

## Analysis of Sexual Behavior of Teenagers and Health Risk Factors

### Análise do Comportamento Sexual de Adolescentes e Fatores de Risco à Saúde

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**Abstract**

The objective was to analyze the behavioral diagnosis of adolescents of a public school through the Precede-Proceed model. A qualitative study of the participative research-action in health (PaPs) type, developed with adolescents, students of a public school in the city of Paraíba do Sul-RJ. The data collection techniques were the application of a questionnaire with closed questions and an interactive dynamic called World Café. The data of the questionnaire are presented by means of descriptive statistics and those of the World Café through the online tool Wordle. The qualitative analysis was thematic that corroborated in four categories. The results indicate that adolescents are aware of risks, prevention and pregnancy in adolescence. However, exposure to risks is a frequent behavior among teenagers. It is concluded that families, especially parents, have participated in discussions about sexual health with their children, and that adolescents rarely access information about sexuality, sex, diseases and prevention with health professionals, especially the Family Healthcare Strategy.

**Keywords:** Adolescent; School Health; Family health strategy

**Resumo**

Objetivou-se analisar o diagnóstico comportamental de adolescentes de uma escola pública por meio do modelo *Precede-Proceed*. Estudo de abordagem qualitativa do tipo pesquisa-ação participativa em saúde (PaPs), desenvolvida com adolescentes, alunos de uma escola pública do município de Paraíba do Sul-RJ. As técnicas de coleta de dados foram aplicação de um questionário com perguntas fechadas e uma dinâmica interativa denominada *World Café* ou *Café Mundial*. Os dados do questionário são apresentados por meios de estatística descritiva e os do *World Café* por meio da ferramenta *online Wordle*. A análise qualitativa foi temática que corroborou em quatro categorias. Os resultados apontam que existe conhecimento por parte dos adolescentes quanto aos riscos, prevenção e gravidez na adolescência, contudo, a exposição aos riscos é comportamento freqüente entre os adolescentes. Conclui-se que as famílias, principalmente os pais, têm participado de discussões sobre saúde sexual com os filhos e que os adolescentes acessam pouco as informações acerca de sexualidade, sexo, doenças e prevenção com os profissionais de saúde, em especial os da Estratégia Saúde da Família.

**Palavras - chave:** Adolescente; Saúde Escolar; Atenção Primária de Saúde, Estratégia Saúde da Família.

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### Introduction

Adolescence is defined as the second decade of life, which goes from ten to nineteen years old <sup>(1)</sup>, and comprises a diversity of emotional, cognitive, social and corporal transformations, in addition to those related to affective behaviors and sexuality <sup>(2,3)</sup>.

In adolescence, basic patterns of behavior that influence lifelong behavior, such as sexuality <sup>(4)</sup>, are established. In this sense, knowing the behaviors and lifestyles of adolescents is of significant importance for the planning of the set of interventions or practices in health, especially those to be carried out by the teams of professionals who work in the Family Health Strategy.

When discussing health practices aimed at adolescents in the Family Health Strategy (ESF), it is important to highlight aspects related to care, such as the recognition and appreciation of the intersubjectivity between the people who provide care, the ones who receive care and those who participate in it, in order to create a relationship of respect, empathy, help and bond between those involved <sup>(5)</sup>.

One of the main resources used in adolescent care is health education, which, in addition to being a scientific practice of reorienting life habits, is a governmental strategy to guarantee the rights to information and Health Promotion offered through the Program Health in School (PSE), which has been contributing to the empowerment of sexual and reproductive rights of the genres <sup>(6)</sup>.

The onset of sexual activity in adolescence may be accompanied by a lack of knowledge about the risks of Sexually Transmitted Diseases (STDs), such as AIDS <sup>(4)</sup>. Thus, knowing the behavior, predisposing factors of reinforcement and facilitators of this stage of life has relevance for the planning of adolescent care, as well as directing the actions of health education.

