

## COMMON MENTAL DISORDERS AMONG HEALTH WORKERS: INTEGRATIVE REVIEW

Transtornos mentais comuns entre trabalhadores da saúde: revisão integrativa

Trastornos mentales comunes entre los trabajadores de la salud: revisión integrativa

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### ABSTRACT

**Objectives:** to identify and discuss the variables associated with the presence of Common Mental Disorders among health workers and to classify the level of evidence for the health of the worker. **Method:** integrative review of studies published in the LILACS, PubMed and CINAHL databases between 2011 and 2015. The search and selection were performed by two independent reviewers. **Results:** the variables associated with Common Mental Disorders among health workers were related to personal, work and life characteristics and health conditions. The analysis allowed to identify that, of the 10 selected, six associate the variable sociodemographic characteristics with Common Mental Disorders. Nine studies associate this disorder with labor variables, while three with lifestyle and health conditions. **Conclusion:** knowledge of these results is useful as a subsidy for the management of the health work process, minimizing the impact of work on worker health.

**Descriptors:** Occupational health; Health personnel; Work conditions; Mental disorders; Mental health.

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## RESUMO

**Objetivos:** identificar e discutir as variáveis associadas à presença de Transtornos Mentais Comuns entre trabalhadores da saúde e classificar o nível de evidência com vistas à saúde do trabalhador. **Método:** revisão integrativa de estudos publicados nas bases de dados LILACS, PubMed e CINAHL, entre os anos 2011 e 2015. A busca e seleção foram realizadas por dois revisores independentes. **Resultados:** as variáveis associadas aos Transtornos Mentais Comuns entre trabalhadores da saúde diziam respeito às características pessoais, laborais e aos hábitos de vida e condições de saúde. A análise permitiu identificar que, dos 10 selecionados, seis associam características sociodemográficas ao Transtornos Mentais Comuns. Nove estudos associam este transtorno às variáveis laborais, enquanto três, aos hábitos de vida e condições de saúde.

**Conclusão:** o conhecimento destes resultados é útil como subsídio para o gerenciamento do processo de trabalho em saúde minimizando o impacto do trabalho sobre a saúde do trabalhador.

**Descritores:** Saúde do trabalhador; Pessoal da saúde; Condições de trabalho; Transtornos mentais; Saúde mental.

## RESUMEN

**Objetivos:** identificar y analizar las variables asociadas a la presencia de Trastornos Mentales Comunes entre los trabajadores de la salud y clasificar el nivel de pruebas con vistas a la salud del trabajador. **Método:** revisión integrativa de estudios publicados en las bases de datos LILACS, PubMed y CINAHL, entre los años 2011 y 2015. La búsqueda y selección fueron realizadas por dos revisores independientes. **Resultados:** las variables asociadas a los Trastornos Mentales Comunes entre los trabajadores de la salud se refieren a las características personales, laborales y en los hábitos de vida y condiciones de salud. El análisis permitió identificar que, de los 10 seleccionados, seis asocian la variable características sociodemográficas a los Trastornos Mentales Comunes. Nueve estudios asocian a este trastorno a las variables laborales, mientras que tres, los hábitos de vida y condiciones de salud. **Conclusión:** el conocimiento de estos resultados es útil como subsidio para la administración del proceso de trabajo en salud para minimizar el impacto del trabajo sobre la salud del trabajador.

**Descriptorios:** Salud del trabajador; Personal de salud; Condiciones de trabajo; Trastornos mentales; Salud mental.

## INTRODUCTION

Work, over time, has undergone changes that interfere with workers' quality of life, health and safety. Changes in working modes generate fear of unemployment, competitiveness, intensification of pace, flexibility of labor rights, informal employment, reduction of the workforce, expropriation of knowledge, harassment and insecurity.<sup>1</sup>

These changes resulting from the process of globalization and the capitalist production system were not accompanied by conditions that enhance health and quality of life, leading to exhaustion, fatigue and affecting belief system and values of the individual.<sup>2</sup> Work that sometimes contributes to its strengthening at the moment is deteriorating intensifying health problems.<sup>3</sup>

Health workers are exposed to precarious work processes and health services, leading to physical and/or mental illness. Moreover, they suffer psychically because they are involved in

situations that present high psychological demands, such as living with the suffering of patients and families, the urgency of care, deaths and biological risks.<sup>4</sup>

