

## Prevention of HIV in people who live in a street situation: sharing experiences

Prevenção do HIV em pessoas que vivem em situação de rua: compartilhamento de experiências

Prevención de la infección por el VIH en las personas que viven en situación de calle: intercambio de experiencias

Giselle Mary Ibiapina Brito<sup>1</sup>, Vanessa Moura Carvalho de Oliveira<sup>1</sup>, Bráulio Vieira de Sousa Borges<sup>1</sup>, Silvana Santiago da Rocha<sup>1</sup>, Fernanda Valéria Silva Dantas Avelino<sup>1</sup>, Dalila Cinara Pereira da Silva<sup>2</sup>, Rosilane de Lima Brito Magalhães<sup>1</sup>

1. Postgraduate Program in Nursing, Federal University of Piauí, Teresina, Piauí, Brazil.

2. Nursing Graduation, Federal University of Piauí, Teresina, Piauí, Brazil.

#### ABSTRACT

**Objective:** to report the experience of university extension activities for HIV prevention and health promotion to homeless people. **Method:** a descriptive study, the type experience report, carried out at a referral center for specialized population living in the streets, in the period from May 2016 to August 2017. It was used the arc of Maguerez as the method. Held rapid testing for HIV and viral hepatitis, individual and collective guidelines for prevention and referral of cases required. **Results:** it was noted the consumption of alcohol and drugs, reports of various types of violence, social stigmas and HIV risk behaviors. **Conclusion:** homeless people are more exposed to various infections and is in a situation of greater vulnerability. There is urgent need for better inclusion of this population in different spaces that enable their participation in educational activities for health promotion and prevention of diseases that are exposed.

Descriptors: Primary Prevention; HIV; Homeless Persons; Problem-Based Learning.

#### RESUMO

**Objetivo:** relatar a experiência de atividades de extensão universitária para prevenção do HIV e promoção da saúde em pessoas que vivem em situação de rua. **Método:** estudo descritivo, do tipo relato de experiência, realizado em um Centro de Referência Especializado para População em Situação de Rua, no período de maio 2016 a agosto de 2017. Foi utilizado o arco de Maguerez como o método. Realizou-se testagem rápida para o HIV e hepatites virais, orientações individuais e coletivas para prevenção e encaminhamento dos casos necessários. **Resultados:** dos participantes abordados observou-se consumo de álcool e drogas, relatos de diversos tipos de violência, estigmas sociais e comportamentos de risco para o HIV. **Conclusão:** pessoas em situação de rua estão mais expostas às diversas infecções e encontra-se em situação de maior vulnerabilidade. Urge a necessidade de melhor inclusão dessa população nos diversos espaços que oportunizem a sua participação em atividades educativas para promoção da saúde e prevenção dos agravos que estão expostos.

Descritores: Prevenção Primária; HIV; Pessoas em Situação de Rua; Aprendizagem Baseada em Problemas.

### RESUMÉN

**Objetivo:** reportar la experiencia de las actividades de extensión universitaria para la prevención del VIH y la promoción de la salud en personas que viven en situación de calle. **Método:** se realizó un estudio descriptivo, la experiencia de tipo informe, realizado en un centro de referencia para la población especializados que viven en las calles, en el período comprendido entre mayo de 2016 a agosto de 2017. Se utilizó el arco de Maguerez como método. Celebradas las pruebas rápidas para el VIH y la hepatitis viral, individual y colectiva de las directrices para la prevención y la remisión de los expedientes necesarios. **Resultados:** señaló que el consumo de alcohol y drogas, los informes de los diversos tipos de violencia, los estigmas sociales y de comportamientos de riesgo para el VIH. **Conclusión:** la gente en las calles están más expuestos a diversas infecciones y se encuentra en una situación de mayor vulnerabilidad. Hay una necesidad urgente de mejorar la inclusión de esta población en diferentes espacios que permitirán su participación en las actividades de educación para la promoción de la salud y prevención de enfermedades que son expuestos.

Descriptores: Prevención Primaria; VIH; Personas sin Hogar; Aprendizaje Basado en Problemas.

