SYSTEMATIC OR INTEGRATIVE REVIEW

SELF MEDICATION AMONG HEALTH PROFESSIONALS

AUTOMEDICAÇÃO ENTRE PROFISSIONAIS DA SAÚDE AUTOMEDICACIÓN ENTRE PROFESIONALES DE LA SALUD

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ABSTRACT

This study aimed to get to know the available evidence in the national and international literature about self-medication among health professionals. An integrative revision was carried out based on research data from Nursing Data (BDEnf), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Embase, Latin-American Literature and from Caribbean in Health Science (LILACS), Pubmed, SCOPUS, Web of Science, Health Virtual Library Brazil (BVS) and the portal of journals Scientific Electronic Library Online (SciELO). Nineteen articles considered inclusive according to criteria of inclusiveness were selected, and the majority was classified with evidence levels 6 (n=17). The articles' analyses supported the assertion that self-medication is a frequent practice among health professionals, especially those in the medical area, presenting a greater number of publications (n=8) and the greatest susceptibility. The consumption of drugs not requiring medical prescription was high among pharmaceutical and nursing professionals. Greater susceptibility was shown among younger professionals and those with higher school education. The symptom identified as a great stimulator for the use of drugs was a headache and painkillers were the most frequently used drugs. Such analysis allowed us to spot gaps in the understanding of the labor aspects associated with self-medication and the effects of such practice upon the health of professionals. It is necessary to identify measures that control this practice so as to maintain the health of health professionals. Keywords: Self Medication; Health Personnel; Occupational Health; Health Education.

RESUMO

O presente estudo teve como objetivo identificar as evidências disponíveis na literatura sobre automedicação em profissionais da saúde. Realizou-se revisão integrativa da literatura com buscas na Base de Dados de Enfermagem (BDEnf), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Embase, Literatura Latino-Americana e do Caribe em Ciências da Saúde (LILACS), Pubmed, SCOPUS, Web of Science, Biblioteca Virtual em Saúde Brasil (BVS) e no portal de periódicos Scientific Eletronic Library Online (SciELO). Foram selecionados 19 artigos que atenderam aos critérios de inclusão, sendo a maioria classificada com nível de evidência 6 (n=17). A análise dos artigos permitiu identificar que a automedicação é prática frequente e aceita entre profissionais da saúde, com destaque para a categoria médica, mencionados na maioria das publicações (n=8) e com as maiores prevalências. O consumo de fármacos que não exigem prescrição foi acentuado em farmacêuticos e profissionais de enfermagem. A prevalência mostrou-se maior em profissionais mais jovens e com mais escolaridade. O sintoma que mais estimulou a automedicação foi a dor de cabeça e os medicamentos mais usados foram os analgésicos. A análise realizada permitiu identificar lacunas relacionadas à compreensão dos aspectos laborais associados à automedicação e os efeitos dessa prática sobre a saúde dos profissionais. É necessário identificar medidas que controlem essa prática a fim de preservar a saúde dos trabalhadores da área da saúde. Palavras-chave: Automedicação; Pessoal de Saúde; Saúde do Trabalhador; Educação em Saúde.

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RESUMEN

El presente estudio tuvo como objetivo conocer las evidencias disponibles en la literatura nacional e internacional sobre automedicación en profesionales de la salud. Se llevó a cabo una revisión integradora de la literatura con búsquedas en la Base de Datos de Enfermería (BDEnf), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Embase, Literatura Latinoamericana y del Caribe en Ciencias de la Salud (LILACS), Pubmed, SCOPUS, Web of Science, Biblioteca Virtual em Saúde Brasil (BVS) y en el portal de publicaciones Scientific Eletronic Library Online (SciELO). Fueron seleccionados 19 artículos que cumplían los criterios de inclusión, la mayoría de nivel de evidencia 6 (n = 17). El análisis de los artículos permitió identificar que la automedicación es una práctica común y aceptada entre los profesionales de la salud, principalmente entre los médicos, se en la mayoría de las publicaciones (n=8) con mayor prevalencia. El consumo de medicamentos que no requieren receta fue superior entre farmacéuticos y enfermeros. La prevalencia fue mayor en individuos más jóvenes y con estudios superiores. El síntoma que más estimuló la automedicación fue el dolor de cabeza, y los fármacos más utilizados fueron los analgésicos. El análisis permitió identificar carencia de información sobre la comprensión de los aspectos laborales asociados a la automedicación y los efectos de esa práctica sobre la salud de los profesionales. Es necesario identificar medidas que permitan controlar esta práctica con el fin de preservar la salud de los trabajadores del área de la salud. Palabras clave: Automedicación; Personal de Salud; Salud Laboral; Educación en Salud.

