

Psychoactive Substance Use and Disabled People: An Integrative Review

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Abstract

This study aimed to analyze the evidence available in the literature about psychoactive substance use by persons with disabilities. We used integrative review of literature in SciELO, PubMed, SCOPUS, BDEF, and PsychINFO databases, with the descriptors: *peças com deficiência; transtornos relacionados a uso de substâncias; disabled persons; and substance-related disorders*. Twelve articles were included in the sample. Data were analyzed and discussed descriptively. The studies' results, with scientific evidence, were synthesized on two main themes: substance use by people with disabilities, and access of people with disabilities to treatment for substance-related disorders. The scientific evidences identified in studies reported disability as a risk factor for substance abuse, and also reported that disabled persons did not have access to treatment and rehabilitation services for substance abuse. Finally, the studies analyzed pointed to the need for scientific research on this topic.

Keywords

Nursing, Disabled Persons, Substance-Related Disorders

1. Introduction

Substance abuse is a prevalent reality in the society, and it is a public health problem. It is related to abandonment, violence, and low self-esteem. In Brazil, alcohol is the first in the ranking of substances whose chemical users become dependent; approximately 12% of the population. The second place is occupied by tobacco, with 10% and the third by cannabis, with 1.2% of the population dependency ratio [1].

Its use can be triggered by a variety of situations, such as low self-esteem, the influence of friends and the media, seeking relief for anxiety, family history, and dealing

with the reality of disability, seeking the relief for abstinence [2] [3].

Public policies related to psychoactive substances emphasize harm reduction. However, these actions cannot meet the needs of the users. It is clear, then, that the logic of dealing with the use of psychoactive substances is related to referrals to specialist or recovery homes, given that the health teams have difficulties to take responsibility for the care of these individuals even recognized as one of the major public health problems in the world.

In the global context, it is estimated that about 5% of the population aged 15 to 64 years old used illegal drugs in 2013. Also, 0.6% of the population in this age group has problems related to substance abuse, as mental disorders due to drug use or dependence [4].

Given this context, prevention, professional training, deployment of devices and community-based strategies are invested. However, the needs of users can not be met by the health services network. The care in this area should be based on the promotion of health, prevention of abuse and complications and early intervention in all population groups, including the group of People with Disabilities, which requires prevention programs that meet their specific characteristics.

Approximately 45.6 million people were considered with disabilities in Brazil [5]. People with disabilities are those who have limitations or inability to perform activities. It can be physical, hearing, visual, mental or multiple activities. Physical disability is understood as a complete or partial change of one or more segments of the human body, resulting in the impairment of physical function. Also, it consists of partial or total bilateral hearing impairment loss of forty-one decibel (dB) or more [6].

Visual impairment can be considered as blindness when the visual acuity is equal or less than 0.05 in the better eye or as low vision, which means visual acuity between 0.3 and 0.05 in the better eye. Mental impairment refers to intellectual functioning significantly below average and limitations associated with two or more areas of adaptive skills such as communication; personal care; social skills; use of community resources; health and safety; academic skills; leisure and work. Multiple disabilities are when there is the association of two or more deficiencies [6]. In this study, it was opted to use the term person with disabilities, adopted by the organizations of the People with Disabilities in 2000 [7].

Concerning substance use by people with disabilities, there is a lack of information on the pattern of consumption of these substances by this group, the reasons that lead to use such substances and their consequences.

Moreover, according to the National Health Policy of People with Disabilities (PcD), these users should receive full attention to health, which includes promotion, prevention, care, rehabilitation and maintenance of health [8] [9]. Thus, the actions related to substance abuse should also be accessible to this group.

Given the above, there was an interest in knowing what had been scientifically produced on the use of psychoactive substances by people with disabilities, which motivated this study.

Therefore, the study aimed to analyze the available evidence in the literature on the use of substances for People with Disabilities, categorizing the studies in levels of evidence and defining their topics.