Como citar este artigo:

Brito GMI, Oliveira VMC, Borges BVS, Rocha SS, Avelino FVSD, Silva DCP et al. Prevention of HIV in people who live in a street situation: sharing experiences. Rev Pre Infec e Saúde[Internet]. 2018;4: 7740. Available from: http://www.ojs.ufpi.br/index.php/nupcis/article/view/7740 DOI: https://doi.org/10.26694/repis.v4i0.7740

#### INTRODUCTION

The magnitude of the Human Immunodeficiency Virus (HIV) is cause for concern, when approximately 36.7 million people are infected in the world and the number of adults with this infection is 34.9 million, with an average of 2.1 million new cases detected per year<sup>1</sup>. In Brazil, in accordance with the epidemiological bulletin from 2007 until June 2016, were notified by the Health Information Systems Programme (HISP) informação (Sistema de de agravos de notificação - SINAN in Portuguese) 136,945 cases of HIV infection. Among this number, 92,142 men and 44,766 cases in women. The prevalence of HIV in the national scenario presents regional differences, namely: Southeast (52.1%), Africa (21.1%), Northeast (13.8%), Center West (6.7%) and in the Northern Region  $(6.3\%)^2$ .

Studies show that the HIV epidemic is with higher prevalence in populations of greater vulnerability as homeless people, female sex workers and men who have sex with men (MSM). In the period from 2009 to 2013, the rate of HIV prevalence was 5.9% in drug users, 4.9% in sex workers and MSM varied from 5.2 to 23.7%<sup>3-4</sup>. In Greece, the estimated prevalence of HIV was 19.8%, and the probabilities of infection were 2.3 times higher in homeless people who inject drugs<sup>5</sup>. A national survey with 47.1% people who were in the streets, the HIV prevalence was 6.8%

It is understood street population as "Heterogeneous population group that has in common extreme poverty, family bonds interrupted or weakened and the lack of regular conventional housing, and that uses the public places and the degraded areas as living space Rev Pre Infec e Saúde.2018;4:7285 and sustenance, temporarily or permanently, as well as the units for temporary accommodation or as provisional housing"<sup>7</sup>.

In this sense, the sojourn on the street associated with drug use, and the various types of violence experienced by people living in the streets make them more vulnerable to sexually transmitted infections (STIS), moreover, the lack of knowledge to adopt preventive measures and self-care can compromise the health of this population. A study revealed that in the majority of cases, the use of alcohol and crack are present in their lives. And this may be a negative factor for condom use, which is the most effective measure in the prevention of STIS<sup>8</sup>.

In Teresina, the homeless population counts with the support of specialized Reference Center for Homeless Population called POP Center. Access to the Wellness POP Center occurs from the abstraction of people living in the streets, and subsequently are registered and receiving care from professional psychologists and social workers regarding social rights.

Whereas the POP Center's Policy, in Teresina, there is assistance to health and since 2015 has the extension project support, for this type of assistance, which is an activity of the Study Group about infections and other ailments (GEDI) at the Federal University of Piauí which created the extension project entitled: Health Promotion and strategies for coping with violence, HIV and STD/Aids in street dwellers of the central zone of Teresina-PI.

Due to this problem arises the need to seek methods and essential elements for a better understanding of reality. So, taking as a basis the Problematization Methodology, it was

decided the observation of reality by means of the method of the arc of Maguerez, drawn up in the decade of 70 proposed by Bordenave and Pereira (1989)9. This applicability of the arc of Maguerez, enabled the completion of the steps to better construction of a data collection instrument.

Based on the facts presented, this study aimed to report the experience and reporting the experience of university extension activities for HIV prevention and health promotion for homeless people.

## METHOD

It is a descriptive study, experience report type, drawn up during the activities of an extension entitled: "Health Promotion project and strategies for coping with violence, HIV and STD/Aids in street dwellers of the central zone of Teresina-PI" developed by the Federal University of Piauí, which happened in two moments: the first occurred in May to August 2016 which corresponded to the planning of activities; the second, developed in October 2016 to August 2017 was characterized by the site recognition and implementation of proposed activities.

#### Firts moment

In this planning phase was the selection of students considering the better academic performance, the identification and affinity with the work and knowledge about the topic. In this sense, were selected four students to integrate the extension project.

