

Comorbid psychiatric in drug users: Integrative Review on Dual Diagnosis

Selene Cordeiro Vasconcelos^{1,*}, Rafaella Viana Teixeira², Paulo Dias de Amorim Neto²,
Murilo Duarte da Costa Lima¹, Vânia Pinheiro Ramos², Iracema da Silva Frazão²,
Ana Márcia Tenório de Souza Cavalcanti²

¹Neuropsychiatry, Federal University of Pernambuco, Recife, Brazil

²Nursing, Federal University of Pernambuco, Recife, Brazil

Email address:

selumares@yahoo.com.br (S. C. Vasconcelos), rafaellavteixeira@hotmail.com (R. V. Teixeira), diasasp@hotmail.com (P. D. de A. Neto),
murilocostalima@ig.com.br (M. D. da C. Lima), vpinheiroramos@uol.com.br (V. P. Ramos), isfrazao@gmail.com (I. da S. Frazão),
anapopita@gmail.com (A. M. T. de S. Cavalcanti)

To cite this article:

Selene Cordeiro Vasconcelos, Rafaella Viana Teixeira, Paulo Dias de Amorim Neto, Murilo Duarte da Costa Lima, Vânia Pinheiro Ramos, Iracema da Silva Frazão, Ana Márcia Tenório de Souza Cavalcanti. Comorbid Psychiatric in Drug Users: Integrative Review on Dual Diagnosis. *American Journal of Nursing Science*. Vol. 3, No. 6, 2014, pp. 110-116. doi: 10.11648/j.ajns.20140306.14

Abstract: Despite the high prevalence of dual diagnosis in the world and the importance to treatment patients, very little is known about complexity of this phenomenon and the factors associates in this population. Aim: Of delineating the themes to related dual diagnosis. Methods: Integrative review, two investigators independently reviewed the articles. Pubmed, Scopus, CINAHL and LILACS using combinations of the keywords "dual diagnosis" and "drug users". Results: Our search identified 15 papers, showed about two emphases, one on the drug users and other on the professional of mental health. The themes related patients were: psychiatric comorbidity in injecting drug users; reasons for the drug consume; substance use disorders and not substance use disorders in patients with mental illness; dual diagnosis in VIH patients. Other themes were: necessity to train the team of professional mental health; necessity to supervision of professional mental health during their job with the patients with dual diagnosis; necessity to do scientific gap to this patients; need to identify early dual diagnosis in drug users; to work with expanded clinical in the treatment of dual diagnosis in drug users; necessity to beware professionals mental health. Limitations: the search strategy did not rescue any intervention article in dual diagnosis. Conclusion: Given the high prevalence of dual diagnosis, the relative paucity of clinical guidance, and the potential impact that occurrence of dual diagnosis can have on the course of treatment. Implications for nursing and health policy: Nurses care directly from these patients need to know the disease for taking better care of their clients. For public policy contributes to the exhortation need for changes in the operation of mental health services, because they realized that there is dichotomy between mental health policy and alcohol and other drugs that do not include the care of a patient with dual diagnosis.

Keywords: Addiction, Dual Diagnosis, Mental Health, Nursing

1. Introduction

Psychoactive substance consume is often present among the people [1]. Sometimes people with mental illness use drugs and drug users developed mental illness because the drugs act in theirs central system nervous, but there have been no known about the first occurrence [1].

It is known that the use of psychoactive substances is related to other phenomenon such as premature death, reduced days of productive life and is often associated with decreased motivation for life and regarded as destructive

behavior and death [2].

The use and the consequent dependence on psychoactive substances contribute to the increased morbidity rate in the world, where 8.9% of all illnesses are attributed to the use of psychoactive substances, and tobacco-related 4.0%, 4.1% 0.8% alcohol and the use of illicit drugs [3]. Consumption data of drugs is increasing worldwide and related age of onset and the loss of this consumption.