2. Method

For this study, the steps of the integrative review were followed: establishment of a hypothesis and review objectives; definition of criteria for inclusion and exclusion of articles (sample selection); definition of the information to be extracted from selected articles; analyzing the results; discussion and presentation of results [10].

The following question was formulated to guide this integrative review: What is the scientific evidence available in the literature on substance use by people with disabilities?

The inclusion criteria of the articles in the sample were: full research article, electronics and free availability; be published in English, Portuguese or Spanish; having evidence of substance use by people with disabilities. The period of publication and exclusion criteria were not established.

Scientific evidence is classified according to the data source and the strength of the information provided. Evidence hierarchy is presented in seven levels: systematic or meta-analysis of randomized controlled clinical trials at level 1; evidence from randomized controlled trials at level 2; evidence originated from systematic review of correlation studies or observation at level 3; evidence from correlation studies or observation at level 4; evidence originating from systematic review of descriptive or qualitative studies at level 5; evidence derived from descriptive or qualitative study at level 6 and evidence from opinion of authorities and/or expert committees report at level 7 [11].

The articles were searched in the Scientific Electronic Library Online (SciELO) and the SCOPUS databases; PsychINFO; Pubmed; Latin American and Caribbean Health Sciences (LILACS); Nursing Database (BDENF) using the keywords: *pessoas com deficiência* and *transtornos relacionados ao uso de substâncias*, disabled people and substance-related disorders. In all databases, the index words were used together and were explored, in Portuguese and in English.

The search was carried out by online access, and the final sample was 12 articles. For the collection of information, an instrument was used that covers the following items: article identification, objective, methodology, site of the research and findings.

Theses, essays, editorials, articles, letters to the editor were found totaling 807 articles. After reading the titles and abstracts, 795 articles were excluded according to pre-established criteria. It is noteworthy that in BDENF database any articles that met the inclusion criteria were not found.

The analysis of the selected articles required reading and rereading to obtain the data of interest to the study. The information was collated and analyzed descriptively and analytically.

Figure 1 presents a selection of articles on the surveyed databases identifying the reason for their exclusion from this study.