INTRODUCTION

The use of medication for the own benefit and without the proper prescription is called self-medication. In such circumstances, the individual does not seek medical help to solve what he thinks is a health problem, using advice from neighbors, friends or family; consuming leftovers of old drugs that were saved; using their or others prescriptions to buy the same drug that at some point in the past was effective.¹

Even this practice often provide relief of the symptoms; side effects can be experienced as iatrogenic diseases, masking developing diseases, poisonings, adverse reactions, drug interactions, development of resistance and allergic reactions.² Self-medication reduces the signs and symptoms but often not properly solve the problem, and it adds the risk of worsening.³

It is not difficult to observe in daily life the ease with how self-medication is embedded in people's lives, worshiping the idea of being a benefit under any circumstances. Moreover, the acceleration of contemporary life has stimulated people to want immediate solutions to the ills disturbing them. Thus, health begins to be a commodity that can be acquired through drugs.

The message presented after the advertisements of drugs in different media: "if the symptoms persist, the doctor should be consulted," recommended by the National Health Surveillance Agency (ANVISA)⁴, could be being interpreted wrongly by the population. In this way, it could be inducing people to look for a qualified professional to prescribe the correct medicine only after symptoms have not passed. However, they may be suggestive for self-medication. This issue is exacerbated by free access to some medications that can be easily found on shelves in pharmacies to purchase without restriction.

Given the above, it should be considered that advertising and free access to certain drugs would be stimulating and enabling self-medication habit, justifying the assumption that this practice is high among Brazilian population^{1-2,5-7}, such as health professionals, students, and the general population. Self-

medication has been a habit also reported among college students.⁵⁻⁷ A population-based study in Bambuí-MG with about 15,000 inhabitants, there was a prevalence of 46% of self-medication in the last 90 days.¹ Among the citizens seeking encouragement for the problems in self-medication, the health professionals are highlighted who besides having the same expectations of an immediate resolution of pain and suffering, they have easy access to medicines.

Health professionals are exposed to biological, ergonomic and psychosocial risks, so they are more susceptible to demonstration or installation of certain diseases due to their job³, also contributing to the need to alleviate symptoms through self-medication. Among healthcare workers, back pain in lower limbs, stress, mood swings, sleep disorders, varicose veins have been reported among others.8 Health workers have the knowledge and access to medicines available, and they are an important group regarding self-medication.3 This topic is the subject of interest to this research. Given the above, the objective of this review was to identify the available evidence in the literature on self-medication among health professionals.

METHOD

The study developed is an integrative literature review, following five stages: problem identification, literature search, data evaluation, data analysis and presentation of literature. The guiding question of the review was: what is the available evidence in the literature on self-medication among health professionals?

The online accessible information sources for this study were: Nursing Database (BDEnf), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Embase, Latin American and Caribbean Health Sciences (LILACS) Pubmed, Scopus, Web of Science, Virtual Health Library Brazil (BVS) and the portal Scientific Electronic Library Online Journals (SciELO).

The literature search was performed using controlled descriptors coming from the Health Sciences Descriptors (DeCS):

self-medication, health personnel, occupational health. Based on the Medical Subject Headings (MeSH), keywords were also used: self-medication, health personnel, occupational health. In the search process, the Boolean AND operator were used.

The inclusion criteria used in this integrative literature review were: research articles, reflection, reviews, editorials and experience reports to respond to the problem of research, published in the last 10 years from July 2004 to July 2014, in English, Spanish and Portuguese. Theses, dissertations, and articles that were not available online in its entirety, as well as duplication, were excluded.

Articles were classified according to the level of evidence, using Melnyk and Fineout-Overholt¹⁰ classification that, according to a methodological approach, states: Level 1 – evidence from systematic review or meta-analysis; Level 2 – evidence derived from at least one randomized controlled clinical trial clearly delineated; Level 3 – evidence from well-designed clinical trials without randomization; level 4 – evidence from court studies and well-designed case-control; Level 5 – evidence derived from systematic review of descriptive and qualitative studies; Level 6 – evidence derived from a single descriptive or qualitative study; Level 7 – evidence from opinion of authorities or experts report.

