

# Analysis of chemical dependence among adolescents: A review





https://doi.org/10.56238/globalhealthprespesc-055

#### Aline Cicilioti Ervatti

Medical student at Faculdade Metropolitana São Carlos-FAMESC-BJI-RJ.

## Barbara Gomes do Carmo Paschoa

Medical student at Faculdade Metropolitana São Carlos-FAMESC-BJI-RJ.

#### Cecília da Silva Benedito

Medical student at Faculdade Metropolitana São Carlos-FAMESC-BJI-RJ.

## Edielson Maria Nabiça de Castro

Medical student at Faculdade Metropolitana São Carlos-FAMESC-BJI-RJ.

#### Karina Costa Albani

Medical student at Faculdade Metropolitana São Carlos-FAMESC-BJI-RJ

## Marcelo Costa Albani

Medical student at Faculdade Metropolitana São Carlos-FAMESC-BJI-RJ

## Rebeca Agnes de Oliveira Almança

Medical student at Faculdade Metropolitana São Carlos-FAMESC-BJI-RJ

#### Maria de Lourdes Ferreira Medeiros de Matos

PhD student in Religious Sciences and professor of medicine at Faculdade Metropolitana São Carlos-FAMESC-BJI-RJ.

E-mail: mlourdes.psi2@gmail.com

# Alcemar Antonio Lopes de Matos

Master in Cognition and Language, doctor and professor of medicine at Faculdade Metropolitana São Carlos-FAMESC-BJI-RJ

#### **Antonio Neres Norberg**

Doctor in Parasitic Diseases, Coordinator of Medicine at Faculdade Metropolitana São Carlos -FAMESC-BJI-RJ, Member of the Brazilian Academy of Military Medicine.

#### **ABSTRACT**

The World Health Organization defines adolescence as the period of life that comprises the interval between 10 and 19 years. This is considered a critical phase, of intense changes that go through the physical, emotional and social development. External influences can lead to worrying risk behaviors that often contribute to increased alcohol and drug consumption in this age group. Curiosity and the search for ways to deal with problems are other reasons that lead some adolescents to try these substances. In this context, chemical dependence among adolescents is a public health issue that is perpetuated over different generations, unfolding with different temporal characteristics, causing significant damage. including accidents, disagreements, involvement with criminal actions, and medical emergencies such as overdose. To face the problem, it is necessary to unravel its roots, understand and look for the warning signs and work on prevention. The treatment requires an efficient multidisciplinary approach and as early as possible, being necessary the understanding and humanitarian reception of the adolescent, encouraging him to regain control over his life and his future, guaranteeing for these individual promising possibilities.

**Keywords:** Adolescence, dependence, risk behavior, public health.

## 1 INTRODUCTION

Adolescence is widely recognized as being a period of great changes in the life of the individual. It is a milestone not only biological and hormonal, but also social. Evidently, so many changes, in a



relatively short space of time, provoke uncertainties, insecurities, fears, in short, a whole series of sensations for which, often, the adolescent, at the beginning of his journey towards maturity, is not yet prepared.

Unfortunately, a portion of these individuals seek the way out to overcome this troubled moment in their lives through the use of illicit drugs, which eventually leads to chemical dependence.

In fact, the present work aims to address, in a concise and updated way, the relationship of the current generation of adolescents with narcotic substances without losing sight of the sociocultural dilemmas, indicating possible solutions to such a broad and complex problem.

The following themes will be addressed here: i) drugs most used by adolescents and users' profile; (ii) genetic predispositions to substance abuse; iii) motivations and apologies; iv) social, educational, health and personal development consequences; v) new frontier: drug dependence; vi) dialogue and breaking taboos as a means of prevention.

At the end of this work, what is intended is to shed light on sociological and biological aspects of this arid theme, at the same time dynamic and challenging for educators, health professionals and civil society in general.

## 2 MATERIAL AND METHOD

The objective of this work is to present a revisional analysis on the profile of adolescent users, motivations, social consequences and personal-social development, as well as more recurrent substances of abuse, in order to understand the core of this condition. For this, a bibliographic review was carried out on the platforms of journals such as PUBMED, Scielo and Google Scholar, using the descriptors "chemical dependence", "adolescents", "young people", "school age". As inclusion criteria, we considered published articles that analyzed the adolescent population, chemical dependency and the factors involved in a qualitative-quantitative context.