Many methods can be used to assess and monitor adolescent behavior. One of these methods is called Precede-Proceed, where in one of its

phases it is possible to trace a behavioral and environmental diagnosis of a particular social group <sup>(7)</sup>.

Health interventions that impact on exposures to risk factors presented in adolescent behaviors are relevant to public health and are justified by the incidence of health indicators that point to increased cases of teenage pregnancy and sexually transmitted diseases.

The question that guides this study is: How do adolescents behave in terms of sexual and reproductive health?

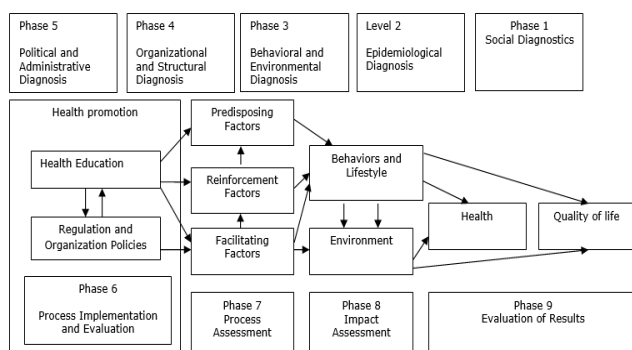
Based on what's learned on this study, the aim is to analyze the behavioral diagnosis of adolescents of a public school through the application of phase 3 of the Precede-Proceed model.

### Method

This is a qualitative research of the type participatory research in health (PaPs), whose proposal is to bring the subjects of the research and researchers in all phases of the research. This study is based on the Precede-Proceed Model, which is developed in its entirety in nine phases, to mention: social diagnosis, epidemiological diagnosis, behavioral and environmental diagnosis, educational and organizational diagnosis, political and administrative diagnosis, intervention (health promotion practice that contributes to regularization and organization policies), process implementation and evaluation, process evaluation, impact assessment and evaluation of results, as shown in Figure 1.

**Figure 1.** Schematic of the PRECEDE-PROCEED

model. Rio de Janeiro, RJ, Brazil, 2018.



Source: scheme of the PRECEDE - PROCEED model, adapted from Green & Kreuter (1991: 153) by Brito (8).

In the present study are appropriated and analyzed data concerning the third phase of this model, a phase that seeks to build the behavioral and environmental diagnosis. This stage presented predisposing factors, reinforcing factors, facilitating factors, behaviors and lifestyles.

The study was carried out in the city of Paraíba do Sul, located in the Center - Sul Fluminense Region, in the State of Rio de Janeiro. The data presented here are from 35 adolescents between 12 and 18 years old, students from the sixth to ninth grade of a public school.

The Inclusion Criteria for participation in the research were: Boys and Girls aged 12 to 18 years old; To be enrolled in 6th, 7th, 8th or 9th grade; Participate in at least 75% of the meetings. The Exclusion Criteria were: Students who missed more than 25% of the meetings; Did not fill out the questionnaire or filled it in incompletely. The signing of the TCLE and TALE is the right of the participants, and therefore does not enter inclusion and exclusion criteria.

Data collection took place between September and December 2017 through an interactive dynamic called World Café or Café Mundial, which was directed by four rounds: sexuality, prevention in sexual and reproductive health, risks to sexual and reproductive health, and teenage pregnancy. In addition, the adolescents also answered a questionnaire adapted from the

survey conducted in the year 2012 by Belisse (10), composed of sixteen closed questions.

The data of the questionnaire are analyzed by means of descriptive statistics and those of the World Café through the online tool Wordle.net (11). The program used is an online tool that generates word clouds from the provided text, emphasizing the words that appear most frequently in the original text.

The qualitative analysis was thematic (12) that culminated in the construction of the categories: (1) Access to information on sexual and reproductive health; (2) Understanding the risks that permeate the reproductive health of adolescents; (3) Behaviors regarding prevention of pregnancy and sexually transmitted diseases and (4) Influences on sexual and reproductive behavior of adolescents.