Searches of information sources allowed locating 779 articles, which were subjected to a pre-selection from reading the title and abstract, resulting in 36 articles for reading in full. After reading these articles, and considering the inclusion criteria, exclusion criteria, and repetitions, there were 17 studies excluded (Figure 1).

All articles selected had their evidence transferred to a specific form designed by the authors to identify the results that respond to the objective of the study. The findings were grouped according to the theme.

RESULTS

There were 19 articles analyzed in full, of which 13 were in English and six in Portuguese. Regarding the country of origin, six studies were from Brazil; three from the United States; two from India; and the rest from different countries. For the year of publication: the highest number of published articles in 2007 (n=5), and in 2010 and 2004 there were no publications on the subject. Also, observing the strength of the evidence obtained in the products met an article with evidence level 5 and 17 with evidence of level 6 (Table 1).

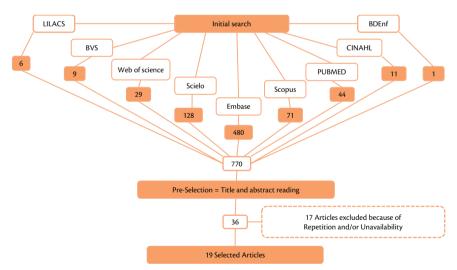


Figura 1 - Search and selection process of the studies.

Table 1 - Presentation of the articles included in the integrative review, as the title, year of publication, authors, study site, journal and level of evidence (LE)

Nº		Authors	Origin				
1	2014	Chen J, et al.	Pakistan	Acta Pol Pharm.	6		
2	2014	Shishani NF, Hamlan A, Yousef A	Jordan	Rawal Medical Journal	6		
3	2014	Tejashree T, Sarala N, Girish MB	India	Indian journal of medical research and pharmaceutical sciences	6		
4	2013	Vieira TG, Beck CLC, Dissen CM, Camponogara S, Gobatto M, Coelho APF	Brazil	Rev Enferm UFSM.	6		

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Table 1 - Presentation of the articles included in the integrative review, as the title, year of publication, authors, study site, journal and level of evidence (LE)

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Nº	Year	Authors	Origin	Journal	NI
5	2012	Woźniak-Holecka J, Grajek M, Siwozad K, Mazgai K, Elzbieta C	Poland	Przegl Epidemiol.	6
6	2012	Buhling KJ, Studnitz FSG, Jantke A, Eulenburg C, Mueck AO	Germany	Menopause	6
7	2011	Ritu P, Himmat S, Manisha R, Gaurav G, Priya B	India	International Journal of Drug Development & Research	6
8	2011	Montgomery AJ, Bradley C, Rochfort A , Panagopoulou E	Greece	Occup Med	5
9	2011	Oliveira ALM, Pelógia NCC	Brazil	Rev Dor	6
10	2009	Barros ARR, Griep RH, Rotenberg L	Brazil	Rev Latino-Am Enferm	6
11	2009	Baggio MA, Formaggio FM	Brazil	Rev Anferm UERJ	6
12	2008	Chen JY, Tse EYY, Lam TP, Li DKT, Chao DVK, Kwan CW	Hong Kong (China)	BMC Public Health	6
13	2007	Balon R	USA	Psychother Pychosom	6
14	2007	Baggio MA, Formaggio FM	Brazil	Rev Gaúch Enferm	6
15	2007	Tomasi E, Sant'Anna GC, Oppelt AM, Petrini RM, Pereira IV, Sassi BT	Brazil	Rev Bras Epidemiol	6
16	2007	Schneider M, Gallacchi MB, Goehring C, Künzi B, Bovier PA	Switzerland	Swiss med wkly	6
17	2007	Evans RW, Lipton RB, Ritz KA	USA	Headache	6
18	2005	Hem E, Stokke G, Tyssen R, Gronvold NT, Vaglum P, Ekeberg O	Norway	BMC Med	4
19	2005	Ebrahim A, Balbisi EA, Ambizas EM	USA	Am J Health System Pharm	6

Source: GALVAN, Micheli Rita. Self-medication among health professionals. Porto Alegre. 2014.

Regarding the studied population, medical professionals (n = 8) and nursing (n = 5) predominated (Table 2).

Next, the main results presented in the articles analyzed organized according to the approach themes are described.