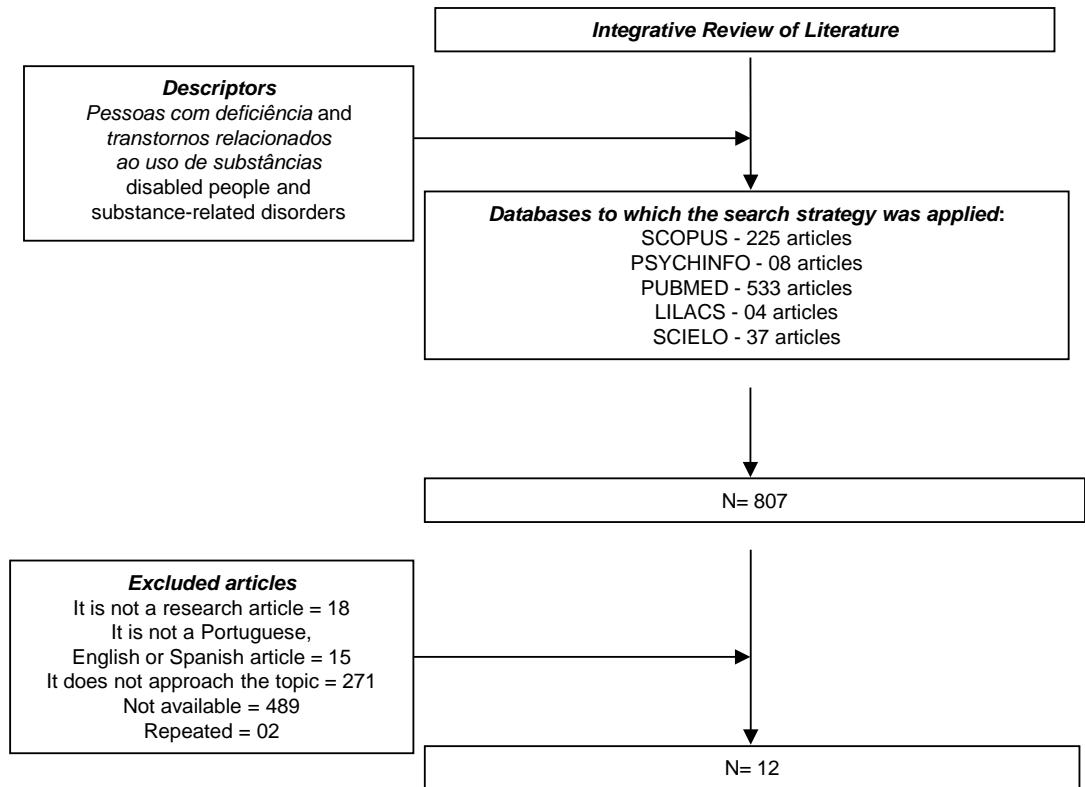


Figure 1. Diagram of the selection process of literatures.

3. Results

The analysis of the articles in their entirety was proceeded, with research data as an objective study, main results and relevant topic. The main themes identified in the articles were: I: Use of substances for People with Disabilities (DP) and II: Access to treatment for substance abuse by People with Disabilities.

In the first topic, the articles described about substances more used by people with disabilities, its characteristics, reasons for use it and some consequences. The topic II presents the articles that described the barriers to treatment for substance abuse.

The size of sample presented differences among the studies, from 10 to 24.590 participants. In regarding site of the research, studies were developed in participant's household (04), at the schools (02), association of blind people (01), addiction services (01), specialized unit (01), assertive community treatment (01). Two studies did not cite setting of the study.

The variables investigated were: type and frequency of the coping strategies; psychosomatic symptoms, mental health symptoms, alcohol drinking, type of substance and frequency of their consumption, cause of their hazardous patterns of substance use, alcohol use (number of days they consumed, average number of glasses), smoking rates, accessibility to the substance abuse treatment service.

The articles were organized into two tables according to the classification of the level of evidence. The articles classified in level of scientific evidence six were presented in **Table 1**.

Table 1. Distribution of studies classified by the level of scientific evidence 6, according to year/country, objective, main results and theme, 2016.

Reference	Year/Country	Participants	Objective	Main results	Theme
[12]	2002/US	People with disabilities (non-specific)	To examine tobacco use characteristics among adults with disabilities in Massachusetts	Adults with disabilities are more likely to use tobacco and smoke. Smoking rates vary by type of disability.	I
[13]	2007/US	People with disabilities (non-specific)	To evaluate the accessibility of a nationally representative sample of the United States substance abuse treatment facilities for people with disabilities	There were barriers in treatment: lack of services, accommodation, parking places, visual and audible warnings and Braille materials.	II
[14]	2004/US	People with disabilities (non-specific)	To identify the prevalence of substance abuse and disability	PwD caused by damage to the nervous system has a higher risk for substance abuse; it may be more expensive and complicated to treat. PwD can also experience the disorder related to substance. PwD does not believe that require treatment or the use of substances contributing to disability.	I
[15]	2006/US	People with disabilities (non-specific) and managers from Drug and Alcohol Treatment Office	To identify areas needed to develop policies for access to treatment for substance abuse for people with disabilities	The barriers were: attributes of people with disabilities, limited access, recognition for the need for treatment, limited mobility, negative attitude toward treatment, stigma of disability prevents successful treatment, family members do not believe in treatment, inadequate community resources, belief that substance abuse should not be treated, lack of services and abuse substances.	II
[16]	2007/UK	People with intellectual disabilities	To examine the reasons why people with intellectual disabilities abuse of alcohol or drugs, and the impact that this behavior can have on them, and analyze the services they receive	Reasons for its use and abuse: self-medication, psychological trauma, social distance from their community, loss, sadness, confusion. Consequences: psychological impact, financial implications, verbal and physical confrontation, amnesia, suicidal ideation, conflicts with people they lived, loss of independence, discussions with family, violent behavior.	I
[17]	2009/Brazil	People with visually impairment	To understand the perception of blind women and men on drugs	Blind men cited disadvantages drug abuse: losing physical and mental health, neglecting to work and study. Substance abuse is due loneliness, unemployment and family conflicts.	I
[18]	2013/Norway	People with substance use disorder and severe mental illness	To explore reasons for substance use through analysis of the participants' experiences	The reasons are: in controlling the symptoms of mental illness, counteracting medication side effects, or balancing the ambiguity.	I