In Brazil, according to the First National Survey About Alcohol Consumption Patterns in the Brazilian population, 52% of Brazilians over age drink at least once a year [4];

regarding the use of psychotropic drugs, a survey reported that 19.4% of participating in the study used some type of drug, estimating 9.109 million people [5].

In this context, the National Policy for Integral Attention to the User of Alcohol and Other Drugs in Brazil, recommends a treatment guided by the logic of harm reduction with a therapeutic approach centered on expanded clinical and social reintegration of this clientele, being carried out mainly by the Centers Psychosocial Care for Alcohol and other Drugs (CAPSad) and Therapeutic Hostel or Halfway Houses [6].

Harm Reduction consists of individual or collective actions in order to mitigate the harm caused by drug use [6], being a working strategy that develops in the circumstances of human use/abuse of the substance remaining person-centered drug user [7]. On the other hand, consists of expanded clinical care developed by an interdisciplinary team, in which professionals from diverse backgrounds take care of the same subject [6].

However, the National Policy for Integral Attention to the User of alcohol and other drugs not specifically address the care users with dual diagnosis, which is the co-existence of a disorder by substance abuse and psychiatric disorder [8]. This situation may be playing in a dichotomy between care and CAPSad CAPS disorder, constituting a major challenge for health care professionals responsible for the care of these clients.

Moreover, one of the biggest challenges in addressing the patient with comorbid consists of performing the appropriate differential diagnosis because there is overlapping symptoms, a disorder which can exacerbate or mask the other [9]. In this context, nurses are constantly challenged in the pursuit of knowledge, to promote the improvement of nursing assistance [10]. Such knowledge can be acquired through the Evidence-Based Practice (EBP), whose purpose is to encourage the use of research results by the health care, given the different levels of care, reinforcing the importance of research to clinical practice [11].

Thus, it was decided to conduct an integrative review of the literature. This is one of the research methods used in the PBE, allowing the incorporation of research evidence into clinical practice. This method aims to gather and synthesize research findings on a particular topic or issue, in a systematic and orderly manner, contributing to a deeper understanding of the investigate topic [11].

To guide this integrative review, we formulated the following question: What are the scientific evidences on dual diagnosis? In order to contribute to the expanded clinical care for these patients, the realization of this research was to examine the scientific evidence on dual diagnosis.

Patients with a dual diagnosis of some mental illness and a substance use disorder may present many factors related with yours health and illness process. This article reviews the literature on dual diagnosis, with the aim of delineating the themes to related dual diagnosis. The various table text styles are provided. The formatter will need to create these components, incorporating the applicable criteria that follow.

2. Methods

Integrative review, two investigators independently reviewed the retrieved articles; assessing relevance from the title and abstract and if relevance was still unclear, the full text was read. A third reviewer was consulted about the articles selected if there was disagreement between the two independent reviewers. LILACS (Latin American and Caribbean Center on Health Sciences), PubMed (Public/Publish Medline), CINAHL (Cumulative Index to Nursing and Allied Health Literature) e Scopus searches were using combination official the keywords "dual diagnosis" and "drug users". The search was restricted to articles originally written in Portuguese, English or Spanish with humans subjects, and to reply the target question: "what are the scientific evidences in dual diagnosis?" We selected 15 articles, we used validated tool for extraction of information [12] and another tool to assess the level of evidence of articles in the sample [13]. The resulting titles were examined for their relevance to the topic and to reply the target question. Article titles that appeared to be relevant were investigated by reading the abstract and/or the paper to determine whether dual diagnosis was described.

3. Results

Were rescued 43 articles and selected 15 that constituted the sample of this integrative review. The PubMed search retrieved a total of 05 articles, the Scopus 06, the CINAHL 04. There were no articles on LILACS. Despite the high rate of co-occurring mental illness and substance use disorders, we found very limited information concerning this theme. To date, there have been no clinical trials that specifically investigate the treatment of dual diagnosis in drug users, and related of the type of psychoactive substance consumed (Table 1).

Table 1. About research at data bases, 2014.