Table 2 - Distribution of articles according to the professional category approached

0 / 11				
Professional category approached in the study	Articles			
Doctors	3*, 6, 8*,12, 13, 16, 17, 18			
Nursing Professionals	4, 5*,**, 10, 11, 14			
Health professionals	2*, 9, 15			
Pharmacists	1*, 7, 19			

Source: GALVAN, Micheli Rita. Self-medication among health professionals. Porto Alegre. 2014.

SELF-MEDICATION OCCURRENCE IN HEALTH CARE WORKERS

Self-medication showed to be a prevalent practice in this population. Among Brazilian health professionals in the Vale da

Paraíba-SP, 73.8% of respondents reported having used drugs in the last three months, and the self-medication was observed in 53.1% of the interviewed.¹¹ Also in Brazil, among the professionals of the basic health network in the city of Pelotas, 47% of professionals reported using drugs in the last 15 days, regardless of having health problems. Among them, 25% said that for most of the drugs used did not have a prescription.²

In Jordan, the study found that 62.5% of participants self-medicated. Of them, 48.2% were health professionals.¹²

In Poland, when assessing the knowledge about drugs that are available to consumers at pharmacies and do not require a prescription (over-the-counter), it was found that 96% of respondents were using these types of medications, most used (all days) among nursing professionals. According to the author, this fact could be explained by the accessibility to drugs in the workplace of these professionals.¹³

In the case of nursing professionals only, in two public hospitals in the city of Rio de Janeiro-RJ, the prevalence of non-prescription drugs was 24.2%. The average number of drugs used in self-medication was 1.41 (ranging from one to eight of such drugs), and 71.9% reported using only one and 28.2% reported having used two or more drugs in the last seven days.14 When

^{*} Articles that does not approach exclusively this profession.

^{**} The article classifies the study group as "Medical staff," however, it addresses only nurses.

addressing the disease and the use of psychoactive drugs in nursing workers of intensive care units in the teaching hospital in the state of Rio Grande do Sul, it was found that 63.2% of respondents answered affirmatively to the question of self-medication, regardless of the type of drug used.¹⁵

A literature review of self-medication for doctors and medical students showed that 76% of the studies had a higher prevalence of self-treatment to 50%. In the 23 studies reviewed that provided information on the self-prescription, the average number of doctors who declared the self-prescription was 61%. Finnish doctors performed the self-medication in most chronic diseases and 66% of British physicians reported prescribing for themselves when they were ill.¹6 Also, among Swiss doctors who used drugs in the last week, their self-medication was reported in 90% (n=1040) of cases, self-medication among younger and better physical health doctors was the most frequent.¹7

The same can be observed in the follow-up of Norwegian doctors for nine years, when the first time (T1) of evaluation took place at the end of the internship (one year after graduation), the second evaluation (T2) was at the end of the fourth year after graduation and the third assessment (T3) was in the 10th year after graduation. Most doctors reported they performed self-prescription medications. At the end of the internship (T1), 69% reported having self-prescription in the last 2.5 years. The percentages were slightly lower in T2 and T3 (54%) because the prevalence is only the year before the survey. From the doctors who used prescription medications, 90% (T1), 86% (T2) and 84% (T3) used self-prescription. At the end of nine years of study, it was found that being male, having self-prescription during internship (T1), presenting subjective health complaints, somatic complaints, mental distress and having not consulted a general practitioner in the previous year were predictors significant for self-prescription. It is emphasized that in this study most doctors (between 74 and 81%) who reported self-medication said that this behavior was linked to the fact of not needing to use prescription drugs.¹⁸

In a group of doctors in Hong Kong, it was found that 64% are not used to consult another doctor. Of them, 88% (n=2.357) take some medications, 62% (n=1.675) had a self-prescription for the medicines they took.¹⁹

In India, 56.73% of physicians practiced self-medication often two to three times a month.²⁰ Among American neurologists, there were 38% clinical conditions self-diagnosed or self-treated without consulting any other doctor during the last 12 months; and 56% of them said they had started their medical prescription in the last 12 months.²¹

By analyzing self-treatment from psychiatrists in Michigan, it was found that 42.5% of participants would use self-medication if they were depressed and 7% would accept this practice to severe depression with suicidal ideation. Also, 15.7% re-

ported that they self-treated depression in the past and 22.2% thought they should self-treat depression.²²