It should be emphasized that the research respected the ethical and legal aspects, as regulated in CNS Resolutions 466/2012 and 510/2016 (13-14). The project was approved by the Ethics Committee of the Hospital Universitário Antônio Pedro of the Federal Fluminense University, with number CAAE 68462017.5.0000.5243 on August 21, 2017, receiving opinion No. 2,230,992.

## Results

After the data collection using the questionnaire adapted from Belisse (10), the predominance of females was observed in 54% (n = 19) and an average age of the overall participants of 13.88 years. In addition, 45% (n = 16) of the target audience were enrolled in the sixth year, which is the most representative age group in the analysis.

When asked if TV shows influence in any way the early start of sexual activity, 83% (n=34) said yes. Regarding the possibility of getting pregnant in the first sexual relation, 68.6% believe it's possible. When asked if their parents (mother or father) or their legal guardians talked to them about subjects related to sexuality/sex/prevention, 57% (n=20) said yes, while 40% (n=14) said no, and 3% (n=1) didn't answer.

Regarding the information about sexuality and sex, 34.3% (n=12) of the teenagers said they learned from parents or legal guardians, 17% (n=06)

learned from friends, 40% (n=14) in school during sex education classes, 8.7% (n=03) with professionals of the Family Health Unit.

In the questionnaire regarding pregnancy, when asked when a teen girl gets pregnant, the answers were: 5.7% (n=02) the girl and the boy did not know birth control methods; 48.6% (n=17) the girl and the boy knew about birth control, but believed it wouldn't happen to them; 28.6% (n=10) the girl and the boy knew about birth control, they knew that pregnancy was possible, but decided to engage in sexual relations without a condom anyway and risk getting pregnant; 8.6% (n=03) the boy did not accept the use of condoms; 2.9% (n=01) the girl did not accept the use of condoms; and 5.6% (n=06) both had difficulties when putting the condom on.

As to the approach regarding sexually transmitted diseases (STDs), 80% of the teenagers expressed they believed they knew the ways of contamination and prevention of these diseases well. When questioned, for example, about the use of condoms, 17.1% (n=06) said they frequently use it; 5.7% (n=02) said they use it, but not frequently; 2.9% (n=01) said they've never used it; and 74% (n=26) said they've never had sexual relations.

Regarding the influence coming from friends, 63% (n=22) believe that their group of friends don't encourage them to have their first sexual relation. However, 37% (n=13) of the teenagers believe that the group of friends do encourage them in this decision.

About birth control methods, 57.2% (n=20) affirm knowing the methods very well and know how to use it without any problem, and 42.8% (n=15) affirm having doubts on how to use most of them. As to condoms, 91.4% (n=32) believe it's the best birth control method for teenagers, while 8.6% (n=03) believe that condoms are not the best method.

The interactive World Café dynamics was carried out with the following didactics: division of the participants into four groups, where each group discussed the following topics: sexuality, risks to sexual and reproductive health, preventions for sexual and reproductive health, and teenage

pregnancy. In each group a host was elected, and the other participants ran sequentially in the four groups giving their contributions in the final production, which were posters in which they wrote in colored pen phrases or words that expressed the collective understanding about the four themes. In the end, each group presented a poster corresponding to the theme. The data of each poster were launched in the online tool and are presented in figures 2, 3, 4 and 5.

**Figure 02.** Understanding about sexuality by teenagers- extracted in the World Café dynamics. Paraíba do Sul, RJ, Brazil, 2018.



Source: research data

When analyzing the data of the discussion about sexuality, it is noticed that there is not a unified concept formed for the adolescents. There was a greater prevalence of words that interconnected the concept, such as: transformations, hormones, changes, desires, risks, pleasure, illnesses, prevent, desires, sex, thoughts and feelings.