Articles Found	LILACS	PubMed	CINAHL	SCOPUS	Total
In disagreement with the topic of study	0	21	11	11	43
Repeated	-	14	6	5	25
Are not research articles	-	-	1	-	1
Total selected	-	5	4	6	15

In addition to summarizing the small amount of information available on dual diagnosis in drug users, we focused the majority of this review on what is known about dual diagnosis in drug users and theorize what challenges may be present in treating these disorders simultaneously. These articles were excluded of references in this paper and were identified by letters of the alphabet as follows (Table 2).

4. Discussion

We summarized what the papers addressed and they showed about two emphases, one on the drug users and other on the professional of mental health. The themes related

patients were: psychiatric comorbidity in injectables drug users; reasons for the drug consume; relation between substance use disorders and not substance use disorders in patients with mental illness; dual diagnosis in HIV patients; prevalence of mental disorders and drug use in primary care.

The themes related professionals of mental health were: need to train the team of professional mental health; need to supervision of professional mental health during their job with the patients with dual diagnosis; need to do scientific gap to this patients; need to identify early dual diagnosis in drug users; need to work with expanded clinical in the treatment of dual diagnosis in drug users; need to beware professionals mental health.

4.1. Emphasis about Drug Users

- (1) Psychiatric comorbidity in injectables drug users [14-16]: Personality disorders were also prevalent among heroine users, with 72% meeting criteria for antisocial personality disorder and 47% screening positive for borderline personality disorder [17]. There were high degrees of psychiatric co-morbidity, with 49% reporting severe psychological distress, 28% having current major depression, 37% having attempted suicide and 42% having a lifetime history of post-traumatic stress disorder [17].
- (2) Reasons for the drug consume [18-19]: Some personal behaviors increase the risk of drug addiction; low self-esteem, lack of social and adaptive proficiency and basic methods to deal with the stresses of life [20]. Highlights the relief obtained with consumption as a determinant of the use and maintenance of the development of addiction [21-22]. The environment, the influence of the pairs and the use of drugs by someone in the family were others risk factors to drug consume [23]. Among high school students, the motivations for alleged drug use were curiosity, disgust with parents and peer pressure [24]. Thus, interpersonal relationships experienced by adolescents, maybe all the people, are very important for the development and maintenance of chemical dependency [25].
- (3) Relation between substance use disorders (SUD) and not substance use disorders (not SUD) in patients with mental illness [26-28]: The schizophrenia was frequently related with SUD and the drug consumed were only cannabis or in association with alcohol and others drugs (methamphetamine and cocaine) [29]. Some women presented mental illness before the drug consume, related with not SUD [30].
- (4) Dual diagnosis in HIV patients [31-32]: It was a reality among cocaine users [33] and mainly injecting [34]. Drug use was more prevalent among HIV positive women [35]. Need to identify early dual diagnosis in drug users dual diagnosis in HIV patients. It is very important to change theirs treatment. Depression was the disease more prevalent among injectables drug users with or without HIV positive [36]. Even after so long still cannot take care of these patients holistically, with

all specialties and guided by clinical enlarged. In view of the high prevalence of depression among HIV positive and the more prevalence of drug consume among this patients, is important to systematically investigate depressive symptoms in this population and highlights the need the presence of a psychiatrist in care services to HIV positives [36].

- (5) Prevalence of mental disorders and drug use in primary care [37-38]: The higher absolute frequency of acute alcohol abuse is striking. Often substance misuse remains undetected in daytime practice at emergency or at primary care [39]. The professional of mental care and professional of primary care need works together. In Brazil, this joint has been made through the matricial or matrix support, which consists of the mediation relationship between the service network [40]. Thus, the matrix team performs a specialized technical support to primary care teams, contributing to the construction of the caring process of clientele, such as mental health [41].

