics related to psychiatry in natural disaster and war conflict situations, related to the disciplines or undergraduate modules of psychiatry and mental health of the Schools of Medicine in Mozambique.

METHOD

A literature and documentary narrative review of articles, documents and reports that address the subject of natural disasters and armed conflicts and the teaching of these topics in the discipline of psychiatry in undergraduate medical courses was carried out between April and June 2021, through online consultation on the virtual platforms Research4life, PubMed, Hifa-PT, Google Scholar, and websites. The search was carried out with the following words: natural disasters, tropical cyclones, armed conflicts, mental health, teaching of psychiatry and psychiatric emergencies, which were used for the selection of scientific studies and other relevant information from a literature review that addressed the main pathologies arising in situations of natural disasters and war conflicts and the teaching methodology.

RESULTS

Studies of experiences of traumatic events showed that most people who experience a traumatic event do not always develop psychological pathologies. Goldmann and Galea suggest shifting the focus from post-disaster observations of looking for post-traumatic stress disorders, which have been

extensively addressed and studied, to longitudinal assessments of disaster victims to further elucidate post-exposure trajectories, aiming to better understand the protective mechanisms and disease triggers, and the different types of pathologies that may arise¹⁴.

The risks for the onset of mental illness include pre-traumatic, peri-traumatic and post-traumatic factors, which can be related to temperament, environmental or genetic factors. Contrary to risk factors, the resilience-promoting factors such as coping strategies, cognitive flexibility, coping mechanisms, spirituality, maintenance of the family unity and social and community support, can help reduce the risk of becoming ill^{15,16}.

In a meta-analysis of several studies on environmental disasters and cases of mental illness in situations of vulnerability, it seems that repeated experience, several overlapping risks, lack of economic resources, especially in populations with less financial resources, can affect adaptation mechanisms and not allow positive reinforcement strategies to emerge¹⁷.

The late detection of mental illnesses delay care, due to:

- The nature of the mental illness that leads to a lack of self-objectivity, causing many patients to not know they need treatment or to deny it outright;
- Lack of access to health care due to the patient's condition;
- Geographical area where the catastrophic event or conflict occurred/occurs;
- Lack of attention, concern, knowledge (and recognition) on the part of the physician of mental illnesses;
- Lack of physicians' training related to the approach and intervention of mental illness.
- The stigma of mental illness^{18,19}.

In a literature review, Benthem et al. analyzed 27 psychiatry teaching programs for general practitioners and verified the non-inclusion or non-addressing of emergency psychiatry topics on natural disasters or armed conflicts. Another important aspect mentioned in the research was the worldwide perceived acknowledgement as a persistent problem of underdiagnosis of psychiatric disorders, so it was considered that it was necessary to include critical topics of psychiatry and mental health and the choice of effective methods of training in knowledge and skills²⁰.

An identical result is found in an study presented at the 21st Brazilian Congress of Psychiatry, which mentioned that general practitioners understood that the responsibility for the diagnosis and treatment of mental illnesses lies with psychiatry

specialists, so the challenge of continuing education in mental health would be maintained and required interactive and critical teaching methods²¹.

In an attempt to improve the knowledge of general practitioners regarding the teaching of psychiatry and mental health, several authors recommend that when designing a program for the training of general practitioners, it should take into account: 1. the needs of the physician as a student and of the user of the health units; 2. the program content; 3. The description of the teaching methods of the program; 4. the use of combined teaching methods to attain better practical results; 5. the program approval and implementation; 6. the program accreditation and certification^{10,20,22}.

Current psychiatry and mental health program

In the current context of teaching general medicine in Mozambique, the psychiatry and mental health teaching programs generally have an average workload of 40 theoretical hours and 80 practical hours. The subject is biannual, taught in the 5th year of the medical course, in a model of weekly theoretical-practical classes, followed by 3-to-4-week internships in central or general hospitals and in psychiatric hospitals¹, where contact with the patients is encouraged through case discussion, problem solving, explanation of clinical histories and discussion of the adopted family cases¹.