The concept of sexuality is still little discussed, not being familiar to adolescents and young people. A study with young undergraduates of a nursing course in the Northeast Region of Brazil presented a very similar result, which highlights that sexuality is not fully understood by adolescents as an individual factor and constituent of the human personality, which are inseparably integrated into the other aspects of life and is related to the biopsychosocial and spiritual aspects of the individual<sup>(15)</sup>.



**Figure 3.** Understanding of risks to sexual and reproductive health by teenagers - extracted from the World Café dynamics. Paraíba do Sul, RJ, Brazil, 2018



Fonte: dados da pesquisa.

In the data produced in the discussion about the risks to sexual and reproductive health, there were highlights of phrases and words that connect the risk of illness, where disease, early pregnancy, risks, HIV, AIDS, violence, condoms and contagion predominate. It is understood that for teens, risks to sexual and reproductive health are linked to pregnancy and diseases, especially HIV. Violence and prevention were still present in the debate, which shows that in addition to sexual behavior, the factors that permeate the social, such as violence, are understood by them as a risk.

**Figure 4.** Understanding on sexual and reproductive health prevention by teenagers - extracted from the World Café dynamics. Paraíba do Sul, RJ, Brazil, 2018.



Source: research data.

The word cloud generated by the discussion during the World Café in the theme Prevention in Sexual and Reproductive Health highlighted the words: condom, relationship, prevention, health, diseases. In their understanding, prevention appears to be a good thing for health, and many associate the word "good" with the words "prevention" and "illness." In this sense, it is understood that there is an understanding in the group that there are risks, and these are connected directly with sexually transmitted diseases. Thus, there are indications that prevention is known to the fact that the word "condom" stood out.

**Figure 5.** Understanding teenage pregnancy in teenagers - extracted from the World Café dynamics. Paraíba do Sul, RJ, Brazil, 2018.



Source: research data

In the result of the collective discussions about teenage pregnancy, the following words were extracted: pregnancy, adolescence, child, life, person, prevent, danger. However, other words with less emphasis also circulated in the discussions: womb, damage, dying, injury, body, wrong, patience, delay and caring.

## Discussion

The results corroborate four categories of discussion, namely: "Access to information on sexual and reproductive health"; "Understanding the risks that permeate the health and reproductive health of adolescents"; "Behaviors in relation to the prevention of pregnancy and sexually transmitted diseases"; "Influences on sexual and reproductive behavior of adolescents".

### Access to information on sexual and reproductive health

It was verified that the information obtained on sexual and reproductive health by the adolescents were, in great majority, through their parents or guardians, the group of friends being the second group to pass on such information and the school occupied the third place. The professionals of the Family Health Units were the ones that had the least representation in this information for adolescents.

It has been proven that, in the last decades, adolescents have gotten more space to discuss issues related to sex and sexuality with parents, since 57% (n = 34) of adolescents stated that parents talk about sexuality, sex and prevention. However, the conversations are still very superficial, with no real clarification about the need for some care before sexual initiation and adequate knowledge of contraceptive methods <sup>(16)</sup>.

On the experience of sexuality, this translates the potentialities of existence itself, especially if it is placed in the field of discoveries, experiments and experience of freedom <sup>(17)</sup>. Teenagers' sexuality is lived according to the values learned in the family environment, since it is in this environment that, since childhood, they teach and conduit teens as to what is acceptable to the socialization of the individual, composing their symbolic universe. The processes of socialization of the individual are constructed in this way, internalizing contents of the subjective reality, becoming a member of society, where they act according to the different social roles <sup>(18)</sup>.

Understanding the school as a dynamic environment for knowledge production, the Ministry of Health created the Health in School Program to strengthen knowledge relations between the school environment and health policies. The discussion of sexuality and sexual and reproductive health is part of the components of this program <sup>(2)</sup>.

The importance of the program is undeniable. However, it should be emphasized that actions in health education processes should focus on teenagers in different contexts, in health units,

schools and within the family, not only conditioned by the existence of a specific program <sup>(19)</sup>. Access to information on sexual and reproductive health needs to be based on the socio-cultural context, respecting the interaction of adolescents and having a continuous and reflective character, in a way that impacts on experiences and exposure to risks.