Two of the studies classified as evidence level 6 derived from descriptive or qualitative study addressed the access to treatment for substance abuse by people with disabilities, while five articles spoke about substance use by people with disabilities.

It was observed in **Table 2** that five articles were classified as evidence level 4; evidence obtained from correlation or observation studies. All studies of that level have focused on the use of substances for People with Disabilities.

Table 2. Distribution of studies classified by the level of scientific evidence 4, according to the reference year/country, goal, main results, and theme, 2016.

Reference	Year/Country	Participants	Objective	Main results	Theme
[19]	1996/UE	People with disabilities	To evaluate the association of disability and drug use	Participants aged 18 - 24 reported using heroin, crack cocaine and over 35 years reported the use of sedatives or tranquilizers. Illicit drug use is a problem among people with disabilities. Treatment programs could be accessible to these individuals.	I
[20]	2008/Sweden	Adolescents with hard of hearing	To compare the setting in school, mental health symptoms and substance use among school students aged 15 to 16	Students with hearing loss with tinnitus reported more psychiatric symptoms or emotional problems than those without tinnitus. The adolescent group with multiple disabilities had higher rates of mental symptoms than other groups. Substance use was higher in the group of adolescents with hearing impairment and multiple disabilities when compared to other groups. The use of daily cigarette was 45%, the consumption of alcoholic beverages was 41%, and use of illicit drugs was 41%. This group has about 8 times more likely to use illicit drugs compared to those without disabilities, and 4 times more likely when compared to the group with only hearing disability.	I
[21]	2009/The Netherlands	Clients with mild to borderline intellectual disabilities	To investigate the association between substance abuse, coping strategies, adaptive behavior and emotional problems and behavior in adults with intellectual disability	There is a relationship between substance abuse, anxiety, depression, aggressive behavior, antisocial personality problems, hyperactivity intellectually disabled. Substance abuse is a major problem in intellectually, disabled people. Anxiety and depression can be cause and effect of substance abuse.	I
[22]	2015/German	Students with and without hearing loss	To compare the use of tobacco among students with and without hearing impairment	Adolescents with hearing loss consume, on average, less alcohol than their hearing peers, they have less binge drinking, fewer episodes of drunkenness.	I
[23]	2013/USA	People with disabilities	To compare prevalence between persons with disabilities and persons without disabilities for different substances of abuse, and recent SA trends	Prevalence of overall substance abuse was 34% for persons without disabilities and 40% for persons with disabilities. The findings indicted a need for accessible prevention programs.	I

4. Discussion

The concern of scholars to conduct research related to substance abuse by individuals or groups is quite evident when searching in the scientific database. However, when driving this demand for People with Disabilities, and also, with the aim of identifying the level of evidence of these studies, the amount becomes very restricted. This fact is confirmed in this study.

Moreover, it was found that the studies addressing psychoactive substances and People with Disabilities focus two specific themes: the first topic refers to studies on the substance use standard, user profile, and type of substance consumed; and the second theme describes about the barriers faced by people with disabilities to have access to treatment and rehabilitation services for substance abuse as discussed below.

4.1. Substance Uses by People with Disabilities

A shortage of the literature about the use, consumption and prevention of psychoactive substances by individuals with a disability was perceived. The findings in the international literature are incipient, although significantly higher than in Brazil. Individuals with disabilities may also experience the use of substances. A study found that young people with disabilities between 18 and 24 years old use more often heroin and cocaine than those without disabilities. Adults aged over 35 years old use sedatives and tranquilizers as non-disabled to the same age [19]. Another study on the use of alcohol among visually impaired people pointed out that the biggest consumers are men, aged between 11 and 30 years old, with incomplete secondary education [24].