## **3 DEVELOPMENTS**

## 3.1 DRUGS MOST USED BY ADOLESCENTS AND USERS' PROFILE

Adolescence is the intermediate phase between childhood and youth, marked by major biopsychosocial changes, responsible for addressing aspects of emotional fragility and greater sensitivity that are institutional, attributing to the individual a certain discomfort. Current doubts generated in this phase exposes the adolescent to incalculable risks, such as the abusive use of tobacco, alcohol and other drugs (ZEITOUNE et al., 2012).

In this period, the subject recognizes himself with the group to which he belongs, settling on the behaviors of its members. And, if these are users of drugs, such as illicit drugs, the chances of an experimentation of these substances by the individual increase (ZEITOUNE et al., 2012).



Epidemiological data demonstrate that it is in this transition from childhood to adolescence that the experimentation and abusive use of licit and illicit drugs is established (MOMBELLI et al., 2010). According to Ribeiro et al. (2018), data from the latest Brazilian Report on Drugs demonstrate that the average age of the first interaction with tobacco and alcohol is 12 years and of marijuana and cocaine around 13 and 14 years. Information from the National Council of Justice shows that around 75% of adolescents who comply with socio-educational measures are drug users.

The VI National Survey on Psychotropic Drug Consumption among Elementary and High School Students of the Public and Private Education Networks in the 27 Brazilian Capitals of 2010 showed that the most prevalent drugs by users were alcohol (60.5%), tobacco (16.9%), solvents (8.7%), marijuana (5.7%), cocaine (2.5%) and crack (0.6%). It was also observed that the incidence of illicit substance use is higher among males, while in females, there is a predominance of the use of controlled medications, such as anxiolytics and amphetamines (GALDURÓZ et al., 2021).

According to this same study, a dominance of drug use was observed among older students, but 1/3 of students aged between 10 and 12 years reported having consumed alcohol at least once in their lives. The drugs most used by students of the public network were tobacco, cocaine and crack, while those of the private network were alcohol, solvents and medicines (GALDURÓZ et al., 2021)

A retrospective cross-sectional analysis performed by Mombelli et al. (2010) at the Psychiatry Unit of the University Hospital of Western Paraná, located in the city of Cascavel, determined that the profile of the eighty-one adolescent drug addicts hospitalized, where there was a predominance of males (79%), these, with a mean age of 15.46 years, and among the patients 92.5% were between 13 and 18 years old. Most did not attend school and lived with their families, being referred for treatment by CAPS-ad. All patients were initially diagnosed with abusive and chronic use of numerous psychoactive drugs; Most claimed to consume more than one type of illicit substance, including marijuana and/or crack cocaine.

In this study, there are reports from family members attesting that, before crack, adolescents already used other drugs, and could observe a pattern that went from substances considered lighter, such as cigarettes and alcohol, to heavier ones, such as crack itself, with marijuana being the first illicit narcotic to be consumed. The family history of abusive use of these substances was reported by 53.1% of adolescents at the time of hospitalization (MOMBELLI et al., 2010).

## 3.1.1 Genetic predisposition to substance abuse: alcoholism

Youth is an important phase for brain development, because ontogenetic maturation is completed in the third decade of life with the myelination of the cerebral lobes (PAUS, 2005). In this context, it is in this phase that the consequences of this development occur, which can be observed in



behavioral changes in mood, emotional instability and desire to perform new habits along with the famous identity crisis (FLIGLIE et al., 2004).

Thus, the use of certain substances, such as alcohol, can become something attractive and innovative, especially if they are used by family members in social life, which determines a greater vulnerability of the adolescent to want to investigate the curious stimulus. Therefore, the genetic factor is considered a means likely for the individual to enter this path, since the environment where he inhabits is also responsible for forming his identity and ideologies. According to KOHNKE (2008), there is a heredity in 50% in alcoholism in the CHRM2 gene, encoding the protein that forms the muscarinic receptor M2. In addition, the interaction of genes for genetic vulnerability to alcoholism was investigated and it was observed that the LL allele of the serotonin transporter gene (5-HTT) and for the Pro/Ser of the alpha6 gene (GABRA6) is more prevalent in people with alcohol dependence (SCHUCKITM et al., 1999).

According to Comings et al., several studies are being involved in the path to determine the genetics of alcohol, as in the case of the dopaminergic system (DRD1, DRD2, DRD3, DRD4 and DRD5), where associations were found mainly for the DRD2 gene for impulsive behaviors, drug abuse and alcohol dependence with the B1 allele variant.