### Understanding the risks that permeate the reproductive health of adolescents

Understanding the risks of teenage sexual and reproductive health is also guided by a universe of doubts, uncertainties and undervaluation of prevention. 48.6% (n = 17) of adolescents believe that teenage pregnancy occurs because girls and boys do not use birth control methods, even though they know about them, based on the certainty that such an event would not happen to them. Thus, in a mixture of romanticism, immaturity and magic, they are daily exposed to the risks of early pregnancy or STDs.

Despite the understanding of the risks to sexual health, exposure to these risks has been frequent. The increase in STD rates is due to the early onset of sexual activity, which is becoming more common among adolescents <sup>(18)</sup>. To think for this group of creative and innovative actions of health promotion and prevention of diseases related to this theme is necessary for care in the Family Health Strategy.

A study that followed a cohort in Pelotas, Rio Grande do Sul, Brazil, for 15 years, showed that sexual practice before the age of fifteen was directly related to other behaviors considered to be a health risk, such as smoking and alcohol, drunkenness, use of illicit drugs and involvement in fights <sup>(20)</sup>. This fact corroborates the understanding that exposure to numerous risks is a practice of adolescence that urges intervention in public health.

The same study showed that the onset of boys' sexual life predates that of girls, and this fact is linked to the Brazilian socio-cultural context, with the appreciation of masculinity <sup>(20)</sup>. The reflection on the risk exposure by boys in relation to girls is referred to, since the earlier the onset of sexual life, the greater the exposure to risks related to sexual and reproductive health.

The incidence of unprotected sexual practice among adolescents shows that the relationship between the understanding of the existence of risks and the expository behavior are independent <sup>(1, 20-21)</sup>. The curiosity that culminates the exposure is a worrisome factor that characterizes the epidemiology of STDs in this age group.

### **Behaviors regarding prevention of pregnancy and sexually transmitted diseases**

Prevention of pregnancy and sexually transmitted diseases is part of the sexual and reproductive behavior of some adolescents. Thus, it was evidenced that 80% (n = 28) of adolescents believe that they know the forms of contamination and prevention of these diseases, and 17.1% (n = 06) affirm that they use condoms as a prevention method and that they know this is the most appropriate method of prevention. Thus, these are relevant data. However, with regard to contraceptive methods, there are still many doubts among adolescents, since most of them say they know them and do not know how to differentiate them.

A study carried out in 2013 in the city of Silva Jardim, state of Rio de Janeiro, Brazil, found that girls were given more information on how to avoid pregnancy in relation to boys and that the methods most used in the first sexual intercourse were the male condom as the leading method, followed by the contraceptive pill, and in the third, interrupted intercourse <sup>(22)</sup>.

Despite the proven knowledge of prevention methods, the use of condoms is not constant among adolescents. In this study, the prevalence of condom use among adolescents is 17.1%, corroborating a study that indicates that the use of the method occurs sporadically (59.7%) in this age group (22).

The use of preventive methods is not directly related to teenagers' expertise, but its effective use involves historical and cultural aspects that make it difficult to perform a behavioral transformation for the sake of the sexual act <sup>(21,22)</sup>. Actions to promote sexual and reproductive health should be based on the understanding of cultural

spaces and experiences in order to be effective.

### **Influences on sexual and reproductive behavior of adolescents**

The Precede-proceed model lists several factors that should be considered in community interventions. Three of these are more important to understand the behavioral diagnosis, which are: the predisposing factors, the factors of reinforcement, and the facilitating factors. The predisposing factors are the psychological factors that influence the individuals' health behaviors. Reinforcement is in a particular person's reference groups, such as family and school. The facilitators emanate from the socio-cultural context of the community in which it is inserted <sup>(8)</sup>.