Some studies have related disabilities to use of alcohol and drugs during adolescence [20]. The substance abuse among adolescents, in general, is an important issue for health professionals. Research conducted in Brazil showed that 54.3% of young people between 12 and 17 years old had consumed alcohol at least once in a lifetime [1]. A study found that 71.4% of students have tried alcohol at least once in life, 27.3% of adolescents surveyed reported regular alcohol consumption and 8.7% experienced other drugs such as marijuana, cocaine, crack, glue, ecstasy [25].

As a group, the People with Disabilities use more drugs than the general population [15] [19]. Individuals with disabilities caused by injury to the nervous system are the most likely to report substance use [14].

The combination of hearing loss and other deficiency increases the risk for mental symptoms, school problems, and drug use. The study showed that the group of adolescents with hearing loss and other disabilities had higher rates of mental symptoms than other groups surveyed (only hearing disability, other disabilities, without disabilities). These adolescents reported less welfare; they were depressed, often suffering bullying and using drugs more often than other students. Also, they reported the use of cigarettes daily (45%), alcohol consumption (41%) and use of illicit drugs (41%). This group had about eight times more likely to use illicit drugs compared to those without disabilities and four times more likely when compared to the group with only hearing loss [20].

In general, the researchers aimed to investigate the use of psychoactive substances and a few studies reviewed have evaluated the use of specific substances, which can be considered a gap, as there is not a description in detail of the types of substances consumed. Thus, it was observed that the substances most often cited in the studies were the alcohol and tobacco [12] [19] [20] [22] [24].

Drug use by people with intellectual disabilities may be related to anxiety, depression, aggressive behavior, antisocial personality disorder, hyperactivity [21]. Anxiety and depression can be a cause or effect of substance use.

In turn, the reasons that lead people with visual disabilities to use substances are related to the influence of the media and the social group to which they belong, and the school and television resources used to obtain information on these substances, although unable to see images, they hear the content of the information [17]. A study with people with visual impairments identified that the reasons to drink are related to leisure and entertainment, especially among young adult men [24]. The use of psychoactive substances may also be related to psychological trauma as deaths of family members; lack of company and friends; loneliness; isolation; exploitation of partners; sadness; confusion [16]. It is noteworthy also the use of substances to control the symptoms of mental illness and minimize the side effects of medications [18].

When comparing the group of people with and without disabilities, it was observed that the reasons that lead to substance abuse in both groups are similar. This can be seen in a study of college students without disabilities, who pointed out that friends or acquaintances were aimed at introducing the use of psychoactive substances, as well as the pursuit of pleasure, fun, routine break, enjoy the effects and reduce anxiety/stress as reasons for substance use [26]. Thus, it is observed that people with disabilities have the same growth characteristics than other people and are also vulnerable to drugs.

As a result of substance use, one of the reviewed studies reported psychological effects, effects on the mind, financial implications, verbal and physical confrontation, amnesia, suicidal ideation, loss of independence, discussions with family, violent behavior [16].

As for the psychological and mind effects, a study with non-disabled people found that use of marijuana/crack can influence cognitive function. The capacity of attention and performance showed differences between cocaine/crack when compared to the control group that did not use substances [27].

It is found that the results of the studies complement each other, especially in studies where participants have specific disabilities. Furthermore, studies often point the consumption of psychoactive substances for People with Higher Disability for consumption by people without disabilities, except for the study of students with hearing impairment, which identified that there is a lower consumption of alcohol by these students when compared to their peers without disabilities. Therefore, such a situation is perceived as a serious problem in the context of the disabled person. The authors further state that it is necessary to undertake further research on this topic and develop studies with greater methodological rigor and representative samples.

Thus, it is important to know the pattern of substance use by people with disabilities to develop prevention and intervention, which can be effective to their reality.