In this sense, the family network that already has this genetic predisposition should be guided by multidisciplinary teams and psychological support not to allow the introduction of future generations in the insertion of the alcoholic environment. In this clash, parents and professionals should be aware of the multifactorialities of chemical alcohol dependence among young people linked to the genetic and behavioral factors correlated.

## 3.1.2 Motivation and apology

Adolescence is marked by intense maturation processes, be they physical, neuropsychological and social, which culminate in new skills, curiosities and discoveries related to the demands of the environment in which they live. The great vulnerability is also highlighted, since they seek autonomy, through activities that sometimes bring both physical and mental risks.

The study done by Komatz, Bono and Bazon (2021) with 120 adolescent offenders aged 13 to 18 years, all male, from the Initial Care Unit of the Foundation Center for Socio-Educational Assistance to Adolescents (CASA Foundation) located in Ribeirão Preto, identified the motivation for the use of drugs, especially marijuana, as an adjunct to reduce the symptoms of depression, anxiety, tension or suffering in the context of life, but also as a means of socialization in social groups.

In highlight there is the desire to want to be accepted and integrate into groups, with great influence on the part of friends, to aggregate and be accepted. The curiosity to experiment is something that, despite environmental influences, is intrinsic to each individual, since in this age group they are



more submissive to the physical and social environment. Experimentation sometimes occurs due to lack of information about the subject and also as a way to take refuge to forget the problems. (CORREA; SILVA; BOUSFIELD, 2020).

Silva and Pereira (2020) in their exploratory, descriptive and qualitative research made with 06 female adolescents, highlight that initially the use of drugs occurs by experimentation and pervades several types of substances, until the one for frequent use is elected. Added to this are feelings of curiosity, as well as the desire to meet the expectations of groups of friends. A welcoming and safe family environment presents itself as a protective factor for drug use, however, it was noted that the discovery by parents occurs with explosive attitudes, with both physical and verbal aggressions.

Tick et al. (2020) points out that the use of drugs is seen as a way of enabling pleasure or to escape from problems and that promotes "happiness", producing changes in the emotional state, sensations and degree of consciousness of individuals. The causality of drug use, both licit and illicit, is based on social norms such as the search for one's own well-being, the feeling of exclusion, lack of opportunities, anxiety. It is important to highlight that the family history of use of psychoactive substances leads to a greater probability of the adolescent reproducing such an attitude, by influence or even in the fact of having a certain person as a reference. There is also a lack of belonging, especially in relation to the family and social groups; traumas experienced; repression generated by social standards. It is also necessary to emphasize the conception of neutrality and naturalness, often praised by the media, that certain social patterns have added to certain psychoactive substances with the idea of fun, beauty, joy and adventure.

# 3.1.3 New frontier: drug dependence

Drug addiction is a condition that can affect people of all ages, including teenagers. According to data from the World Health Organization (WHO), the problem affects about 10% of the world's population. A priori, it is considered drug dependence the continuous use of a substance that generates impulse in the individual, causing episodes of withdrawal in his absence.

In today's society, psychotropic drugs are the main drugs related to drug dependence, being drugs that act on the central nervous system. Thus, changes in the individual occur by biochemical modifications of behavior, affecting mental state, mood and cognition. Specifically in adolescents, the indiscriminate use of medications is due to various factors. In addition, during this period, significant changes may occur in the individual's life, such as the transition from school to college or insertion in the labor market. Thus, the significant increase in stress can result in more serious pathologies, such as anxiety and depression, leading to a greater demand for substances that provide relief, pleasure and physical and mental well-being (KATZUNG, 2014).



Thus, this population becomes susceptible to the use of medications that are mostly associated with abuse. On the other hand, the family environment is an important modulator in the life of the adolescent, where factors such as solid family ties, quality of relationships, clear and coherent establishment of rules and limits, monitoring and supervision are aspects that protect the adolescent against substance abuse (SCHENKER, 2003).

Thus, recent research on the use of drugs by adolescents indicates that there is a consensus that dysfunctional families, characterized by a pathological pattern of communication, absent the establishment of limits and lack of affection are the most common among adolescent's dependent on these drugs (ACSELRAD, 2015). In summary, drug dependence can generate negative effects for the health of adolescents, including unwanted side effects, damage to the nervous system in formation and dependence. Thus, the prevention of drug dependence in adolescents is fundamental. Doctors and health care professionals should monitor teens' use of medications and advise against prescribing to patients who do not fall under the use of potentially harmful substances.