Reports of Common Mental Disorders (CMD) represent a large proportion of scientific literature as one of the main causes of mental illness among workers in the most diverse groups, such as cleaning workers,<sup>5</sup> community health workers,<sup>6</sup> maritime workers,<sup>7</sup> agents and prisoners,<sup>8</sup> students<sup>9</sup> and health professionals.<sup>10</sup>

CMDs are frequent and difficult to characterize because they involve clinical symptoms of non-psychotic symptoms characterized by sadness, decreased concentration, anxiety, irritability, fatigue, insomnia, depression, gastric discomfort, feelings of uselessness, headaches and somatic symptoms, which do not meet the criteria established by the International Classification of Diseases (ICD) for mental illness.<sup>10</sup> CMDs may take many different names because they are not included in ICD.

A study pointed out that CMD symptoms can lead to resignation.<sup>11</sup> However, it was demonstrated that being at work, for most people, is beneficial for mental health, making the dichotomy of pleasure and suffering at work evident.<sup>12</sup>

The repercussions of CMDs cause significant damage to workers, institutions, society and state.<sup>13</sup> They negatively affect the quality of life and ability to work,<sup>14</sup> and because they are disabling, represent high social and economic costs by leading to absenteeism.<sup>15</sup>

Given the relevance of the theme and its professional, social and economic impact, the following guiding question was outlined: which variables are associated with the presence of Common Mental Disorders among health workers? The objective was to identify and discuss the variables associated with the presence of Common Mental Disorders among health workers described in the integrative review publications; and to classify the level of evidence of the integrative review sample focusing on healthcare workers.

## METHOD

Integrative literature review that allows simultaneous incorporation of studies with different methodological approaches to understand the same phenomenon more broadly. The methodological sequence was as follows: identification of the theme and selection of the hypothesis or research question; establishment of criteria for inclusion and exclusion of studies/ sampling or literature search; definition of information to be extracted from selected studies/ categorization of studies; evaluation of included studies; interpretation of results; and presentation of the review/ synthesis of knowledge.<sup>16</sup>

Inclusion criteria were full articles addressing the theme and variables associated with the presence of CMD among health workers, with field research methodology, published between 2011 to 2015. Exclusion criteria were: articles without relevance to the proposed theme, classified as literature

reviews, event summaries, abstracts and full dissertations and theses. There was no language restriction.

The Latin American and Caribbean Health Sciences Literature (LILACS), National Library of Medicine NLM (PubMed), and Cumulative Index of Nursing and Allied Health Literature (CINAHL) databases were searched using their specific search strategies.

Initially, a search was performed in the electronic vocabulary Health Sciences Descriptors (DeCS) and the Medical Subject Heading (MeSH) to identify possible search terms. Selected terms were: worker health (DeCS) and occupational health (MeSH). The terms for characterization of the disorders in the study were not considered descriptors in Portuguese language. The following keywords were used: minor psychiatric disorders, common psychiatric disorders, minor mental disorders and common mental disorders. The terms minor psychiatric disorders and common mental disorders were used as keywords in the PubMed and CINAHL databases.

Search was carried out in October 2015 by two independent reviewers. The following boolean phrases “minor psychiatric disorders” AND “occupational health” were used; “Common mental disorders” AND “occupational health”; “Minor mental disorders” AND “occupational health” and “common mental disorders” AND “occupational health” in the LILACS database, while PubMed and CINAHL used “common mental disorders” OR “minor psychiatric disorders” AND “occupational health”.

A specific instrument was developed to categorize the studies and extract the data for further analysis and synthesis, based on: title, journal, database, year of publication, language, objective, methodological detail, results and conclusions, level of evidence, limitations and recommendations.

Items of interest that could be quantified were coded and treated using descriptive statistics. For synthesis and final presentation, the data were grouped by thematic similarity, in order to elucidate the purpose of the research, later discussed and presented descriptively.