Among German gynecologists, the self-prescription habit of hormone replacement therapy was investigated. The gynecologists were asked about its use, and the male professionals were asked on prescription therapy for a partner; 97% (n=2,459) stated willingness to practice.²³

Among Brazilian health professionals, the fact that physicians reported four times the use of drugs for self-medication than workers in the average level of health was highlighted. Furthermore, even when assessed as self-medication function, medical category showed the most prevalent self-medication (43.1%), while the second highest prevalence (32.4%) was among nurses and dentists.²

In India, self-medication was prevalent among 67% of pharmaceuticals.²⁴ Among American pharmacists, the majority of respondents (77%) reported self-medication with non-prescription drugs.²⁵ Also, to know the preferences and knowledge of medicines that do not require a prescription, there were 250 faculty members of College in Pakistan addressed (53 members of the Faculty of Pharmacy and 197 members of other departments). When asked about what they do when they feel pain, 34% (32% of not pharmacists) said they had visited a doctor and bought the drug prescribed. Other 38% (pharmaceuticals) reported that bought the drug on its own at a pharmacy.²⁶

Among Brazilian health professionals, it was found that the higher the level of education and social class, the higher the occurrence of self-medication.² And among Brazilian nursing workers, it was observed that the prevalence of self-medication use was higher among younger and more educated. Thus, in the same study lower prevalence of self-medication among assistants and technicians was identified when compared to nurses.¹⁴

DRUGS USED IN SELF-MEDICATION AMONG HEALTH PROFESSIONALS

The use of drugs in the last 15 days was reported by 47% of Brazilian health professionals, especially analgesics (27%). A quarter of respondents (25%) said that most of the medicines they take, they do not have a prescription.²

When addressing the headache as the cause of self-medication among the Brazilian health professionals, it was found that the most commonly used drugs belonged to the following therapeutic classes: no steroidal anti-inflammatory (NSAIDs) (25.8%); antibiotic (9,1%); influenza (7.6%); anti-inflammatory corticosteroid, gastroprotective, muscle relaxant (6,1%); antispasmodic (4.6%).¹¹

Still, among nursing professionals in Brazil, they were identified as the drugs most consumed by self-medication action of the nervous system (46.7%), digestive system (15.4%) and natural products in general (10%). The most used subgroup was an-

algesics (43.4%), followed by anti-inflammatory and antirheumatic (7.3%) and vitamins (6.2%).¹⁴

In another group of Brazilian nursing workers, analgesics were cited 26 times; anti-inflammatory were cited six times, and antibiotics were cited in three times.¹⁵ IN a qualitative approach with nursing professionals, it was possible to infer the use of anti-inflammatory and analgesic main practice related medicines of self-medication, followed by psychotropic drugs group.³

Among Swiss physicians, analgesics were the most frequent self-medication (96%), and tranquilizers (96%) and less frequent for antidepressants (70%) and antihypertensives (65%). ¹⁷ Among Norwegian doctors, more drugs used for self-medication in the three days of research were antibiotics, contraceptives, analgesics and hypnotics.¹⁸

In a group of neurologists, when asked about the self-prescriptions initiated during the past 12 months, the drugs most frequently cited were: NSAIDs (n=24), allergy medications (n=13), proton pump inhibitors (n=13), statins (n=10) triptans (n=10), antihypertensives (n=8) and for the prevention of migraine (n=7).

In Jordan, for a total sample including health professionals, analgesics, antipyretics and antibiotics were the most common types of medications administered by self-medication (77.6, 75.3 and 71.8%, respectively).¹² In India, also looking up in the overall sample, the painkillers were commonly used for self-medication. Among the doctors, the use of antimicrobials, drugs for insomnia and laxatives was expressive.²⁰

In a group of Indian pharmaceuticals, analgesics and antipyretics (57.1%) were most commonly used for self-medication, followed by drugs for cold (14.3%).²⁴

In the case of non-prescription drugs, the US pharmacists most often practiced self-antibiotic, followed by analgesics and NSAIDs.²⁵

Polish study that evaluated the knowledge of citizens of health and other areas of medicines that do not require prescription found that analgesics are used by 87.8% of the buyers of these products.¹³

CLINICAL SYMPTOMS FOR SELF-MEDICATION

In a group of American neurologists in the last 12 months, the following medical conditions have cited as self-diagnosis and self-treatment reasons: migraines (n=8); allergy (n=5); back pain (n=4); sinusitis (n=4) and upper respiratory infection (n=4).²¹ Among the Indian doctors, the most self-medicated clinical condition was a headache, followed by cold and cough.²⁰ In a study of Indian pharmaceuticals, cough and cold (60.6%) were the most common indications for self-medication, followed by a headache, fever (38.4% each) and strep throat (17.2%).²⁴

In Pakistan, when addressing the preferences and knowledge of medicines that do not require a prescription, 6% of

pharmacists and 4% of professionals from other departments said they felt pain almost every day. Pain in the head and back were the most common, 24 and 19%, respectively. There were discriminated how many participants practiced self-medication for each symptom specifically.