## 3.1.4 Social, educational, health and personal development consequences

The growth of abusive use and chemical dependence increase the risk of problems in the spheres of the individual's life. One of the main consequences reported by the users was the family breakdown that, due to the use of drugs, triggered fights and estrangement from the family, corroborating the feeling of marginality contained in chemical dependence. (ALVAREZ et al., 2014)

According to Capistrano et al. (2013), drug users report that chemical dependence entails physical, material and, mainly, moral losses, highlighting the learning difficulty, which leads to school dropout, job loss and even prison. In this context, it is known that excessive drug consumption can generate work problems, since the low level of lucidity resulting from the drug in the central nervous system generates disorganization and implies the performance of activities at work.

Added to this, another obstacle pointed out by drug addicts was the impairment of their health, since the drug makes users vulnerable to acquiring sexually transmitted diseases and serious liver problems. (CAPISTRANO et al., 2013)

Dalpiaz et al. (2014) analyzes the use of drugs as a risk factor for the development of several diseases, such as: cancers, psychiatric disorders, heart problems, lung, in addition to suffering from a series of symptoms caused by the use of drugs, such as: weight loss, loss of appetite, tremors, convulsions, anxiety, and can reach the extreme of a cardiac arrest. Each drug has numerous physical and psychic impacts on the human body, the severity of which may vary according to its consumption. We can mention some symptoms related to each type of drugs, such as: alcohol can cause tremors, anxiety, tachycardia, vomiting, mood swings, mental confusion; nicotine manifests itself with restlessness, irritability, anxiety; marijuana also generates anxiety and restlessness, in addition to



depression; Cocaine and crack can cause depression, anxiety, lethargy, physical exhaustion, weight loss.

Still in the field of health, Marques et al. (2016) state that the use of psychoactive substances cause various damages to oral health such as halitosis, gingivitis, even causing mouth cancer. The use of these drugs will often increase the pain threshold of the user, camouflaging the symptoms and this causes him to delay the search for the health service, increasing the criticality of the case.

In addition, drug users, in most cases, feel inferior and have a block in interaction and communication, thus becoming more impulsive, uncontrolled and with aggressive attitudes. (ALVAREZ et al., 2014)

According to the World Health Organization, in Brazil, the consumption of alcohol and other drugs, except tobacco, represent 12% of all severe mental disorders in the population over 12 years of age. Given this, chemical dependence reveals itself as a significant obstacle to global public health, since it increases the risk of social, family, educational and labor problems, thus being a threat to well-being.

# 3.1.5 Dialogue and breaking taboos as a means of prevention

Drug abuse in contemporary societies has generated constant concern in the public debate. The pleasure or escape mechanism associated with its use puts on the agenda the "normalization" of society and its methods of control. What was culture, commemorative object or antidote against existential suffering has become a disease and, therefore, needs treatment. In addition to the issue of personal and collective health, there are the implications with criminality and violence. (MONTEIRO, 2013)

Prevention focused on drug use/abuse can be defined as a method of planning, implementing and implementing numerous techniques aimed at reducing specific vulnerability and risk factors. For an effective prevention, it is necessary a community insertion of the proposed practices, in addition to the collaboration of all the available social segments, aiming at the reduction of the initiation in consumption, the frequency and intensity, and the consequences of the use. (ZEFERINO; FERMO, 2012).

Zeferino and Fermo (2012) highlight, as well as, the vulnerability to drug abuse being greater in individuals dissatisfied with their quality of life, in those who have poor health, do not have appropriate information on the subject of drugs, have easy access to substances and are not integrated into the community.

Prevention has as its main axis to collaborate for the construction of citizenship, through the dissemination of knowledge among individuals and communities, through lectures with the intention that, with knowledge, individuals can fight for better living conditions. Such actions can be done on three fronts: first with informational programs in individuals who have not had contact with the drug,



but are at initiation age in order to offer knowledge about its consequences and avoid contact with the drug; in a second moment, the proposal is to reach individuals who have already had contact, but do not use it often, aiming to distance them from abusive use; on the third front, emphasizing programs that include people who already make habitual use, aiming to minimize the consequences.