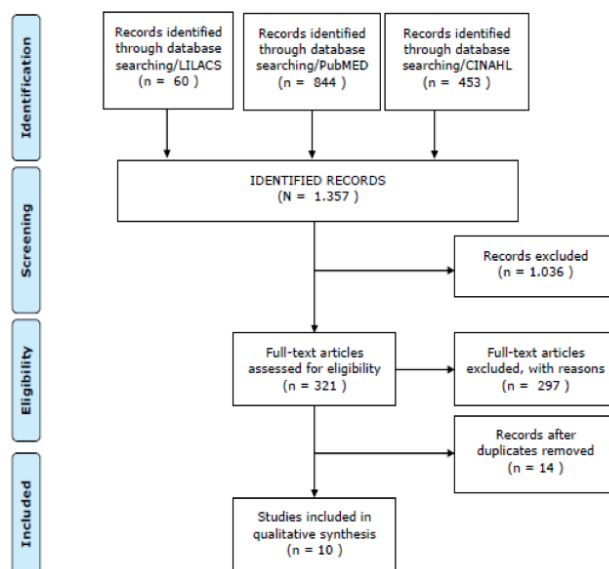
It is noteworthy that this review used international evidence classification proposed by the Oxford Center for Evidence-Based Medicine, adopted by the Brazilian Ministry of Health: level I. systematic review of randomized controlled trial (RCT);

level II. well-designed randomized controlled trial; level III. nonrandomized trial; level IV. correlation / observation studies; and Level V. Opinion of Authorities and Expert Committees and Descriptive Studies.<sup>17</sup>

## RESULTS

At the intersection of the descriptors 1,357 publications were found, of which 60 in LILACS, 844 in PubMed and 453 in CINAHL. After initial evaluation, through the inclusion criteria 1,036 were identified and excluded. Based on the 321 titles read, 89 were selected to read the abstracts. Of these, 65 were excluded for not meeting the scope of this review and 14 for being duplicated. As a result, 10 articles were selected for full reading and analysis (Figure 1).

**Figure 1** - Flowchart of selection of articles included in the review. Rio de Janeiro, RJ, Brazil, 2019



**Table 1** presents selected studies according to the alphanumeric coding formed by the letter “E” and sequential Roman numerals in increasing order according to the years of publication.

**Table 1** - Included studies on CMD among health professionals. Rio de Janeiro, RJ, Brazil, 2019

Article	Year	Title
E01	2011	Condições de trabalho e de saúde de trabalhadores em saúde mental em Feira de Santana, Bahia.
E02	2012	Prevalência de transtornos psiquiátricos menores em trabalhadores da atenção primária à saúde das regiões Sul e Nordeste do Brasil.
E03	2012	The prevalence of common mental disorders among hospital physicians and their association with self-reported work ability: a cross-sectional study.
E04	2012	Distúrbios psíquicos menores em enfermeiros docentes de universidades.
E05	2013	Estresse no trabalho segundo o Modelo Demanda-Control e distúrbios psíquicos menores em trabalhadores de enfermagem.
E06	2013	Work conditions and common mental disorders in physicians in Brazil.
E07	2014	Prevalência de distúrbios psíquicos menores em enfermeiros docentes.
E08	2014	Prevalência de transtornos mentais comuns em trabalhadores de enfermagem em um hospital da Bahia.
E09	2015	Relação entre capacidade para o trabalho na enfermagem e distúrbios psíquicos menores.
E10	2015	Violência, <i>burnout</i> e transtornos psíquicos menores no trabalho hospitalar.

Among the retrieved studies, seven (70%) were in LILACS and three (30%) in PubMed. Regarding the year of publication, one (10%) was published in 2011, three (30%) in 2012, two (20%) in 2013, 2014 and 2015. In terms of origin, nine (90%) are Brazilian and one (10%) Dutch. Two (20%) published in English and eight (80%) in Portuguese. Most of the publications were published in Brazilian journals, six of them in the nursing area.

Regarding the characteristics of the study participants, there was a large variation in the sample, ranging from 77 to 4,749 participants, of both sexes. Five (50%) were found among the nursing professional population, two (20%) were doctors and medical residents and three (30%) from the healthcare team.

All studies included cross-sectional designs of non-experimental quantitative approach using descriptive statistics. All studies were at level V of evidence, corresponding to descriptive studies. To evaluate CMD, the Self Reporting Questionnaire (SRQ-20) was applied in nine studies.

Considering the peculiarities and diversity of the variables associated with CMD identified in the scope of this review, they were organized and grouped according to similarity and proximity in three categories: (1) sociodemographic variables, (2) work variables and (3) lifestyle and living conditions. We observed that a study could be allocated to more than one group of variables.

Of the studies analyzed (Table 2), seven associated CMD with sociodemographic characteristics, nine with work aspects and three with lifestyle and health conditions.