4.2. Access to Treatment for Substance Abuse for People with Disabilities

People with disabilities need support in dealing with the problem of psychoactive substances. They receive support services for disabled people, but they also need family support and specialized services in the treatment of this problem [16]. This situation has been discussed in several review articles. However, it was observed that it is necessary to deepen this discussion.

There were some barriers identified in the articles reviewed to inclusion of People with Disabilities in the treatment and rehabilitation of substance abuse services, such as the belief that there is no need of treatment for drug use by people with disabilities; inadequate community resources as barriers in transport; limited knowledge of the professionals on the individual's needs with disabilities [14].

There are other barriers to treatment, such as attributes of People with Disabilities as limited mobility; contextual variables that prevent access; lack of recognition of the need for treatment; service features; negative attitude to treatment; belief that the stigma deficiency prevents successful treatment; lack of family support for treatment; belief that substance abuse should not be treated; lack of services to treat substance abuse and disability; inability of professionals to treat multiple disabilities; lack of integration between services; insufficient mental health care; physical accommodation barriers [15]. Further, research has identified negative attitudes toward treatment; lack of accessibility in institutions; inability to deal with multiple disabilities as barriers that hinder the access of People with Disabilities to the treatment of drug use [13].

Access to health services for people with disabilities is still a problem to be overcome. The delay in treatment, problems with parking, lack of ramps, elevators, wheels and adapted toilet seats were the main difficulties of access mentioned by people with disabilities who seek health services [28]. This is seen in other health services, as highlighted in a study that identified the basic health units' doors out of legal standards, without banister staircases, floor nonstandard, drinking fountains and bathrooms not accessible to wheelchair users [29].

A study in 236 basic health units in seven states of the south and northeast regions of Brazil found that 59.8% of the buildings were not suitable for people with disabilities access. The main barriers identified were: the presence of carpets in offices, steps, no ramps, narrow doors that prevent the passage of wheelchair [30]. It is observed that the barriers faced by people with disabilities are present in the organization of cities and health services, as an integral part of this context; they also have a physical structure and inadequate staff to assist these users better.

The exposed difficulties are also in the health promotion and prevention of drug use. It is noteworthy that for the treatment, communication established with people with sensory disabilities is particular through the use of hearing, of touch, of symbols. Thus,

there is a need for programs to prevent substance abuse in this population to have accessible and meet its features [23].

It is observed that the current information used to prevent the abuse of substances, consisting of booklets, folders that contain text and images and not allowing the blind, for example, the access to information, does not favor linking these with the health team professionals. Similarly, the verbalized information, especially in the media, are not accessible to people with hearing impairment. In this sense, it is necessary to the creation and distribution of educational and informative material in accessible formats such as Braille, in POUNDS, CD (for voice conversion), in large print, using the information and communication technology tools [31].

5. Conclusions

Thus, it was found through the survey conducted that it is important that programs of prevention, treatment, and rehabilitation for substance use can be accessible to people with disabilities. Moreover, the training of professionals who work in addressing the use of these substances to meet the Disability is necessary.

It is perceived that the subject studied in this work is little explored by researchers. The group of people with disabilities is poorly viewed by society and public managers. The fact that they have limitations does not prevent them from consuming substances. Initiatives that focus on prevention, inclusion and accessibility must become relevant and provide the right to health and dignity.

Barriers to access to people with disabilities to the prevention and treatment of the use of substances identified in the revised articles reflect the attitudinal barriers adopted by managers and health professionals. Workers' health services know not interact with these people, but also do not recognize them as vulnerable to substance use.

One limitation of this study is the limited number of articles, suggesting expanding the search to other databases and research work with the highest level of evidence.

The study is relevant to the practice because it raises the discussion on the use of substances for People with Disabilities. Health professionals should be prepared to take care of this group, and therefore respect the principle of comprehensive health care of People with Disabilities.

Therefore, the findings of this study describe the profile of consumption of psychoactive substances for People with Disabilities, as well as the barriers to treatment and rehabilitation services for substance abuse. The analyzed studies pointed to the need for scientific research on this subject.

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