Given this, it is observed the need to always raise awareness of the population, using debates and lectures as preventive work, offer quality information, aiming at reducing the consequences of drug abuse. Added to this, the presence of the family is also an essential tool in offering adequate support, in order to promote spaces for dialogue on this theme that today is still treated as taboo before society

## **4 FINAL CONSIDERATIONS**

Given all that has been addressed and scrutinized in the course of the present work, the difficulty, whether of the previous or new generations, in facing the addition of narcotic substances is incontrovertible.

Not by chance, the topic is worthy of heated debates and is at the center of several public policy programs, sociological discussions and scientific research.

There is no single or definitive solution to this interdisciplinary and multifaceted problem, which has challenged society for many decades.

Interestingly, at the same time that the evolution of scientific research unveils several previously obscure aspects on the subject, the complexity of modern life seems to deepen the sociocultural problematic that underlies the question.

In short, the conclusion is that only an interdisciplinary, technical and sensitive approach to the treatment of the individual as a whole can prove fruitful.

Analysis of chemical dependence among adolescents: A review

# 7

#### **REFERENCES**

ALVAREZ, Simone Quadros, GOMES, Giovana Calcagno, XAVIER, Daiani Modernel. Causas da dependência química e suas consequências para o usuário e a família. Revista de Enfermagem UFPE online, Recife, v.8, n.3, p. 641-8, mar., 2014. Disponível em:https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/9720. Acesso: em 05 abr. 2023.

ASCSELRAD G. Quem tem medo de falar sobre drogas? Saber mais para proteger. Rio de Janeiro: Editora FGV, 2015. 164p. ISBN: 978-85-225-1629-2. Diponível em: https://www.e-publicacoes.uerj.br/index.php/revistateias/article/view. Acesso em: 07 maio 2023.

CAPISTRANO, Fernanda Carolina; ZERWES FERREIRA, Aline Cristina; ALVES MAFTUM, Mariluci; PUCHALSKI KALINKE, Luciana; DE FÁTIMA MANTOVANI, Maria. Impacto social do uso abusivo de drogas para dependentes químicos registrados em prontuários. Cogitare Enfermagem (Universidade Federal do Paraná), Curitiba, v. 18, n. 3, julio-septiembre, 2013, p. 468-474. Disponível em: https://revistas.ufpr.br/cogitare/article/view/33556. Acesso em 05 abr. 2023.

CARRAPATO, Josiane Fernandes Lozigia et al. Dependência de substâncias psicoativas na adolescência: um fenômeno exclusivamente biológico ou biopsicossocial? Cadernos Brasileiros de Saúde Mental, Florianópolis-SC, v. 12, ed. 31, p. 353-373, 2020.

COMINGS D, et al. Studies of the potential role of the dopamine D1 receptor gene in addictive behaviors. Mol Psychiatry, v. 2, p. 44-56, 1997. Disponível em: https://pubmed.ncbi.nlm.nih.gov/9154217/. Acesso em 06 maio 2023.

CORRÊA, Ivana Lauffer; SILVA, Jean Paulo; BOUSFIELD, Andréa Barbará da Silva; GIACOMOZZI, Andréia Isabel. Adolescência e Drogas: Representações Sociais e Atribuições de Causalidade ao Uso. PSI UNISC, Santa Cruz do Sul - RS, v. 4, ed. 2, p. 43-61, 2020.

DALPIAZ, Ana Kelen et al. Fatores associados ao uso de drogas: depoimentos de usuários de um CAPS AD. Aletheia, Canoas, n. 45, p. 56-71, dez. 2014. Disponível em: http://pepsic.bvsalud.org/scielo.php?script=sci\_arttext&pid=S1413-03942014000200005&lng=pt&nrm=iso>. Acesso em 06 abr. 2023.

FIGLIE NB, et al. Filhos de dependentes químicos com fatores de riscos bio-psicossociais: necessitam de um olhar especial? São Paulo (SP): UNIFESP 2004. Disponível em: https://www.scielo.br/j/rpc/a/ZtCB8BRwmzdLcYWM3ZryWDB. Acesso em 6 maio 2023.

GALDURÓZ J. C. F.; BEBENDO, A. Uso de drogas entre estudantes do ensino fundamental e médio no Brasil: II Relatório Brasileiro Sobre Drogas - Sumário Executivo. Ministério da Justiça e Segurança Pública Secretaria Nacional de Políticas sobre Drogas e Gestão de Ativos, Brasília, 2021. Disponível em: https://www.gov.br/mj/pt-br/assuntos/sua-protecao/politicas-sobre-drogas/arquivo-manual-de-avaliacao-e-alienacao-de bens/SumarioExecutivoIIRelatrioBrasileirosobreDrogas.pdf. Acesso em 13 mar. 2023.