4.2. Emphasis about Professionals of Mental Health

- (1) Need to train and supervision the team of professional mental health [42-43]: Despite is necessary integral treatment few are treated for drug use and mental disorders simultaneously in the same institution [44]. Mental health professionals who reported difficulties and insecurities in the management of these patients, recognizing the importance of supervision by another more experienced [45]. Thus, professionals appropriated concepts and develop critical analysis of reality; learned about the origin of harmful drug consumption; undid myths, prejudices and stereotypes about the user, the power and effects of drugs; understood the female alcoholism; were made reflections in relation to public policy and the reality of nursing practice through health education [46]. The complexity of healthcare systems makes it difficult to provide nursing students with sufficient clinical experiences to ensure their competency. Thus, knowledge gaps can be reduced by investing in professional training, such as simulation techniques for teaching health [47].
- (2) Need to work with expanded clinical in the treatment of dual diagnosis in drug users: The logic of the expanded clinical care, offers a support for drug users grounded in the knowledge of professionals with different backgrounds [48], encouraging co-responsibility, autonomy and citizenship of this clientele. It is noted that each professional exerts its interventions according to their area of expertise. Interventions lend support of drug users discussing the role of substance use in the health event or recovery from the event [49]. Thus, they may be especially primed for making changes to their substance.
- (3) Need to beware professionals mental health [50]: Such care in relation to the team of professionals is justified by the fact that they exhibit signs of stress, overload, burnout and emotional exhaustion, demonstrating

difficulties on the mental health work, compromising the quality of care provided to the user. Such emotional difficulties occur more frequently among younger professionals [51]. Moreover, this situation can create great stress and compromise the work, it is necessary that institutions establish actions of mental health care for its staff of professionals. The monitoring and evaluation of mental health professionals may be strategies for mental health care of the same and are social and professional support [52]. Large as successful public health outcomes of health care restructuring are dependent on nurses' work ability and performance [53].

- (4) Given the above we can see the complexity and coverage of care for patients with dual diagnosis. Therefore, to be developed quality care to patients with dual diagnosis should be established care actions directed both to patients and health care professionals in the mental health team.

4.3. Implications for Nursing & Health Policy

The importance of this review is to present its contribution in summarizing research on double to assist mental health professionals who care for drug users with mental disorder diagnosis. Especially for nurses who care directly from these patients need to know the disease and its repercussions for taking better care of their clients.

For public policy contributes to the exhortation need for changes in the operation of mental health services, because they realized that there is dichotomy between mental health policy and policy for alcohol and other drugs that do not

include the care of a patient with dual diagnosis. There is need for a logic of care integrated into a single service to the patient with dual diagnosis is careful and unique service is met in full their demands for health.

5. Conclusion

Given the high prevalence of dual diagnosis, the relative paucity of clinical guidance, and the potential impact that occurrence of dual diagnosis can have on the course of treatment, there is a need for additional researches regarding dual diagnosis to improve recognition and management of these patients.

Some articles also suggested that the most appropriate intervention that is offered by the same institution that specializes in mental disorder and substance abuse, as therapeutic strategies combined. Besides lead to reflections on the importance of understanding the complexity of the phenomenon, focusing on the need for early diagnosis and differential training of mental health teams, being essential to take care of these professionals to promote their own mental health. Thus, it is suggested that the development of intervention research on the subject, contributing to nursing practice in the care of patients with dual diagnosis.

However, in certain patient dual diagnosis is evident even experienced professionals reported difficulties in managing these patients. It is still difficult to provide specialized therapeutic areas and able to promote a comprehensive treatment, holistically, considering the aspects of both disorders.

Table 2. About articles of the sample, 2014.