Initially, a meeting was held with the staff of the POP Center to explain the objectives Rev Pre Infec e Saúde.2018;4:7285

Prevention of HIV in people who live in a street and goals, request support for implementation of the project in relation to the appropriate physical space, security of the team and define inclusion criteria (age greater than or equal to 18 years and live on the streets for more than three months) and did not present aggressive behavior at the time of the activities. Subsequently, the fellows were oriented to the development of activities with people in the streets by active methodology of the arc of Maguerez, following the steps: reflect on the reality found, define Key Points, Theorization, Hypotheses of Solution and Application to Reality<sup>9</sup>.

In the stage of observation of reality it was noted: predominantly male population, lack of housing, drug use, difficulty of approach and devaluation of self-care. Afterwards, emerged the following question: measures related to HIV prevention and health promotion are developed for people living in the street?

It was defined as key points: little information regarding the prevention measures for HIV and health promotion, consumption of alcohol and other drugs, violence, and difficulty of access to health services.

In step Theorization were listed: health behaviors among young people in the streets showed their vulnerability to HIV infection as a result of their high levels of high-risk sexual behavior, i.e., multiple sexual partners, involvement in survival sex and inconsistent use of condoms in contexts of considerable consumption of alcohol and drugs. Besides, many factors make young women vulnerable to HIV infection, such as the lack of power to negotiate safer sex, sex trade, be victims of forced sex<sup>10</sup>.

The high consumption of alcohol increases the risk of a number of communicable and non-communicable diseases diseases. including HIV. The link between the consumption of alcohol by men, and the increase of sexual risk behavior with the acquisition of HIV was documented in a variety of subpopulations and settings, including Angolan soldiers, migrants from central region and migrant workers in Kazakhstan and male homosexuals in India. Excessive alcohol consumption showed that can increase the progression of the disease in people living with HIV<sup>11</sup>.

On this basis were listed the following issues: carrying out educational interventions to expand the knowledge of homeless people in relation to preventive measures contributes to the reduction of risk behaviors, and thus helps to prevent HIV and promote health?

Based on the findings was built an instrument type form that has been validated on the form and content by three judges with experience in the subject matter. This form contained questions relating to sociodemographic and behavioral aspects. Yet, in this phase of the project scholars empowered to carry out rapid tests for detection of HIV and viral hepatitis. During these activities, was the advice in the pre and post test, and all participants were instructed to individually and collectively about the preventive measures for the reduction of HIV infections.

## Second moment

In October 2016 the activities were initiated at the POP Center. To compose the sample table of participants was used non-probabilistic sampling, of the convenience type; thus, the people in the streets that existed at the time of data collection were invited to participate in the research. In the end, it was told with a total of 250 interviewed. In this way, the data collection occurred through the applicability of the instrument, implementation of rapid testing and individual and collective guidance for HIV prevention and improvement of self-care and referral of cases required. This is a population of difficult approach and for greater adherence to the project by this population the team attended an average of four participants per taking into account the individual day, characteristics. such as the level of understanding and time availability.

Prevention of HIV in people who live in a street

After applying the instrument was offered the rapid test for HIV, hepatitis B and C. For all who agreed to perform the examination was requested signing the Informed Consent Form (ICF) and was carried out pre and post-test counseling. In addition to this advice, people in the streets were oriented about preventive measures for the reduction of risks to Sexually Transmissible Infections, namely: the use and distribution of male and female condoms and gel lubricant; not sharing of sharp and piercing objects; clarification on the increased risk of contracting HIV by the use of drugs, lack of housing, and high-risk sexual behavior; incentive to routine and regular testing; strengthening the HIV-positive serum or discordant couples on the importance of the use of antiretroviral treatment is associated with the use of condoms to minimize the risk of HIV infection, as well as adherence to pre-exposure prophylaxis (PrEP) and post-exposure prophylaxis (PEP).

TAll participants with results reagents for HIV and hepatitis were referred to the Outpatient Care (Serviço de Assistência Ambulatorial - SAE in Portuguese). All the participants forwarded were instructed to return to the POP Center, in the face of any difficulty of access to health services. This proposal has met all the ethical requirements n° 1.755.893<sup>12</sup>.