In Poland, the most consumed medicines that do not require prescription were painkillers for severe pain, especially by the health personnel. Thus, the reasons given most often for taking analgesics were: a headache in 69% of respondents and menstrual pain in 18%.¹³

When addressing the headache as the cause of self-medication in Brazilian health professionals, it was revealed that the symptoms that stimulated using drugs were a headache 33.7%, 8.8% infection, 7.4% gastritis or dysmenorrhea, 4.4% fever or low back pain. The complaint of pain was reported by 48.5% of respondents.¹¹

In a sample of Jordanians, headache (81.2%) and toothache (52.9%) were the most common complaints that required the administration of drugs for self-medication.¹²

CONCEPTIONS AND REASONS FOR SELF-MEDICATION

Seeking to understand the reasons that justify the use of self-medication of non-prescription drugs in a group of pharmacists, most of them (75%) reported knowing the disease treatment options for which self-medicated, believing that a doctor would probably prescribe the same drug. Lack of time for medical consultation was the second most cited reason for self-medication, being mentioned by 42% of participants.²⁵

The main reason for self-medication among 68% of Indian pharmacists surveyed was the common notion that it was not necessary to consult a doctor for minor ailments. With 13%, the convenience of purchasing medicines on the store counter was the second most common reason for self-medication.²⁴ Among Indian doctors, the most common reasons for the practice of self-medication were the ease and convenience.²⁰

In a literature review, four main reasons for self-treatment of doctors and medical students were identified: avoid being a patient; acceptance of self-treatment; performance or work pressure to remain in the work environment; and protect or keep things under individual control.¹⁶ The perception of the need to show a healthy image, combined with the discomfort to be identified as patient and concern for confidentiality can lead doctors to take responsibility for their care.¹⁶ This is consistent with the results presented in a study with psychiatrists in Michigan, where the decision of the self-treatment would be more influenced by a secure permanent record (40.4%) and the stigma of mental illness (25.7%).²²

In a qualitative approach to Brazilian nursing professionals, it was observed that they have a knowledge of products available and their effects, and they have easy access to them, encouraging self-medication.³ Easy access is also mentioned in a group of health professionals from Poland, assessing the knowledge of medicines that do not require a prescription. It was identified that the group consisting of nurses was the group most using this type of drug daily.¹³ Among nursing professionals in Brazil, it was mentioned the availability on getting prescriptions from a physician of their interpersonal relationships, without follow-up treatment.²⁷

ACCEPTANCE AND KNOWLEDGE OF SELF-MEDICATION AMONG HEALTH PROFESSIONALS

Acceptance of self-medication was also the subject approached by some articles analyzed. Among health professionals from Poland and individuals from other areas, only 14% of subjects were against any treatment without medical supervision.¹³ Among American pharmacists, 57% of respondents reported supporting the self-medication by pharmacists.²⁵

The practice of self-medication was shown to be accepted among doctors. Neurologists agreed that the following behaviors are acceptable for doctors: self-treatment of small acute conditions (94%); self-treatment of chronic conditions (37%); self-prescription of antidepressants (20%); self-prescription of hypnotics for insomnia (18%); and self-prescription of narcotics for pain (10%).²¹ A Literature Review presented a similar study among Australian doctors and reported that 90% of them believed to be acceptable self-treatment of acute diseases and 25% believed to be acceptable the treatment of their own chronic conditions.¹⁶

Self-medication has not been linked to lack of information or lack of knowledge about the risks arising from this practice. When interviewed, 25% of neurologists professionals answered affirmatively to the question that doctors make some mistakes to self-treatment.²¹ In India, all the doctors interviewed reported having a knowledge of the problems associated with self-medication.²⁰ Also in India, most pharmacists (81.5%) knew that self-medication could lead to complications.²⁴

DISCUSSION

The variety of methods used in the studies difficult the comparison between the self-medication prevalence. This is due to the composition of the populations studied that showed distinctly and some studies were not restricted only to a category of health professional team.