Study	Design: setting	Intervention	Outcomes
Hughes et al. (2008) [42]	Randomized controlled trial. Quantitative.	Control group and experimental group (receive training). Baseline measure attitude, self-efficacy and knowledge.	Significant knowledge differences between the groups, but had no impact on motivation, relationship and job satisfaction with work.
Asher et al. (2010) [18]	Descriptive exploratory. Qualitative.	Semi-structured interview with schizophrenics about drug and reasons of this use.	Suggests standardization for evaluation of the reasons for use. This article was source of scientific information.
Nnadi et al. (2002) [32]	Descriptive exploratory. Quantitative.	Applied the SCL90-R to assess drug use and HIV ELISA.	HIV positive patients were more vulnerable to drug abuse. Need for better support of treatment for these patients. Major disorders were: TOC, depression and psychosis.
Laudet et al. (2004) [19]	Descriptive exploratory. Qualitative.	Semi-structured interview with adolescents about drug and reasons of this use.	The reasons for use were: belong and be accepted into peer groups; schizophrenics to alleviate; depressive symptoms and to alleviate the suffering
Magura et al. (2009) [27]	Descriptive exploratory. Quantitative.	Applied scale to assess drug use, quality of life and mood	Suggests to improve the evaluation of these issues during treatment. Improve attention to relapse prevention.
Johnson et al. (2006) [14]	Descriptive exploratory. Quantitative.	Used the Beck Depression Inventory among drug users.	Depression was highly prevalent.
Mackesy-Amiti et al. (2011) [15]	Descriptive Exploratory Quantitative	Semi-structured interview with younger people injectables drugs use, without treatment.	Heroin was the most commonly used drug. The mental disorders were depression, alcohol dependence, antisocial personality and disorder borderline personality.
Torrens et al. (2011) [26]	Descriptive exploratory. Quantitative.	Semi-structured interview and PRISM to assess the difference between the effects of intoxication and withdrawal disorders and independent primary those induced by drugs.	Non SUD disorders were mood disorders, anxiety and antisocial personality.
Frisher et al.	Observational	Evaluated the risk of developing mental disorder in	The risk of patient with mental disorder to use drug was

Study	Design: setting	Intervention	Outcomes
(2005) [28]	prospective population-based	drug user and the risk of the patient with mental disorder to use drugs.	twice than people without mental disorder. But the study can't
Havens et al. (2007) [16]	Randomized controlled trial	Evaluate the effect of Strengths-Based Case Management (SBCM).	People with antisocial personality remained a drug abuse more time with your manager and had more risk behaviors for HIV.
Brooks et al. (2011) [50]	Descriptive Exploratory Quantitative	Semi-structured interview to assess the risk of psychological distress and drug abuse among physicians.	Doctors working in mental health had higher rates of mental health problems including drug abuse. Self-medication, depression, emotional exhaustion or burnout was identified.
Manley (2004) [43]		To improve the prognosis for clients who have mental health problems and who drink or take drugs problematically.	Suggests that integrated treatment for patients with dual diagnosis can receive intervention for psychiatric disorder and of drug consume in the same institution.
Whetten et al. (2005) [31]	Controlled trial. Quantitative.	Creation and preliminary testing of a brief screening tool, the Substance Abuse and Mental Illness Symptoms Screener (SAMISS).	Among HIV positive: Depression, anxiety, panic attacks and borderline personality disorder. For substance use of alcohol dependence and were diagnosed with non-alcohol-substance dependence.
Adamson et al. (2006) [38]	Descriptive Exploratory Quantitative	Axis I psychiatric diagnoses were made using the computerized Composite International Diagnostic Interview (CIDI-Auto), and were supplemented by the South Oaks Gambling Scale (SOGS) and the conduct disorder and antisocial personality disorder section of the Diagnostic Interview for Genetic Studies (DIGS). The sampling frame for this study is the general practice research database (GPRD). Diagnoses on the GPRD are recorded using OXMIS codes (Oxford Medical Information Systems) and Read codes.	The most commonly diagnosed of these co-existing psychiatric disorders were major depressive episode, social phobia and posttraumatic stress disorder. About the drug consume the most prevalent diagnoses were alcohol and cannabis dependence
Frisher et al. (2004) [37]	Descriptive Exploratory. Quantitative.	OXMIS codes were devised for use by GPs and are based on the International Classification of Diseases (ICD) and Office of Population and Census Statistics (OPCS) operation codes.	The annual period prevalence of comorbidity increased. Rates of comorbid psychoses, comorbid schizophrenia, and comorbid paranoia increased. The average age of comorbid cases decreased from 38 years to 34 years. Over 80% of comorbid cases were newly diagnosed in each study year, although many are treated in subsequent years for either psychiatric illness or substance misuse.

