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Pharmaceutical interventions in mental health: A review of the literature to support evidence-informed policymaking

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ABSTRACT

Background: Pharmaceutical interventions may have an impact on different treatment aspects, such as therapy adherence, reducing the number of different medications in use and lowering treatment costs.
Objective: Identify pharmaceutical interventions in the mental health field and their possible application in Brazilian public mental health services, considering the evidence-based model to establish implementation options.
Methods: A structured search of the literature was performed in the Pubmed (Medline), Cochrane, PsycINFO and Lilacs databases to identify the main pharmaceutical intervention studies conducted in the mental health area. The articles selected were evaluated according to the quality of the evidence. The current laws and public database were researched to collect information on services and procedures provided by the Brazilian units, known as CAPS, and the number the pharmacists allocated to them. The proposal to synthesize the results of pharmaceutical interventions in Brazil was based on SUPPORT methodology items to prepare evidence-based policies.
Results: A total of 1442 studies were identified, 18 of which were included. Several interventions are reported in the literature, educational interventions being frequently cited. However, there is a need for further studies with more methodological rigor. The number of pharmacists working in the CAPS is insufficient to cover all the services, since only 26.5% of CAPS employ pharmacists, who work an average of 29 (±11.1) hours a week. Three options were formulated to implement interventions in the Brazilian context that consider including pharmacists on the basic team of CAPS professionals and educational interventions through pharmacist training.
Conclusions: The present study could support the establishment of health policies, based on a synthesis of the evidence, contextualization of the current situation, given the absence of local evidence, and a discussion of the options available to implement pharmaceutical interventions in the Brazilian health system. Organizational changes in CAPS are needed to broaden pharmacist participation on the multidisciplinary team.

1. Introduction

Pharmacists exhibit a range of skills that play an important role in the care of patients with mental disorders.[1,2] They are considered one of the most accessible professionals to the population and a good source of information.[3,4] Pharmaceutical interventions in mental health include monitoring the use of medication, treatment recommendations, patient education, drug management and orientation for prescribers.[5] These interventions may have an impact on different treatment aspects, such as therapy adherence, reducing and reassessing medicines in use, and lowering treatment costs.[5–7] Although pharmaceutical interventions are important tools, many pharmacists still fail to use a number of practices in their daily routine due to work environment limitations, lack of infrastructure and processes, or even professional stigma.[1,8]

In the Brazilian public health system, mental health is organized into a Psychosocial Care Network (RAPS) with a number of health units that are linked to primary care. Psychosocial Care Centers (CAPS – from Portuguese Centro de Atenção Psicossocial) are strategic facilities that treat patients with severe mental disorders at the local level.[9,10] At CAPS, pharmaceutical interventions are scarce and often unknown to the team and patients, which is worrisome for thelatter in terms of the number of psychotropic drugs in use, prolonged therapies and the need to attribute safe and rational drug prescription policies at these facilities.[11,12] Studies and policy formulation are alternatives that may identify ways to improve the integration of pharmacists as members of the community mental health care team.[8]

Formulating evidence-based policies is a recent practice aimed at ensuring that decision-making is grounded and contextualized in a

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Abbreviation

SUPPORT SUPporting POlicy relevant Reviews and Trials
CAPS Psychosocial Care Centers (CAPS – from Portuguese Centro de Atenção Psicossocial)

systematic and transparent process.[13] The methodology developed by the SUPPORT (SUPporting POlicy relevant Reviews and Trials) project through international collaboration provides support for formulating evidence-based policies in their main stages: problem clarification, establishing options and planning according to evidence identified primarily in systematic reviews and articles. The next stage consists of the transition from research evidence to the decision phase, which involves policy makers and analyzing policy implementation by constructing deliberative dialogues.[14]

Identifying the best evidence available from previously implemented pharmaceutical interventions in mental health services is important in decision-making. This evidence can guide policy options considering the benefits, harm, costs, barriers, facilitators and other important aspects in the work environment.[14] The aim of this review was to identify pharmaceutical interventions in the mental health field and their possible application in Brazilian mental health services, considering the evidence-based model to establish implementation options.