**Chart 2** - Description of variables associated with CMD among health workers. Rio de Janeiro, RJ, Brazil, 2019

Category	Associated variables	Study
	Gender	E01, E07, E09.
	Age	E02, E07, E09.
	Marital status.	E07.
Sociodemographic Variables	Children and dependents.	E07, E10.
	Income.	E07.
	Professional category.	E02, E10.
	Multiple jobs.	E06, E09.
	High demands at work.	E01, E04, E05.
Labor Variables	Precarious work regime.	E02.
	Time of acting and in function.	E02, E05, E10.
	Satisfaction with structure and work process.	E02, E10.
	Ability to work.	E03, E09.
	Active work	E04, E05.
	Insecurity and excessive commitment to work.	E06.
	High psychological demand.	E08.
	Accidents at work.	E10.
	Days away.	E10.
	Sector.	E05.
Living Habits and Health Status	Labor violence.	E10.
	Sedentary lifestyle.	E02.
	Sleep.	E09.
	Health condition.	E02, E09.

## DISCUSSION

Based on the results, we inferred that the factors associated with CMD are a growing concern in terms of occupational health. The contribution of the Brazilian scientific community to the debate of the theme was observed, with a particular interest in understanding the conditions in which work is carried out and its consequences to the mental health of the worker.

It is noteworthy that the incentives to research in Brazil in recent years had a significant influence on the publication of study results, especially by federal public universities, institutions that originated the largest number of studies of this review. It was also observed that there is no consensus on the terminology used for denomination of CMD.

Due to all the descriptive and cross-sectional studies included in this review, a weak level of evidence was found. It is not common for health professionals, especially nurses, to develop clinical research on the subject, yet the majority of studies analyzed here were both authored by and focused on this professional category. However, this fact does not prevent the use of this evidence in practice.

The results are also consistent with the conclusion that there is an urgent need for the researchers to increase the use of innovative and differentiated research methods and techniques.

The occurrence of CMD among health professionals is one of the biggest challenges today. The results showed prevalence rates ranging from 16.0% to 41.9%, among primary health care<sup>18</sup> and public hospital nursing workers<sup>19</sup> respectively.

Multiple variables were identified as associated with CMD. The study showed that health professionals experience stressful situations due to long working hours, effort-reward imbalance, task overload and lack of recognition.<sup>20</sup>

Through the results, we observed that sociodemographic variables act as mediating conditions between the work context and CMD. Gender and age of participants appeared to be significant for the development of CMD.<sup>18,21-22</sup>

However, with regard to the gender factor they are not consistent. Studies with mental health workers<sup>21</sup> and nursing professionals from a university hospital<sup>18</sup> identified higher prevalence of CMD among women, while a study conducted with nurse teachers from federal universities identified higher frequencies of CMD among men.<sup>22</sup>

In the present review, a comparison between the studies<sup>18,21-22</sup> that linked gender variable was possible because both studies used a single cutoff point, did not differentiate between genders, considered seven or more affirmative answers to SRQ-20. However, it is noteworthy that the adjustment of different cut-off points for this factor is paramount, since gender differences are an expression of

women's social role, where, besides performing activities in the labor market, they often also perform domestic activities thus adding to the psychosocial factors.

We noted that domestic work may increase harmful consequences of labor activity in relation to CMD.<sup>23</sup> Investigations concerning workers' health from a gender perspective, in predominantly female occupations, explain this phenomenon by double working hours combining professional functions and house work.<sup>24</sup>

In terms of age, the conclusions are similar - with increasing age, the occurrence of CMD significantly decreases.<sup>18,22,25</sup> In this regard, it appears that time allows for adjustments to professional activity, mediating the negative impact of work on mental health. Moreover, these professionals have greater security in their performance and skills for the development and control of daily work and coping with difficulties.<sup>22</sup>

Other variables such as having children, other dependents, marital status and family income were associated with CMD. A study showed that single and childless workers with lower family per capita income and up to three dependents had higher frequencies of CMD.<sup>22</sup> Contrary to the above, some research has demonstrated that having children is associated with CMD among health workers.<sup>26</sup> However caution is necessary when considering having children as an agent associated with any psychiatric pathology, as it can also be a balancing factor in the context of work-family conflict.<sup>27</sup>

Another study<sup>20</sup> found that salary is one of the factors linked to job dissatisfaction that can lead to emotional distress. As a form of income complementation, many assume more than one job, a condition that is associated with CMD.<sup>18,28</sup> However, one caveat is that, while holding multiple jobs can cause increased workloads, work itself can cause pleasure as a result of the added financial contribution.