References

- [1] WHO, Library cataloguing in publication data. Neuroscience consumption and dependence on psychoactive substances: summary, 2004.
- [2] Vasconcelos, S.C., Frazão, I.S., and Ramos, V.P. Contributions of the Therapeutic Health Education Group in motivation for life user of psychoactive substances. *Enfermagem em Foco*, 2012; 3(3):123-126.
- [3] OPAS - Organización Panamericana de la Salud. Epidemiología del uso de drogas en América Latina y el Caribe: un enfoque de salud pública. 2009. Available at: http://new.paho.org/hq/dmdocuments/2009/epidemiologia_drogas_web.pdf. Accessed Mar 07, 2014.
- [4] Laranjeira et al. I National Survey on Alcohol Consumption Patterns in the Brazilian Population. Brasília: Secretaria Nacional Antidrogas/ SENAD, 2009, 76 p.
- [5] Galduróz, J.C.F., Noto, A.R., Nappo, A.S., and Carlini, E.A. Use of psychotropic drugs in Brazil: household survey in the 107 largest cities - 2001. *Revista Latino-Americana de Enfermagem*, 2005; 13(esp):888-895.
- [6] BRASIL. Ministério da Saúde. Secretaria Executiva. Coordenação Nacional de DST/AIDS. The policy of the Ministry of Health for comprehensive care to users of alcohol and other drugs. Ministério da Saúde, Secretaria Executiva, Coordenação Nacional de DST e AIDS. Brasília: Ministério da Saúde, 2003.
- [7] Nery Filho, A., Macrae, E., Tavares, L.A., and Rêgo, M. Organizers. Dependencies: socio-anthropological and clinical implications. Salvador: CETAD, 2009, 308 p.
- [8] Cohen, S.T., and Jacobson, N.A. Dual diagnosis: substance abuse and psychiatric illness. In: Jacobson, J. L., and Jacobson, A. M. Segredos em psiquiatria. Porto Alegre: Artes Médicas, 1997.
- [9] Zalesky, M. et al. Guidelines of the Brazilian Association of Studies on Alcohol and Other Drugs (ABEAD) for the diagnosis and treatment of comorbid psychiatric and dependence alcohol and other substances. *Revista Brasileira de Psiquiatria*, 2006; 2(28):142-148.
- [10] Lobiondo-Wood, G., and Harber, J. Nursing research: methods and critical appraisal for evidence-based practice. 6th ed. St. Louis (USA): Mosby/Elsevier, 2006.
- [11] Mendes, K.D.S., Silveira, R.C.C.P., and Galvão, C.M. -Integrative review: research method for the incorporation of evidence in health care and nursing. *Texto Contexto Enfermagem*, 2008; 4(17):758-764.
- [12] Ursi, E.S. Prevention of skin lesions in the perioperative period: a literature review. Ribeirão Preto: Escola de Enfermagem de Ribeirão Preto da Universidade de São Paulo, 2005.
- [13] CASP - Critical Appraisal Skills Programme. Milton Keynes Primary Care Trust. All rights reserved, 2002.
- [14] Jonhson, M.E., Neal, D.B., Brens, C. and Fisher, D.G. Depression as measured by the Beck Depression Inventory-II among injecting drug users. *Assessment*, 2006; 13(2):168-177.
- [15] Mackesy-Amity, M.E., Donenberg, G.R., and Ouellet, L.J. Prevalence of psychiatric disorders among young injection drug users. *Drug and Alcohol Dependence*, 2012; 124(1-2):70-78.