2. Methods

This is a literature review, whose results will be used to help establish policy options. A structured search of the literature was carried out to identify the main pharmaceutical intervention studies conducted in the mental health area. The search was performed in the Pubmed (Medline), Cochrane, PsycINFO and Lilacs databases in July 2017, with no language restriction, using the following descriptors: intervention, services, Mental Health Services, Mental Health Assistance, Community Mental Health Services, Community Pharmacy Services, Mental Health, Mental Health, Community Pharmacy Services, pharmacy practice, pharmaceutical care, Pharmaceutical Services, Clinical Pharmacist. Selection by title and abstract considered original articles indexed in the databases that discussed pharmaceutical interventions applied to mental health patients. The articles selected that investigated these interventions, but were not restricted to mental health, were separated to as complementary material for the study. The articles were read in their entirety to select and identify the main interventions described in the literature. A manual search was conducted for articles that were not identified in the search strategy, using Google scholar and a database for rapid consultation by health professionals (clinicalkey).

The articles were read and analyzed to identify the main interventions, results, study limitations and conclusions. Assessing different types of studies precluded standardizing a single instrument to evaluate the quality of evidence in the studies found in the literature. As such, critical assessment of systematic reviews and clinical studies considered different instruments already standardized in the literature (AMSTAR, Jadad, and Cochrane). Given the absence of instruments that evaluate the methodological quality of narrative reviews and qualitative observational studies, the authors used the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) and STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) checklists to guide the process. The limitations of these studies, however, extrapolate the property of these instruments, since they add information on the methodological quality of the study proposed.

A search was conducted for the current law that regulates mental health professionals and activities provided by the Psychosocial Care Network (RAPS). Considering that CAPS are the main outpatient care units for users of mental health services, the study was limited to analysis of this service. The current laws were researched on the Portal Legis website in September 2017. The site contains all the country's health legislation, making it possible to collect information on teams of professionals, services and procedures provided by the CAPS that involve pharmacists.

Pharmacists working in mental health were identified on the National Registry of Health Establishments (CNES) database. The survey analyzed all the CAPS and Mental Health Reference Centers enrolled in the database (updated on 22/09/2017). Data on the number of pharmacists enrolled, their employment relationship with CAPS and work load were manually extracted.

One proposal to synthesize the results of pharmaceutical interventions in Brazil was based on SUPPORT methodology items to prepare evidence-based policies. Initial analysis of this methodology consisted of collecting the evidence available on a problem, as well as proposing options for its resolution, identifying barriers and process facilitators. Identifying this perspective is important in informing groups of interest and initiating deliberative dialogues that can establish consensus and recommendations for public policy creation and decision making.

3. Results

A total of 1442 studies were identified, 25 for complete reading and 18 for this study. The main interventions were found in three systematic literature reviews, two narrative reviews and three clinical trials (Table 1). The studies selected are described below and illustrate different aspects, such as the role of pharmacists in mental health, their inclusion on the team and patient perception of their performance.

3.1. Studies of pharmaceutical interventions

Five reviews were identified that were entirely related to pharmaceutical interventions in mental health (Table 1). The narrative review by Hattingh et al. describes studies that used pharmaceutical interventions, interpreting these results in the context of Australian community pharmacists and considering the country's legislation, programs and policies. It details the main interventions found in the literature on mental health care provision in primary care and randomized clinical trials in developed countries on services rendered by pharmacists in mental health.[15]

The narrative review by Rúbio-Valera et al. presents a series of pharmaceutical skills in different mental health interventions. It is divided into three sessions, the first two involving pharmaceutical interventions in mental health care using multidisciplinary teams. The last session presents the barriers and facilitators for implementing pharmaceutical interventions, underscoring barriers related to the organizational culture in community pharmacy practices, pharmacists' beliefs, values and stigmas regarding mental health patients and the need to improve collaboration between pharmacists and doctors.[1]

The review by Richardson, O'Reilly, and Chen selected studies carried out in a hospital setting, identifying pharmaceutical interventions in patients being treated for mental disorders.[7] Rubio-Valera's systematic review with meta-analysis focused on pharmaceutical care of patients using antidepressants.[6] Patient education and follow-up, along with monitoring the adverse effects and promoting adherence, were the most frequent interventions in the services evaluated. Since the number of studies on interventions is limited, heterogeneity data and publication bias may not have been detected.

Finley et al. conducted a systematic review on the impact of pharmaceutical interventions on mental health and found positive results in all 16 studies selected.[5] The 5 economic studies included in the review indicated a decline in medication acquisition costs and length of hospitalization when pharmaceutical interventions were implemented in clinical practice. The studies showed low methodological quality, and design limitations precluded comparisons.