The media are, evidently, forming opinions and behaviors in a society, in a certain time. Regarding the influence of television to the beginning of the sexual life of the adolescents, 83% (n = 29) affirmed that it did influence them. Regarding influences by groups of friends, 63% (n = 22) believe that the group of friends and / or friends do not encourage them to have their first sexual relation. However, 37% (n = 13) of adolescents believe that they do encourage it.

Family, school, and friends are influential in teenage sexual behavior. The influence of family structure on adolescents' sexuality is a determining factor in their experiences acquired in the development phase and sexual maturity <sup>(18)</sup>. It is a prerequisite if they do not understand the structures that adolescents are inserted in, revealing the social and cultural environment, so that sexual and reproductive health promotion actions can be planned with greater possibility of success.

School is a strong environment of interference in adolescent sex education. It is a very appropriate scenario for the development of a sex education program because, in addition to direct action on learners, it indirectly encourages the family to play its part. It is still considered a social environment in which the individual spends a large part of his or her life and is one of the main elements for interpersonal contacts, so it should contribute to the development of a sexual education that



promotes a sense of self-responsibility and commitment in adolescents <sup>(23)</sup>.

Teenagers' sexual development is influenced by themselves, the family and their peers, but the pressure exerted by this group contributes as an important factor to the onset of sexuality <sup>(24)</sup>. However, it is understood that the onset of teenage sexual life is permeated by facilitating factors, such as the group of friends. The reinforcing factors associated with the school and family teachings would contribute to less risk exposure, were it not for the superficiality of the information.

### Conclusion

The behavior of adolescents at the beginning of their sexual and reproductive life is permeated by influences derived from the knowledge acquired with parents, friends, and in the school environment. Knowledge about risk and prevention measures is a recurring theme of discussion between them, but this knowledge is still fraught with doubts, fears and curiosities.

Although they understand the importance of using methods to prevent pregnancy and sexually transmitted diseases, adolescents have behaviors that leave them very exposed to risks with possible health compromises.

The use of a condom (male condom) is understood as an effective method to prevent teenage pregnancy and sexually transmitted diseases, being the most used, even if there are still questions about its use.

The collected data showed that families, especially parents, have made it possible to acquire knowledge about sexuality, sex, diseases and prevention through the opening of spaces for dialogue with their adolescent children.

Regarding the professionals of the Family Health Strategy, the adolescents reported that these are very little accessed. There are many barriers between them, such as age and the fragile bond between them. And this fact points to a limitation in the practice of Family Health Strategy professionals regarding the promotion of adolescent health about their sexual and reproductive health. In this sense, it urges the

importance of mobilization for actions with greater impact related to this theme in order to reduce the rates of adolescents who initiate sexual life with little information, exposing themselves to risks.

The study presented limitations of analysis by the small group of participants who expressed interest in being in all phases of the intervention. As a contribution to the clinic, the participatory approach presented as a facilitator in the approach in health education for the Family Health Strategy.

Scientific relevance has been demonstrated for future researches with a participatory approach that explore sexual and reproductive health issues and bring understanding of social, economic and cultural factors and their relationship with adolescents' behavior and experience in order to guide public health policies that reaches the teenage population.

### References

1. Heidemann M. Adolescence and health: a preventive view. Rio de Janeiro: Vozes; 2006.
2. Ministério da Saúde (BR). National guidelines for comprehensive healthcare for adolescents and young people in the promotion, protection and recovery of health. Ministério da Saúde, Secretaria de Atenção em Saúde, Departamento de Ações Programáticas Estratégicas, Área Técnica de Saúde do Adolescente e do Jovem. – Brasília: Ministério da Saúde, 2010.
3. Malta DC, Silva MAI, Mello FCM, Monteiro RA, *et al*. Sexual health of adolescents according to the National School Health Survey. Rev Bras Epidemiol [internet]. 2011. [Acesso 20 Set 2017]; 14(1): 147-56. Available in: <http://www.scielo.br/pdf/rbepid/v14s1/a15v14s1.pdf>.
4. Cordeiro JKR, Santos MM dos, Sales LKO *et al*. School adolescents on STD / AIDS: when knowledge does not follow safe practices. Rev enferm UFPE [on line]. 2017. [Acesso em 18 dez 2017]; 11(Supl. 7):2888-96. Available in: <https://periodicos.ufpe.br/revistas/revistaenferma>

gem/issue/view/1715.