- [16] Havens, J.R. et al. The Effect of a Case Management Intervention on Drug Treatment Entry Among Treatment – Seeking Injection Drug Users With and Without Comorbid Antisocial Personality Disorder. *Journal of urban health: bulletin of the New York academy of medicine*, 2007; 84(2): 267-261.
- [17] Ross, J. et al. The characteristics of heroin users entering treatment: findings from the Australian Treatment Outcome Study (ATOS). *Drug and Alcohol Review*, 2005; 24 (5):411–418.
- [18] Asher, C.J., and Gask, L. Reasons for illicit drug use in people with schizophrenia: Qualitative study. *BMC Psychiatry*, 2010; 10(94):2-15.
- [19] Laudet, A.B., Magura, S., Vogel, H.S., and Knight, E.L. Perceived reasons for substance misuse among persons with a psychiatric disorder. *American Journal Orthopsychiatry*, 2004; 74(3):365–375.
- [20] Behbahani Z.R., Kakavand, A. R. Comparison of ego strength between addicted and non addicted people from Karaj and Tehran cities of Iran. *American Journal of Applied Psychology*, 2014; 3(1):1-3.
- [21] Brook, J.S., Pahl, K. and Rubenstone, E. Epidemiology of Addiction. In: Galanter, M.; Kleber, H. D. (org.). *Textbook of Substance Abuse Treatment*. 4 ed. Washington: The American Psychiatric Publishing, 2008, pp 29-44.
- [22] Hall, S.M., and Prochaska, J.J. Treatment of smokers with co-occurring disorders: emphasis on integration in mental health and addiction treatment settings. *Annual Review of Clinical Psychology*, 2009; 5,409-431.
- [23] Oliveira, E.B., Bittencourt, L.P., and Carmo, A.C. La importancia de la familia en la prevención de consumo de drogas en niños y adolescentes: El papel maternal. *Investigación en Enfermería: Imagen y Desarrollo*, 2010; 2(12): 9-23.
- [24] Garcia, J.J., Pillon, S.C. and Santos, M.A. Relationships between family context and drug use in adolescents secondary education. *Revista Latino-Americana de Enfermagem*, 2011; 19(esp):753–761.
- [25] Dietz, G. et al. The interpersonal relationships and drug use by teens. *Revista Eletrônica Saúde Mental Álcool e Drogas*, 2011; 2(7),85–91.
- [26] Torrens, M., Gilchrist, G. and Domingo-Salvany, A. Psychiatric comorbidity in illicit drug users: substance induced versus independence disorders. *Drug and Alcohol Dependence*, 2010; 113(2-3):147-156.
- [27] Magura, S., Rosenblum, A., and Betzler T. Substance use and mental health outcomes for comorbid patients in psychiatric day treatment. *Substance Abuse: Research and Treatment*, 2009; (3):71-78.
- [28] Frisher, M. et al. Substance misuse and psychiatric illness: prospective observational study using the general practice research database. *Journal Epidemiology e Community Health*, 2005; 59(10):847–850.
- [29] Wobrock, T. et al. Comorbid substance abuse in first-episode schizophrenia: effects on cognition and psychopathology in the EUFEST study. *Schizophrenia Research*, 2013; 147(1):132-139.
- [30] Willis, O.J. et al. Estudio de la comorbilidad entre el estrés psicológico y abuso de drogas en pacientes en centros de tratamiento, ciudad de Panamá – Panamá. *Texto Contexto Enfermagem*, 2012; 21(esp):159-167.
- [31] Whetten, K. et al. A brief mental health and substance abuse screener for persons with HIV. *AIDS Patient Care and STDs*, 2005; 19(2):89-99.
- [32] Nnadi, C.U., Better, W., Hernig, R.I., and Cadet, J.L. Contribution of substance abuse and HIV infection to psychiatric distress in inner-city african-american population. *Journal of the National Medical Association*, 2002; 94(5):336–343.
- [33] Arias, F. et al. Abuso o dependencia a la cocaína y otros trastornos psiquiátricos. Estudio Madrid sobre la prevalencia de la patología dual. *Revista de Psiquiatría y Salud Mental*, 2013; 3(6):121–128.
- [34] Grangeiro, A. et al. Prevalence and Vulnerability to Infection By HIV Homelessness in São Paulo, SP. *Revista de Saúde Pública*, 2012; 4(46):674–684.
- [35] Santos, N.J.S. et al. Contexts of vulnerability to HIV among brazilian women. *Caderno de Saúde Pública*, 2009; 25(supl. 2):321–333.
- [36] Malbergier, A., and Stempluk, V.A. Physicians before the patient with AIDS: attitudes, prejudices and difficulties. *Jornal Brasileiro de Psiquiatria*, 1997; 46(5):265-273.
- [37] Frisher, M. et al. Prevalence of comorbid psychiatric illness and substance misuse in primary care in England and Wales. *Journal Epidemiology e Community Health*, 2004; 58(12):1036-1041.
- [38] Adamson, S.J. et al. Coexisting psychiatric disorders in a New Zealand out patient alcohol and other drug clinical population. *Australian and New Zealand Journal of Psychiatry*, 2006; 40(2):164-170.
- [39] Johansen, I.H., Morken, T. and Hunskaar, S. Contacts related to mental illness and substance abuse in primary health care: A cross-sectional study comparing patients' use of daytime versus out-of-hours primary care in Norway. *Scand J Prim Health Care*, 2010; 28(3):160–165.
- [40] Wetzel, C., Pinho, L.B., Olshowsky A. Schneider, J.F., Camatta, M.V., and Guedes, A.C. (2014). Matrix support as a method of mental health care in family health strategy. *Journal of Nursing UFPE*, 2014; 8(6):1702-1708.
- [41] Azevedo, D.M., Gondim, M.C.S.M. and Silva, D.S. Matrix support in mental health: the perception of professional in territory. *Revista pesquisa cuidados fundamentais*, 2013; 5(1):3311-3322.
- [42] Hughes, E. et al. Training in dual diagnosis interventions (the COMO Study): Randomised controlled trial. *BMC Psychiatry*, 2008; 8(12).
- [43] Manley, D. Dual diagnosis: co-existence of drug, alcohol and mental health problems. *British Journal of Nursing*, 2005; 14(2):100-106.
- [44] Sacks, S. et al. Improving the capability to provide integrated mental health and substance abuse services in a state system of outpatient care. *Journal of Substance Abuse Treatment*, 2013; 5(44):488-493.