Below is an example/adaptation of a psychiatry and mental health program in Mozambique²³:

The reason for including disaster and armed conflict psychiatry in medical education programs of the discipline of psychiatry in Mozambique

Benefits of the adequate organization of mental health services

The psychological impact of traumatic situations caused by natural disasters and armed conflicts are usually profound in the short term, but they can also deteriorate the mental health and well-being of the affected population in the long term and create situations of chronicity, so an immediate intervention is necessary, focused on community-based networks²⁴.

To design, organize and implement services aimed at the management of post-disaster crises, it is necessary to establish an integrated, interactive and flexible linkage system between mental health and emergency management agencies²⁵, and in Mozambique this activity is performed by the National

¹There are three specialized psychiatric centers in Mozambique, – in Maputo, Manica and Nampula.

¹⁴At Universidade do Lúrio, in Nampula, each student has a family that must be accompanied by them throughout their academic career and whose care needs are guided and accompanied by the student and the team of professors.

Table 1. Proposal for adaptation of the psychiatry and mental health thematic plan.

Proposal for inclusion of topics	Workload	Observations
Introduction to the history of psychiatry.		
Mental health as an integral part of health		
National mental health program.	1 hora	Reduction in workload hours by 3 hours
Mental Health in Mozambique.		
Clinical history and psychiatric interview.		
Semiology in Psychiatry		
Symptoms and signs, Symptomatology. Generalization in the different spheres of the psychological processes.	2 hours	
Acute and chronic brain syndromes,		
Schizophrenia Syndrome, Delusional Syndromes, Affective Syndromes, Dyskinetic Syndromes. Hypochondriac Syndromes.	2 hours	
Levels of psychological function		
Schizophrenia and other psychoses.		
Mood, neurotic, stress-related and somatoform disorders.		
Adult personality and behavior disorders. Mental developmental delay.	4 hours	
Most common juvenile disorders. Alcoholism and other drugs. Suicide. Psychogeriatrics		
Psychiatric Disorders Associated with HIV and Sexually Transmitted Infections	2 hours	
Psychiatric Emergencies	5 hours	Introduced topic
Therapies in psychiatry	4 hours	
Forensic psychiatry	2 hours	Reduction of the workload by 2 hours
Preparation for tests and exams, Tests, Exams	16 hours	

Source: Adapted from the School of Medicine of UEM, 2021.

Institute for Disaster Risk Management and Reduction, which coordinates all assistance actions in emergency and disaster situations²⁶. It is important to realize that while mental health professionals organize themselves to define care strategies, there are pressing needs for humanitarian assistance and post-disaster rehabilitation (an activity that might persist for months or even years)²⁷.

The services should be organized to identify differences in post-disaster needs among groups of survivors, whose impact can be direct (those exposed to the disaster or armed conflict situation) or indirect (survivors' relatives, first-line support and rescue personnel, health personnel, firefighters, police, armed forces), understanding that the type of plan to be developed and the working mechanisms used differ according to the target group^{9,28}, requiring fast, organized assistance provided by an efficient team, aiming to mitigate emotional instability, stress reactions, anxiety, trauma, and other psychological symptoms that are commonly observed after a disaster, which can be of two types: natural or man-made disasters, such as armed conflicts, and other traumatic experiences²⁹.

Benefits in resilience and intervention in psychiatry

Several articles refer to the need for mental health interventions in disaster situations, caused by natural disasters and armed conflicts, through intervention programs, taking into account the existing financial and human resources in the country, aiming to minimize the impact on the mental health of the affected communities, providing support for them to adapt and cope with adversities, improving their resilience, which plays a vital role and acts as an effective measure in preventing the onset or recurrence of mental illness³⁰. Most of the affected individuals recover over time, with social determinants and mental health response as predictors of good recovery, with the help of effective post-intervention techniques, and individual personality factors, where individual coping strengths, and community integration prevail. In some cases, the recovery is incomplete, leading to a series of persistent symptoms that are often severe^{31,32}.

Recognizing that most individuals with early symptoms of mental illness will not have access to specialist physicians²⁷, all general practitioners should also be trained in the principles of war psychiatry to improve their skills in preventive intervention

measures and the treatment of populations exposed to mental illness to prevent the development of severe mental disorders in an integrated community-based model²⁸. In this context, the adaptation of contents during the training and teaching of psychiatry and mental health will have a significant impact on the population of the affected communities in terms of preparation, response and recovery from mental disorders^{33,34}, which can be carried out in seminars, discussions, practical training, with a greater focus on evaluation to identify active cases, choice of conduct and treatments^{11,35,36}.