## RESULTS

# Understanding Vulnerabilities of Homeless People

Extension activity is an opportunity to share scientific knowledge with society promoting health promotion and prevention of disease. It is through the realization of projects of extension that is possible the interference and social change in the life of a subject<sup>13</sup>.

Homeless people have different characteristics, related to age ranging from youth to the elderly, and also in relation to schooling may be low level high. The majority are men from Teresina and other states of Brazil. These people are more exposed to various infections and is in a situation of social vulnerability, when resources and skills are insufficient or inadequate to deal with the opportunities offered by society<sup>14</sup>.

Based on this, during the period of extension people in a homeless situation reported drug use, involvement by IST, various types of violence, social stigmas, and stated that the difficulty of family life was the main reason to live on the streets. Furthermore, it was observed difficulty in interpersonal relationship among their peers and also with the work team. Prevention of HIV in people who live in a street

Homeless people often have limited access to health services and healthcare. The lack of activities of prevention and health promotion, coupled with the increase in the prevalence of chronic health conditions contributes to the worsening of preventable diseases.

There is urgent need of prevention programs based on vaccination against hepatitis B, early diagnosis of these infections, as well as greater integration of people living in situations of street in the network of health services so that they can receive full assistance.

Attention to the health of this population should be based on priority actions for assistance, regarding the vulnerability and precarious health, the difficulty of access to health services, stigma and prejudice reported by the participants.

Inter-sectoral and integrated actions that focus on the social inclusion of the people living in the streets, are important for the rescue of citizenship. Moreover, the care for the homeless population through the nursing care must come before the installation of diseases, and/or aggravating, in this way, it is necessary to sharpen these professionals, the development of skills, aimed at better therapeutic approach, listening, empathy, and scientific knowledge.

In this context, regarding the organization of health services it must improved the reception to people living in the streets taking as a basis the National Policy for homeless population, in order to respect the dignity of the human person, the right to family and community life, appreciation and respect for life and citizenship, the humanized and universalized and respect to social conditions and differences of origin, race, age, nationality, gender, sexual orientation and religion, and disabled persons<sup>7</sup>.

## DISCUSSION

It is characterized as a population living in the streets, the group of people who have in common the extreme poverty, family bonds interrupted, experiences of a social process of disaffiliation by absence of wage labor and the protections derived or dependent on this form of work, without regular conventional housing and the street as the living space and sustenance<sup>15</sup>.

The difficulty in establishing the interpersonal relationship that homeless people demonstrated is possible to be developed. For this, it is necessary to the detachment and empathy, the ability to understand without judging and respect, establishing limits<sup>16</sup>.

People with housing instability that also have long-term illnesses, such as HIV, have a greater risk of negative results of health compared with people housed in a stable way with the same health conditions<sup>17</sup>.

A study conducted in the southeast region of Brazil found a prevalence of 4.9% and 12.5% for HIV and syphilis in homeless people8. Surveys conducted in the world scenario, as in Costa Rica and in Iran also found high prevalence of HIV (7% and 3.4%), hepatitis B (32% and 2.58%) and hepatitis C (4% and 23.3%)<sup>18-19</sup>.

Without knowing the history of the person who lives in the streets, with their adversities, complaints, adversity and their natural universe, become impractical or difficult to investigate their real needs and desires while humans<sup>14</sup>. Prevention of HIV in people who live in a street

The activity has contributed to applying academic knowledge which can arise the interest for assistance in vulnerable populations in future projects. The Theorization, a planning and implementation of educational actions allowed list key points important for construction of instrument and best approach related measures for the prevention of HIV and the promotion of health with a view to increasing access to health services through referrals.

The study presented as the main limitation not being able to count on the population universe of people in a situation of street. It stands out: because this population is of difficult access and approach, some participants did not continue with the receipt of activities regarding: aggressiveness and change of address or hospitalization in institutions of rehabilitation. Highlights the importance of the partnership of a multiprofessional team of POP Center for best initial approach and support of security guards during the whole period of implementation of the activities.

#### CONCLUSION

People who live in the street are more exposed to HIV infections, considering the consumption of alcohol and other drugs, reports of violence and difficulties of access to health services. Reporting the experience gained with the use of the methodology of problematization awakened in the participants of the extension activity new perspectives on strategies for the prevention of HIV and other infections, and health promotion in people in a situation of street.