A study conducted in a public hospital indicated that multiple jobs are a necessary condition, most of the time, for nursing workers due to professional devaluation and low wages, with this factor more visible among mid-level professionals.<sup>20</sup>

This condition corroborates the findings that identify professional category as a variable associated with CMD. In two studies<sup>25-26</sup> the prevalence of CMD was higher among mid-level professionals, but this condition deserves further investigation.

Regarding labor variables associated with CMD, studies<sup>25-26,29</sup> have shown that dissatisfaction at work, whether with regard to physical structure, relational processes and the work process itself, was significantly linked with higher frequencies of CMD among health workers. This effect can be attributed to feelings of helplessness, insecurity and effort-reward imbalance.

A study with Brazilian doctors<sup>28</sup> found that the highest prevalence of CMD was among those who felt insecure and overly committed to work. Another study concluded that this insecurity may be linked with highly demanding work activities.<sup>30</sup>

These conditions generate in the professional a need to affectively and normatively commit to their work, increasing their workloads.<sup>19</sup> Furthermore, one of the studies analyzed linked work overload with dissatisfaction with work.<sup>31</sup>

In this sense, overload and precarious work regime, when not rewarded, either by recognition of peers and/ or patients or financial compensation, lead to physical and emotional distress among health professionals.<sup>25</sup>

Of 10 articles selected, four relate CMD with psychological demand and control over work, a demand-control model proposed by Karasek. Three articles<sup>13,21,32</sup> linked a higher chance of CMD to high work demands (low control and high demand) compared to low demands (high control and low demand). In two<sup>13,32</sup> high frequencies were identified among workers classified as performing active work (high control and high demand) and one of them describes that CMDs were associated with high psychological demand at work.<sup>33</sup>

In four studies<sup>13,25-26</sup> analyzed, variables related to time and space were linked to CMD. It was evidenced that the night shift workers had higher prevalence of CMD.<sup>29</sup> Furthermore, significant associations between sector of activity, time of work and time in function were observed.<sup>13,25-26</sup> The literature points out that night shift causes harm to workers' health by leading to emotional tension, physiological and psychiatric disorders, and reduced energy.<sup>34</sup>

Another variable associated with CMD referred to absences from work<sup>26</sup> since research with 402 public servants identified 103 who left work due to medical leave, most of them caused by CMD.<sup>35</sup> Thus, it was corroborated that workers absenteeism is related to work induced CMD.<sup>36</sup>

Variables such as work accidents<sup>26</sup> and work ability<sup>14,18</sup> were associated with CMD as well. A study in a teaching hospital showed that psychological damage is more prevalent as a result of occupational accidents, including concern about the possibility of contracting a disease.<sup>37</sup> Another study<sup>18</sup> pointed out that professionals with CMD are twice as likely to have reduced work ability when compared to workers without CMD. In the Netherlands, the odds were 3.5 to 13.6 times greater for reduced work ability among CMD workers compared to the group without CMD.<sup>14</sup>

Regarding the variables related to lifestyle and health conditions, we observe that the possibility of reverse causality bias of these associations cannot be excluded, as these are cross-sectional studies. However, it appears that that self-reported health problem incidents were significantly associated with higher frequencies of CMD among professionals.<sup>23,25</sup>

Another work related factor that contributed to mental illness concerns labor violence. A study<sup>26</sup> conducted with 269 health workers identified that 170 were exposed to violence

and showed a significant correlation with CMD. Furthermore violence is linked not only to CMD, but to other conditions associated with CMD: job satisfaction, recognition, health status, professional commitment and absenteeism.

There was an association between CMD and variables related to lifestyle habits such as physical inactivity<sup>25</sup> and sleep patterns.<sup>18</sup> A study on physical activity<sup>18</sup> points out its stress reducing effects, thus, preventing the occurrence of mental disorders. Notably, insomnia is associated with high emotional demands and low control over work. Sleep-related vulnerability to CMD could be explained by this association.<sup>38</sup>

## CONCLUSION

This integrative review noted that the body of knowledge on CMD among health professionals is growing, yet a gap remains in occupational health studies due to the lack of methodologically generalizable and replicable studies.

Variables associated with CMD identified among health workers included sociodemographic characteristics, work and life habits and health conditions. There were more associations with labor variables, but this is due to the fact that the reviewed articles point to the labor conditions and their consequences as factors leading to CMD.

This review provides inputs to health sector management by suggesting ways to minimize the impact of work conditions on worker health and quality of working life. However, we should consider that the results cannot be generalized, as they have limitations because studies analyzed were based on level V evidence and years of publication were restricted as well.

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