5. Santos FPA, Acioli S, Machado JC et al. Family Health Strategy Team Care Practices. *Rev enferm UFPE* [on line]. 2018. [Acesso em 20 fev 2018]; 12(1):36-43. Available in: <https://periodicos.ufpe.br/revistas/revistaenfermagem/issue/view/2129>.

6. Ministério da Saúde (BR). National guidelines for comprehensive healthcare for adolescents and young people in the promotion, protection and recovery of health. Ministério da Saúde, Secretaria de Atenção em Saúde, Departamento de Ações Programáticas Estratégicas, Área Técnica de Saúde do Adolescente e do Jovem. – Brasília: Ministério da Saúde; 2010.

7. Green LW, Kreuter M. Health promotion planning: An education and environmental approach. Mayfield, USA: Mountain View. [site] 2017. [Acesso em 29 de Set 2017]. Available in: <http://www.lgreen.net/precede.htm>.

8. Brito IS. Awareness raising for brucellosis prevention in endemic areas. [Dissertação Doutorado em Ciências de Enfermagem]. Portugal: Instituto de Ciências Biomédicas Abel Salazar da Universidade do Porto. [internet] 2007. [Acesso 10 Jan 2018] Available in: <https://repositorio-aberto.up.pt/handle/10216/7216>.

9. Teza P, Miguez VB, Fernandes RF et al. Generation of ideas: application of the world café technique. *Int. J. Knowl. Eng. Manag* [internet]. 2014. [Acesso em 10 fev 2018]; 14(1): 2316-6517. Available in: <http://incubadora.periodicos.ufsc.br/index.php/IJKEM/article/view/1990>.

10. Belisse CL. Early Sexual Activity in Adolescence: The Importance of Sex Education in Schools. Projeto de Desenvolvimento Educacional (PDE) desenvolvido pela SEED/PR. Paraná; 2012. Available in: <http://www.diaadiaeducacao.pr.gov.br/portals/pde/arquivos/1460-8.pdf>.

11. Wordle.net. [on line]. [Acesso em 12 fev 2018]. Available in: <http://www.wordle.net/>.

12. Bardin L. Content analysis. SP: Edições 70, 2011.

13. Conselho Nacional de Saúde. Resolution number 466 de 12 de dezembro de 2012. [on line]. [Acesso em 10 de junho de 2016]. Available in: <http://conselho.saude.gov.br/resolucoes/2012/reso466.pdf>.

14. Nacional de Saúde. Resolução nº 510 de Abril de 2016. [on line]. [Acesso em 25 de agosto de 2016]. Disponível em: <http://conselho.saude.gov.br/resolucoes/2016/reso510.pdf>.

15. Nogueira IS, Labegalini CMG, Pereira KFR et al. Action research on human sexuality: a Freirean approach in nursing. *Cogitare Enferm* [internet]. 2017. [Acesso em 12 dez 2017]; 22(1): 01-10. Available in: <http://revistas.ufpr.br/cogitare/article/view/46281>.

16. Torres TRF, Nascimento EGC, Aschieri JC. Nursing care in sexual and reproductive health of adolescents. *Adolescência e Saúde*. 2013;10(supl.1):16-26.. [Acesso 20 fev 2018]. Available in: [http://www.adolescenciaesaude.com/detalhe\\_artigo.asp?id=391](http://www.adolescenciaesaude.com/detalhe_artigo.asp?id=391).