- [45] Alves, H., Kessler, F. and Ratto, L.R.C. Comorbidity: Use of Alcohol and Other Psychiatric Disorders. *Revista Brasileira de Psiquiatria*, 2004; 26(1):51–53.
- [46] Vasconcelos, S.C. et al. Nursing interventions for drug users: qualitative meta-synthesis. *American Journal of Nursing Research*, 2013; 1(1):24-27.
- [47] Yuan, H.B., Williams, B.A. and Fang, J.B. The contribution of high-fidelity simulation to nursing students' confidence and competence: a systematic review. *International Nursing Review*, 2012; 59:26–33
- [48] Campos, G.W.S., and Amaral, M.A. The clinic expanded and shared, democratic management and care networks as theoretical-operational for hospital reform. *Ciência e Saúde Coletiva*, 2007; 12(4):849-859.
- [49] Tripp, J.C., Skidmore, J.R., Cui, R. and Tate, S.R. Impact of physical health on treatment for co-occurring depression and substance dependence. *Journal of Dual Diagnosis*, 2013; 9(3):239-248.
- [50] Brooks, S.K., Chalder, T. and Gerada, C. Doctors vulnerable to psychological distress and addictions: Treatment from the Practitioner Health Programme. *Journal of Mental Health*, 2011; 20(2):157–164.
- [51] Santos, A.F.O. and Cardoso, C.L. Mental health professionals: manifestations of stress and Burnout. *Estudos de Psicologia*, 2010a; 1(27):67–71.
- [52] Santos, A.F.O. and Cardoso, C.L. Mental health professionals: occupational stressors stress and mental health. *Psicologia em Estudo*, 2010b; 2(15):245-253.
- [53] Raitio, K., and Kokkinen, L. Politics of organizational restructuring in health care and work ability of nurses'. *American Journal of Nursing Science*, 2014; 3(5):73-77.