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How COVID-19 pandemic affected physical activity and mental health interventions – A descriptive example of the Mental Health on the MOVE research project

Como a pandemia de COVID-19 afetou as intervenções de atividade física e saúde mental – Um exemplo descritivo do projeto de investigação Saúde Mental em Movimento

R. Costa, T. Bastos, P. Lourenço, R. Corredeira

BRIEF REPORT

ABSTRACT

Coronavirus disease 2019 (COVID-19) is a public health emergency of international concern. Strategies to manage this pandemic have changed the daily routines of people worldwide, including people with a diagnosis of severe mental disorders. In Portugal, mental health services had to adjust several ambulatory facilities for psychiatry patients, as well as closing the acute day hospitals. Additionally, community-based programs for the Portuguese population were also affected. Mental Health on the MOVE research project is a specific look into how COVID-19 affected physical activity and mental health interventions. This document aims to report how COVID-19 changed the project dynamic, mainly during the exercise sessions and research activities, describing the strategies adopted during this difficult time. This information could be helpful for other research teams that also had to adapt and challenge themselves with clinical and scientific methodologies to follow the project purpose, taking into consideration government rules and health standards.
Keywords: COVID-19, mental disorders, exercise

RESUMO

A doença por coronavírus (COVID-19) é uma emergência de saúde pública de caráter internacional. As estratégias para controlar a propagação do vírus alteraram o comportamento diário das pessoas em todo o mundo, incluindo pessoas com diagnóstico de doença mental grave. Em Portugal, os serviços de saúde mental sofreram adaptações, vários serviços ambulatórios e hospitais de dia para pacientes psiquiátricos foram encerrados. Adicionalmente, programas de intervenção na comunidade para esta população foram, também, afetados. O projeto de investigação-intervenção Saúde Mental em Movimento é um exemplo específico de como a COVID-19 afetou as intervenções de atividade física e de saúde mental. Este documento pretende descrever como a COVID-19 alterou a dinâmica do projeto, principalmente durante as sessões de exercício físico e atividades de investigação, descrevendo as estratégias adotadas neste momento difícil. Estas informações constituem uma mais-valia para outras equipas de investigação que também tiveram que se adaptar e incluir novas metodologias clínicas e científicas para manter o propósito do projeto, tendo em consideração as normas e recomendações de saúde.
Palavras-chave: COVID-19, doença mental, exercício

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The coronavirus disease 2019 (COVID-19) outbreak drastically altered the daily behavior of people worldwide, including those with severe mental disorders. The COVID-19 enforced restrictions (i.e., distancing measures and lockdown policies) and led to a profound reformulation of social structures and health systems (Holmes et al., 2020). In Portugal, in Psychiatry and Mental Health units, non-urgent outpatient appointments were performed by telephone, and home visits were made to the most urgent cases (Goncalves-Pinho et al., 2020). Several ambulatory facilities for psychiatry patients and the acute day hospitals were forced to close (Goncalves-Pinho et al., 2020). Community-based programs were also affected. Mental Health on the MOVE research project looks specifically at how COVID-19 affected physical activity and mental health interventions. Following the concerns raised by Costa and co-authors (2021), providing a perspective overview of the Portuguese reality concerning the physical activity during the COVID-19 pandemic in people with severe mental disorders, the purpose of the present document is to describe how exercise sessions and research activities were adapted due to COVID-19 and explain the strategies implemented during this difficult time. This information could be useful and valuable for other clinical and research teams that also had to adapt and challenge themselves with practical and scientific approaches to fulfill the participants' needs and keep the project running whilst considering government rules and health standards.

Mental Health on the MOVE research project (see Bastos et al., 2018 for a full description) is a community-based physical activity intervention aiming to encourage the adoption of healthy lifestyles for people with severe mental disorders, promoting structured exercise sessions. In this demographic, the lack of intrinsic motivation and enjoyment seems to be related to the high dropout rates in physical activity programs (Choi & Medalia, 2010; Vancampfort et al., 2016). Therefore, this project considers the preferences and characteristics (e.g., comorbidities) of the participants with severe mental disorders. This project is delivered by technicians with specialization in Adapted Physical Activity and takes place in a non-clinical environment, namely in the facilities of a Faculty of Sport. Mental Health on the MOVE has a partnership with four mental health institutions, and approximately 50 persons with a diagnosis of severe mental disorder are regularly engaged in the sessions (with an average attendance of 70%). Additionally, several research activities are developed mainly to explore the relationship between physical activity and different variables in this population. It is based at the Department of Adapted Physical Activity, Faculty of Sport, Porto University in Portugal.

Concerning COVID-19, in Portugal, the challenge started in March 2020. Following government guidelines, the first lockdown measures were applied in the Mental Health on the MOVE project, and consequently, the exercise sessions were brought to an abrupt, indefinite pause, and participants remained at home. Research activities (e.g., data collection) were also suspended. During this time, sports technicians maintained frequent contact with participants. This contact was made by phone twice a week and aimed to check participants' physical and mental well-being. Using informal conversation, sports technicians and participants discussed home environments, relatives' conditions, stress management, activities performed during the day and time spent in sedentary activities. Participants reported loneliness, sadness, and anxiety towards the presence of the virus.