17. Pinto ACS, Silva AA, Ferreira AGN, Martins AKL, Pinheiro PNC. Talking about HIV / AIDS prevention with young men who use crack. *Revista Enfermagem Atual* [internet]. 2017 [Acesso em 24 fev 2018]; 8(1):11-18. Available in: [http://revistaenfermagematual.com.br/revistas/revista\\_20-01.pdf](http://revistaenfermagematual.com.br/revistas/revista_20-01.pdf).

18. Ressel LB, Junges CF, Sehnem GD, Sanfelice C. The influence of the family on the sexuality experience of adolescent women. *Esc Anna Nery* [impr]. 2011 [Acesso em 24 fev 2018]; 15(2): 245-250. Available in: <http://www.scielo.br/pdf/ean/v15n2/v15n2a05.pdf>.

19. Leite CT, Vieira RP, Machado CA, Quirino GS, Machado MFAS. Health education practice perceived by schoolchildren. *Cogitare Enfermagem* [internet] 2014. [Acesso em 24 fev 2018]; 19(1):13-19. Available in:

[https://www.researchgate.net/profile/Glauberto\\_Quirino/publication/287442312\\_PRATICA\\_DE\\_EDUCACAO\\_EM\\_SAUDE\\_PERCEBIDA\\_POR\\_ESCOLARES/links/573bd08908ae9f741b2d893a/PRATICA-DE-EDUCACAO-EM-SAUDE-PERCEBIDA-POR-ESCOLARES.pdf](https://www.researchgate.net/profile/Glauberto_Quirino/publication/287442312_PRATICA_DE_EDUCACAO_EM_SAUDE_PERCEBIDA_POR_ESCOLARES/links/573bd08908ae9f741b2d893a/PRATICA-DE-EDUCACAO-EM-SAUDE-PERCEBIDA-POR-ESCOLARES.pdf).

20. Gonçalves H, Machado EC, Soares ALG et al. The onset of sexual life among adolescents (from 10 to 14 years old) and health behaviors. *Rev Bras Epidemiol* [internet]. 2015 [Acesso em 24 fev 2018]; 18(1): 1-18. Available in: [https://www.scielo.org/scielo.php?pid=S1415-790X2015000100025&script=sci\\_abstract](https://www.scielo.org/scielo.php?pid=S1415-790X2015000100025&script=sci_abstract).

21. Jardim FA, Campos TS, Mata RN et al. Sexually transmitted diseases: the perception of adolescents in public schools. *Cogitare Enferm* [internet]. 2013. [Acesso em 10 fev 2018]; 18(4):663-8. Available in: <http://revistas.ufpr.br/cogitare/article/view/46365>.

22. Bagli DM, Miranda SM, Martins CBG et al. Socioeconomic-family issues associated with the sexual practice of adolescents: a study of the capital Mato Grosso. *Cogitare Enferm* [internet]. 2011. [Acesso em 10 fev 2018]; 16(4):667-74. Available in: <http://revistas.ufpr.br/cogitare/article/view/20498/17055>.

23. Vonk ACRP, Bonan C, Silva KS. Sexuality, reproduction and health: experiences of adolescents living in small countryside towns. *Ciência & Saúde Coletiva* [internet]. 2013 [Acesso em 22 fev 2018]; 18(6):1795-1807. Available in: [http://www.scielo.br/scielo.php?pid=S1413-81232013000600030&script=sci\\_abstract&tlng=pt](http://www.scielo.br/scielo.php?pid=S1413-81232013000600030&script=sci_abstract&tlng=pt).

24. Silva RAS, Nelson ARC, Duarte FHS, Prado NCC, Holanda JRR, Costa DARS. Students' knowledge of transmission, prevention and risk behaviors

regarding STDs / HIV / AIDS. *J. res. fundam Care* [online]. 2016. [Acesso em 20 fev 2018]; 8(4): 5054-5061. Available in: [http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/3634/pdf\\_1](http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/3634/pdf_1).