Moreover, the period considered for the questioning of self-medication practice (recall period) was not always the same or sometimes was not broken in the studies. These factors were limiting for the comparative analysis of the findings, as well as the fact that some studies focus self-medication related strictly to some types of drugs.

However, the analysis of articles confirms that the prevalence of self-medication is high in health professionals because even the lowest frequencies can be considered worrying regarding the health of these workers.

Even given the particularities of the results and the low level of evidence of articles (mostly level 6), it is possible to infer that the prevalence of self-medication among health professionals is similar to the general population. Self-medication is a practice of 76.4% of Brazilians, according to a study conducted in 12 cities in the country. Among the state capitals, self-medication was also diverse, found higher prevalence in Salvador/BA (96.2%) and lowest in Belo Horizonte/MG (35%).²⁸

The studies show the medical profession as a highlight in the practice of self-medication. However, the use of drugs that do not require prescription was strong in pharmaceutical and nurses. It is understood that the knowledge of the drugs is a determining factor for its widespread use among health professionals. However, the medical assignment prescription becomes the contribution to the higher numbers in this category. In other categories of health, despite the likely facilitated access and knowledge, there is the need for a prescription, which limits the practice of self-medication.

It must also be emphasized that the medical population was more addressed to the study of self-medication.^{3,6,8,12,13,16-18} This finding reveals that there is already a concern with the practice of this profession, explaining the high prevalence shown in the studies.

The results related to the association between higher levels of education and self-medication among health professionals is confirmed in other studies in the general population.^{29,30} These data reveal that the lack of knowledge is no justification for the practice of self-medication.

Self-medication was longer present in young workers, which is similar to the results observed in different populations, that is, self-medication is inversely proportional to age.^{29,31,32} On this point, it is possible to learn that maturity evokes the sense of professional and people, or even that current generations of young people are less aware of their care, risking undue practices such as self-medication.

In this sense, studies report that between health care academic exists already a high number of self-medication practitioners.^{7,33} Therefore, it is possible to make a projection of the self-medication as continued practice, as these young people

will soon be the new health professionals. Because of performing self-medication, it is believed that there is a tendency to make it in professional life, mainly because the easier access will be even greater with the beginning of professional practice.

The symptoms most often cited for self-medication were similar to studies in the general population,^{5,6,34} where the pain was the symptom that led to self-medication in most cases. It is noteworthy that a headache was cited in all selected studies in this integrative review, which may be related to work stress of these professionals, given the particular responsibilities and constantly dealing with human suffering. Brazilian study of nursing workers in a hospital in the Rio Grande do Sul determining the prevalence of a headache in this population, showed that in 68% of cases the stress was cited as triggering pain.³⁵

The drugs most commonly used in self-medication were analgesics, followed by anti-inflammatory and antibiotics. However, some studies dealt with the drugs that do not require a prescription, including just the most mentioned classes of drugs such as analgesics and anti-inflammatory, and some antibiotics are also not controlled in countries like India. Studies dealing with the use of medications such as anti-inflammatory drugs in the general population associated high consumption of the large investments of industries and media advertising in advertisements without often to highlight the contraindications and side effects, ^{7,36} as well as the fact believing they are harmless to health.⁷

On the results, there is the issue trivialized on the use of medicines that do not require a prescription, that although free access, are not harmless to health. Furthermore, medicines sold without the requirement of a prescription empower the individual to treat their symptoms.

Therefore, it is clear that the practice of self-medication may result from fear of health professionals as feeling sick, which could be revealed in the search for a treatment conducted by another professional. Professionals self-medicated keep their health on own control, identifying himself as healthy.

FINAL CONSIDER ATIONS

Self-medication in health professionals shows a prevalent phenomenon and needs to be investigated further. The high numbers regarding the use of non-prescription drugs are signaling a trivialized practice, which was reinforced by the acceptance of self-medication among health professionals.

The low level of evidence and methodological diversity are limitations found. Aspects such as recall period, symptoms presented and consumed drugs represent a subject of the gap in the literature, as well as an understanding of labor issues associated with self-medication and the effects of this practice on the health of professionals.

Longitudinal studies are suggested to obtain more conclusive results to plan preventive actions for professionals in training or on the promotion of the health of workers.

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