Additionally, sports technicians tried to encourage the participants to be physically active at home, for example, encouraging

them to perform activities of daily living (e.g., cooking, gardening) and, specifically, short exercise workouts. For this, participants were encouraged to perform physical exercises generally performed during the sessions and/ or exercises displayed in the Manual de Boas Práticas em Atividade Física na Doença Mental [Manual of Good Practices in Physical Activity in Severe Mental Illness] (Bastos et al., 2019). This book was created to help people with severe mental disorders (as well as family, caregivers, and professionals) understand the importance of physical activity and support them to reduce sedentary behavior and adopt a healthy and active lifestyle. In 2019, a copy of this book was offered to mental health institutions with the partnership. The several lifestyle recommendations, physical activities, and workout illustrations described in the book helped the participants at home and the mental health professionals (i.e., psychologists, therapists) who used this information to support and guide participants during other activities provided by the institution. It is important to note that most participants reported significant difficulties in accessing technologies or resources (i.e., some did not have access to devices or the internet, and others reported a lack of knowledge about information technology). Therefore, online approaches were not possible to considerer at this stage.

In July 2020, following new government guidelines, it was possible to restart the project, and consequently, exercise sessions took place. Several adaptations were implemented, namely: body temperature was checked upon the arrival, face coverings were mandatory, hands frequently sanitized, social distance maintained at all times, and changing rooms could not be used. Also, the number of participants able to attend each session was limited, and all sessions were held outdoors, comprising walking and running activities, to avoid any physical contact and equipment sharing. At this stage, the attendance was low (approximately 40%) – only around 10 participants, divided into two sessions, attended. Many participants reported being afraid and anxious to leave the house due to the virus. For several of them, public transport was their only means of travel, and they were unwilling to use this service due to the risks.

Additionally, some participants had a higher risk of acute symptoms. Due to underlying conditions such as hypertension and advanced age, some were at risk of death by COVID-19. The government advised such individuals to shield. In this instance, those specific patients were monitored the same way all patients were during the national lockdown, using regular phone calls to keep in contact. Sport technicians kept regular contact with the participants, checking on them and encouraging them to be physically active. Exercise sessions and phone calls stopped during August for the summer holidays.

In September 2020, research activities were performed – anthropometric measures, psychological assessments, and physical tests were applied to set the baseline profile and analyze the impact of the time spent without participating in the project. Data collection took place in the facilities of the Faculty of Sport; a schedule and specific procedures (e.g., which door to use for entry and exit, hygiene practices during the evaluations, sports technician responsible for the data collection) were created and sent in advance to the mental health institutions and participants. Social distance and hygiene rules continued to be applied as described above, and time was provided for disinfection between each evaluation.

In October 2020, the project restarted with the same social rules and hygiene procedures. At this stage, 15 participants, divided into two sessions, were attending the sessions (approximately 40% of attendance).

From early October 2020 until July 2021, the exercise sessions ran twice a week; one session focused on walking/running activities or circuit training (performed outdoor or in the sports hall); another session used the gym. More specifically, when the weather was good, sessions occurred outdoors, and the exercises included walking and running-based activities. When sessions occurred indoors (i.e., in the sports hall), exercises were i) sports-based activities – where participants develop motor control and coordination; ii) and circuit training – for muscular strength and endurance. Rules for social distance and hygiene including disinfection of sports facilities and equipment in the beginning and at the end of the sessions) were followed in all sessions. It is essential to highlight that sports technicians' support shared personal equipment disinfection tasks among the participants.

Regarding the present year, in September, Mental Health on the MOVE research team is preparing to restart the project, considering government guidelines and health standards. Participants are being contacted again to restart engaging in sessions, three sessions per week are being developed, and social distance and hygiene measures have still been applied.

Sports technicians continue providing counseling about social behavior, psychological well-being, and active lifestyles to the sessions' participants. Sharing experiences and emotions are allowed and even encouraged during the sessions. Sports technicians also provide time and opportunity for an individual talk at the end of each session if participants wish to. For participants who are not comfortable taking part in the sessions and prefer to stay at home, regular phone contact is made with the same goals described above. Additionally, staff members from mental health institutions are gradually increasing the online and physical contact with participants. For example, participants are gradually returning to the mental health institution activities; therefore, sports technicians deliver an online session to these participants twice a week, and mental health professionals support the participants during the physical exercises.

In summary, the COVID-19 pandemic seriously impacted the "Mental Health on the MOVE Research Project" – research activities had to stop, and exercise sessions were affected. Participants reported a reduction in their psychological well-being. It was possible for those attending the sessions to note a reduction in their functional capacity and physical fitness after the lockdown period and the summer holidays. Unfortunately, this situation can be even worse for those with a long absence from the program. As described above, lack of motivation and high dropout rates in programs are commonly reported in people with severe mental disorders (Choi & Medalia, 2010; Vancampfort et al., 2016). These behaviors could become more aggravated during the pandemic due to the absence of daily routines. To recover from this inactivity and adopt an active and healthy lifestyle will be a demanding task for all participants, and mental health professionals shall provide support and guidance to ensure success.

Regarding the physical activity counseling made by phone, suggesting physical exercises that participants already know from the sessions, and the visual training plans described on the Manual de Boas Práticas em Atividade Física na Doença Mental [Manual of Good Practices in Physical Activity in Severe Mental Illness] seemed a helpful and vital resource. Also, Costa and co-authors (2021) described some strategies that can be applied in patients with severe mental illness to increase physical activity levels and decrease sedentary behavior. According to Afonso (2020), the impact of COVID-19 on mental health in Portugal still gives rise

to several questions and could take some years to understand wholly. Fortunately, the Mental Health on the MOVE research project will be prepared and willing to support this vulnerable population, promoting the adoption of an active and healthy lifestyle.

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