Advantages of teaching emergency psychiatry in catastrophe and war situations

The abovementioned facts showed that the current program has a gap in relation to the teaching and management of psychiatric emergencies so, regarding the design of the specific plan for teaching psychiatry and mental health, we propose the reform of the plan, with the reduction of the workload of the subjects related to Introduction to the history of psychiatry, Mental Health as an integral part of health, National Mental Health Program in Mozambique and Forensic Psychiatry, and the introduction of the psychiatric emergencies module/topic that will have as premises:

Provide students with knowledge about:

- Addressing common psychiatric emergencies in clinical practice;
- Diagnostic assessment and management of acute cases;
- Identification and management of cases after exposure to traumatic events;
- Implementation of psychotherapeutic and intervention measures;
- Organization of multidisciplinary teams for assistance in extreme situations^{III};
- Provision of out-of-hospital medical care (in the community)³².

According to the proposal, this module/topic should allow critical thinking and also the improvement of skills and competences in the area of psychiatric emergencies, especially interventions, through the use of active teaching methods, such as problem-solving, problematization of situations, practical seminars and clinical cases, among others, to achieve the objectives defined in the program and the analytical plan of psychiatry and mental health^{37,38}.

The proposed changes in the psychiatry program in the medical course are based on the current reality and on the need to provide general practitioners with knowledge for

the consolidation of community-based mental health care, allowing the strengthening of teams with a timely and assertive performance³⁹ since, after completing the medical course, general practitioners are sent to work in peripheral health units in all provinces, and provide care to around 80% of the country's population⁴⁰.

On the other hand, it should be considered that Mozambique has only approximately 25 physicians specializing in psychiatry for a population of 29 million inhabitants⁴⁰, with access to these specialists being reserved for referrals to provincial and central hospitals.

FINAL CONSIDERATIONS

In Mozambique, the humanitarian management of catastrophes, natural disasters, consequences of armed conflicts and other emergency situations is carried out by the National Institute for Risk Management and Reduction, coordinating with all cross-sectional government areas in the implementation of preventive or treatment activities to meet the needs of the vulnerable and at-risk population in Mozambique²⁶.

The Ministry of Health is responsible for acting through the intervention plan to provide psychosocial and mental health support⁴¹, which, when implemented in a timely manner, allows the development of integrated strategies to promote common processes of cure and social support among peers, through the health units of the community, to which general practitioners are attached.

All undergraduate medical courses in Mozambique⁴² have psychiatry and mental health disciplines or modules. It is essential that, given the current situation, not only the general topics of psychopathology be addressed, but also the area of general psychiatric emergencies and natural disasters and war conflicts, which are critical for the country.

The teaching of psychiatric emergencies will allow the safeguarding of the population's well-being through a better understanding of the processes, acknowledgment and early treatment of mental illnesses that arise, aiming to ensure the population's return to normality^{43,44} having as its core the fact that the general practitioner must know how to coordinate and lead teams at the provincial health care level, organize and provide medical and psychological assistance, ensure quantification for the provision of psychotropic drugs, interact with community leaders and traditional authorities, and, last but not least, ensure psychological support to the team that provides assistance to the population^{45,46}.

^{III} An extreme situation is considered to be one in which assistance is provided to a population displaced due to climatic phenomena or refugees due to war.

The mental health implications of disasters for individuals and communities are varied and continue to be studied. Despite the increasing recognition and appreciation of these risks, it is necessary to carry out more studies in Mozambique, which over the years has been affected by natural and man-made traumatic phenomena, aiming to better identify the impact on of these situations on the mental health of communities, as well as to provide evidence-based interventions. Early and prompt mental health interventions help to promote individual and community recovery, so the time has come to reflect on and implement activities for this change to occur in the context of psychiatry teaching.

AUTHORS' CONTRIBUTION

Maria Rosel Pedro: Main author. António José Pacheco Palh and Maria Amélia Ferreira: Co-authors and study reviewers.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest related to this study.

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ABBREVIATIONS

MHPSS – Mental health psychosocial support

UEM – Eduardo Mondlane University

INGD - National Institute for Disaster Risk Management and Reduction

MISAU – Ministry of Health

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