KATZUNG, B. G.; MASTERS, S. B.; TREVOR, A. J. Farmacologia básica e clínica. 12. ed. Porto Alegre: AMGH, 2014.

KÖHNKE, M. D. Approach the genetics of alcoholism: A review to based pathophysiology. Biochemical Pharmacology, v.75, 160-177, Disponível p. 2008. em: https://pubmed.ncbi.nlm.nih.gov/17669369/. Acesso em 06 maio 2023.



KOMATSU, André Vilela; BONO, Elvio Luciano; BAZONI, Marina Rezende. Padrões de uso de drogas e problemas associados em adolescentes judicializados. Psico-USf, Bragança Paulista, v. 26, ed. 2, p. 229-240, abr/jun 2021.

MARQUES, L. A. R. V. et al. Abuso de drogas e suas consequências na saúde bucal: uma revisão de literatura. Revista da Faculdade de Odontologia de Lins, São Paulo, v. 26, n. 1, p. 29-35, jan./jun. 2016. Disponível em: https://repositorio.ufc.br/handle/riufc/22452. Acesso em 05 abr. 2023.

MOMBELLI, M. A.; MARCON, S. S.; COSTA, J. B.; Caracterização das interpretações psiquiátricas para desintoxicação de adolescentes dependentes químicos. Revista Brasileira de Enfermagem, v. 63, n. 5, p. 735-740, set. 2010.

MONTEIRO, Rita Maria Paiva. Álcool e outras drogas: diálogos sobre um mal-estar contemporâneo. Saúde Pública, v. 29, n. 8, p. 1693-1694, 2013. Disponível https://doi.org/10.1590/0102-311XRE020813. Acesso em 06 abr. 2023.

PAUS, T. Mapping brain maturation and cognitive development during adolescence. Trends Cogn Sci., v. 9,n.2, p. 60-8, 2005. Disponível em: https://pubmed.ncbi.nlm.nih.gov/15668098/.Acesso em 06 maio 2023.

RIBEIRO, W. A.; ANDRADE, M.; CIRINO, H. P.; TEIXEIRA, J. M.; MARTINS, L. M; MARIANO, E de S.; Adolescência, tabaco, álcool e drogas: uma revisão no olhar preventivo da educação em saúde na ESF. Revista Pró-univerSUS, v. 09, n. 1, p. 02-06, jan. 2018.

SCHENKER M.; MINAVO M.C. de S. A implicação da família no uso abusivo de drogas: uma revisão crítica. Ciência saúde coletiva [Internet], v.8, n.1, p. 299-306, 2003. Disponível em: https://doi.org/10.1590/S1413-81232003000100022. Acesso em 07 maio 2023.

SCHUCKITM, et al. Selective genotyping for the role of 5-HT2A, 5-HT2C, and GABA alpha 6 receptors and the serotonin transporter in the level of response to alcohol: a pilot study. BiolPsychiatry, v. 45, n.5, p.647-51, 1999. Disponível em: https://pubmed.ncbi.nlm.nih.gov/10088053/. Acesso em 06 maio 2023.

SILVA, Luciana Macedo Ferreira; PEREIRA, Andrea Ruzzi. Percepções de adolescentes sobre influências e consequências do uso de drogas. Revista Saúde e Desenvolvimento Humano, Canoas, v. 8, ed. 3, p. 61-69, nov. 2020.

ZEFERINO, Maria Terezinha, FERMO, Vivian Costa. Prevenção ao uso/abuso de drogas. Proenf adulto, 9-42, Disponível 7, 2, p. emhttps://grupoapis.ufsc.br/files/2016/12/ProENF-SA 1 Prevencao-ao-uso-de-drogas-1-1.pdf. Acesso em 06 abr. 2023.

ZEITOUNE, R. C. G.; FERREIRA, V. dos S.; SILVEIRA, H. S da; DOMINGOS, A. M.; MAIA, C. A.; O conhecimento de adolescentes sobre drogas lícitas e ilícitas: uma contribuição para a enfermagem comunitária. Escola Anna Nery, v. 16, n. 01, p. 57-63, jan. 2012.

Global Health Trends and Perspectives in Health Sciences