Moreover, the study revealed that problems experienced by the community,

especially in vulnerable populations has little visibility to students and the general population, in this way, it is necessary the discussion of these issues, to draw up effective interventions for health care, disease prevention and reducing the grievances.

Therefore, university extensions are considered essential activities when favoring the reflection and construction of critical thinking, guided in action-reflection-action and in relations further university.

### REFERENCES

- UNAIDS. Global Aids Update. [Internet].
  2016; Disponível em: http://unaids.org.br/estatisticas/
- Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de DST, AIDS e Hepatites Virais. Boletim Epidemiológico HIV/AIDS ano V nº 01 27ª a 53ª semanas epidemiológicas - julho a dezembro de 2015 01ª a 26ª semanas epidemiológicas - janeiro a junho de 2016. [Internet]. Brasília: 2016. Disponível em: file:///C:/Users/Acer/Downloads/boletim\_2 016\_1\_pdf\_16375.pdf
- 3. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de DST Aids e Hepatites Virais. Política brasileira de enfrentamento da Aids, resultados, avanços e perspectivas. [Internet]. Brasília: 2012. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/ politica\_brasileira\_enfrentamento\_aids\_2012 .pdf
- Kerr LR, Mota RS, Kendall C, Pinho AA, Mello MB, Guimarães MD, et al. HIV among MSM in Rev Pre Infec e Saúde.2018;4:7285

Prevention of HIV in people who live in a street

a large middle-income country. Aids. [Internet]. 2013; 27(3):427-435. Disponível em:

https://brazil.drclas.harvard.edu/files/drcla sbraziloffice/files/kerr\_hiv20among20msm\_k err20rds-1.pdf

- Paraskevis 5. Sypsa ٧, D, Malliori Μ, Nikolopoulos GK, Panopoulos A, Psichogiou M, et al. Homelessness and Other Risk Factors for HIV Infection in the Current Outbreak Among Injection Drug Users in Athens, Greece. American Journal of Public Health. [Internet]. 2015; 105(1):196-204. Disponível em: https://www.ncbi.nlm.nih.gov/pmc/articles /PMC4145040/
- Halpern SC, Scherer JN, Roglio V, Sibele F, Anne S, Ornell F, et al. Vulnerabilidades clínicas e sociais em usuários de crack de acordo com a situação de moradia: um estudo multicêntrico em seis capitais brasileiras. Cad. Saúde Pública. [Internet]. 2017; 33(6):e00037517. Disponível em: http://www.scielo.br/pdf/csp/v33n6/1678-4464-csp-33-06-e00037517.pdf
- Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Manual sobre o cuidado à saúde junto à população em situação de rua/Ministério da Saúde. [Internet]. Brasília: 2012. Disponível em:

http://189.28.128.100/dab/docs/publicacoe s/geral/manual\_cuidado\_populalcao\_rua.pdf

 Grangeiro A, Holcman MM, Onaga ET, Alencar HDR, Placco ALN, Teixeira PR. Prevalência e vulnerabilidade à infecção pelo HIV de moradores de rua em São Paulo. Revista de

Saúde Pública. [Internet]. 2012; 46(4):674-84. Disponível em: http://www.scielo.br/pdf/rsp/v46n4/4111.p df

 Berbel NAN. A problematização e a aprendizagem baseada em problemas: diferentes termos ou diferentes caminhos? Interface Comunicação, Saúde, Educação. [Internet]. 1998; 2(2):139-154. Disponível em:

http://www.scielo.br/pdf/icse/v2n2/08.pdf

- 10. Asante KO, Meyer-Weitz A, Petersen I. Substance use and risky sexual behaviours among street connected children and youth in Accra, Ghana. Substance abuse treatment, prevention, and policy. [Internet]. 2014; 9(1): 45. Disponível em: https://www.ncbi.nlm.nih.gov/pmc/articles /PMC4258041/
- 11. UNAIDS. Global Aids Update. [Internet]. 2017; Disponível em: http://www.unaids.org/sites/default/files/ media\_asset/Global\_AIDS\_update\_2017\_en.p df
- Ministério da Saúde. Conselho Nacional de Saúde. Normas envolvendo pesquisas com seres humanos - Resolução nº 466/2012 -CNS. [Internet]. Brasília: 2012; Disponível em:

http://conselho.saude.gov.br/resolucoes/20 12/reso466.pdf

 Faria IT, Marques EA, Vieira NM. Registro e documentação das atividades de extensão da Fundação de Ensino Superior de Passos (FESP). Ciência et Praxis. [Internet].
 2013; 7(11):31-34. Disponível em: Prevention of HIV in people who live in a street

http://revista.uemg.br/index.php/praxys/ar ticle/viewFile/2120/1112

14. Bordignon JS, Silveira CCSS, Delvino E M, Araújo CP, Lasta LD, Weiller TH. Adultos em Situação de Rua: Acesso aos Serviços de Saúde e Constante Busca Pela Ressocialização. Revista Contexto & Saúde. [Internet]. 2013; 11(20):629-634. Disponível em:

https://www.revistas.unijui.edu.br/index.ph p/contextoesaude/article/view/1610

- 15. Botti NCL, Castro CG, Silva MF, Silva AK, Oliveira LC, Castro ACHOA, et al. Prevalência de depressão entre homens adultos em situação de rua em Belo Horizonte. J Bras Psiquiatr. [Internet]. 2010; 59(1):10-6. Disponível em: http://www.scielo.br/pdf/jbpsiq/v59n1/v59 n1a02
- 16. Lanceloti J. Vínculo no Atendimento à população em situação de rua. In: Ministério da Saúde. Manual sobre o cuidado à saúde junto à população em situação de rua. Atenção Secretaria de à Saúde. Departamento de Atenção Básica. [Internet]. Brasília: 2012; Disponível em: http://189.28.128.100/dab/docs/publicacoe s/geral/manual\_cuidado\_populalcao\_rua.pdf
- 17. Parker RD, Dykema S. Differences in Risk Behaviors, Care Utilization, and Comorbidities in Homeless Persons Based on HIV Status. JANAC: Journal of the Association of Nurses in AIDS Care. [Internet]. 2014; 25(3):214-223. Disponível em: https://www.nursesinaidscarejournal.org/ar ticle/S1055-3290(13)00121-0/pdf

- Leiva-Hidalgo J, Madrigal-Méndez A, Salas-Segura D. Seroprevalence of Heptatis B, C and VIH en Homeless People in Costa Rica. Rev Costarr Salud Pública. [Internet]. 2013; 22(2):113-118. Disponível em: http://www.scielo.sa.cr/pdf/rcsp/v22n2/art 05v22n2.pdf
- 19. Amiri FB, Gouya MM, Saifi M, Rohani M, Tabarsi P, Sedaghat A, et al. Vulnerability of

Prevention of HIV in people who live in a street

Homeless People in Tehran, Iran, to HIV, Tuberculosis and Viral Hepatitis. PLos One. [Internet]. 2014; 9(6): e98742. Disponível em:https://www.ncbi.nlm.nih.gov/pmc/arti cles/PMC4045893/pdf/pone.0098742.pdf

Submitted: 2018-08-10 Accepted: 2018-09-20 Published: 2018-10-30

## COLABORATIONS

Magalhães RLB participated in the initial conception of the research project, from choice and design of the study. Brito GMI, Oliveira VMC, Borges BVS, Silva DCP contributed in the data collection, organization, interpretations of the results obtained and article writing. Magalhães RLB, Rocha SS and Avelino FVSD contributed in the final reading and critical structuration of the scientific writing of the article.

CONFLICTS OF INTEREST:

No conflict of interest.

# ACKNOWLEDGMENTS:

The Federal University of Piauí, together with the Pro Deanship of Extension for their financial support. The City Health Foundation of Teresina, for authorizing the study and the Specialized Reference Center to Homeless Population (POP Center) for providing a place.

## **FINANCING SOURCES:**

Pro Deanship of Extension of the Federal University of Piauí

CORRESPONDÊNCIA Giselle Mary Ibiapina Brito Rua Salomão Said, 590. São João CEP: 64046-610 Teresina (PI)