TEENAGERS AND YOUTH PERCEPTION ABOUT ALCOHOL PATHOPHYSIOLOGY AND INFLUENCE THIS ON CONSUMPTION

ABSTRACT
Objective: to analyze the perception of adolescents and young people from high school about the physiopathology of alcohol and its influence on its consumption. Method: exploratory, descriptive study of a qualitative approach, with 24 adolescents and young people. The production data was held in July 2014, using a semi-structured interview. For analysis, the content analysis technique was used. Results: after analysis, the themes emerged: From euphoria and sadness to addiction and death: awareness of young people about the acute and chronic effects of alcohol on the body; consuming alcohol or not: knowing the effects and then decide. Conclusion: facing the information about the effects of drinking, adolescents believe that they would have a chance to rethink their choices and demand better in their interventions to institutions promoting information such as schools and the media. Descriptors: Adolescent´s Health; Alcohol; Health Promotion.

RESUMO
Objetivo: analisar a percepção de adolescentes e jovens do ensino médio acerca da fisiopatologia do álcool e a influência desta sobre o seu consumo. Método: estudo exploratório-descritivo, de abordagem qualitativa, com 24 adolescentes e jovens. A produção de dados foi realizada em julho de 2014, utilizando-se entrevista semiestruturada. Para análise, utilizou-se a Técnica de Análise de conteúdo. Resultados: após a análise, emergiram as categorias temáticas: Da euforia e tristeza à dependência e morte: percepção de adolescentes e jovens acerca dos efeitos agudos e crônicos do álcool para o organismo; Consumir ou não o álcool: conhecer os efeitos para então decidir. Conclusão: diante de informações sobre os efeitos da bebida, os adolescentes acreditam que teriam a chance de repensar suas escolhas e reivindicar melhores intervenções diante de instituições promotoras de informações como as escolas e as mídias. Descriptores: Saúde do Adolescente; Álcool; Promoção da Saúde.

RESUMEN
Objetivo: analizar la percepción de adolescentes y jóvenes de la educación secundaria acerca de la fisiopatología del alcohol y la influencia de esta sobre su consumo. Método: estudio exploratorio-descritivo, de enfoque cualitativo, con 24 adolescentes y jóvenes. La producción de datos fue realizada en julio de 2014, utilizando entrevista semi-estructurada. Para análisis, se utilizó la Técnica de Análisis de contenido. Resultados: después del análisis, surgieron las categorías temáticas: De la euforia y la tristeza a la dependencia y muerte: percepción de adolescentes y jóvenes acerca de los efectos agudos y crónicos del alcohol para el organismo; Consumir o no el alcohol: conocer los efectos para entonces decidir. Conclusión: frente a las informaciones sobre los efectos de la bebida, los adolescentes creen que tendrían la chance de repensar sus elecciones y reivindicar mejores intervenciones frente a las instituciones promotoras de informaciones como las escolas y las medias. Descriptores: Salud del Adolescente; Alcohol; Promoción de la Salud.
INTRODUCTION

Adolescence is the period from 10 to 19 years, 11 months and 29 days old, unlike the youth, characterized by 15 to 24 years old. These chronological limitations follow the convention of the World Health Organization (WHO), and they are described in the National Guidelines for Health Care of Adolescent and Youth People in the Promotion, Protection and Recovery of Health, highlighting the term young people as an appropriate setting for individuals from 10 to 24 years old.  

Adolescence is not distinguished only by body changes and appearance of secondary sexual characteristics, but for all aspects of the psychic, emotional, social or cultural character. The psychosocial and cultural changes during this process of transition from childhood to adulthood raises the personality of the construction of each, which is marked by different experiences and meanings, considering each context. Meanwhile, the adolescent or young person will acquire principles, values, beliefs, behaviors and attitudes that helped the abstract thought as the foundation for the construction of their role in society subsidizing their will and facing choices in the search for autonomy, generating intense anxiety and countless fantasies.

Also associated with the confluence of the various changes, the search for new experiences and sensations, the longing for experiencing behaviors as adults, the need for acceptance by the group, the expansion of socialization and independence from parents emerged. However, the limited ability to deal with these situations of everyday social life may favor the appearance of uncertainty, anxiety and increased impulsivity, characteristics that influence the adoption of behaviors considered risky to their health, such as the use of psychoactive substances, especially the alcohol.

Testifying the prior issue, a study with students from a public school in the city of Cajazeiras/PB, found that 71% of respondents had used alcohol, 66.4% had experienced it, and 69.4% used it for fun. Another study indicates that in most cases, individuals considered more prone to high consumption of alcohol among students are those finishing the school, maybe because they are entering the adulthood. Thus, it is important that the individual's knowledge about these substances and their effects to the body is discussed in the literature as a possible influence on the consumer so that ignorance may contribute to the increased intake of alcoholic beverages.

In this sense, considering the increasing use of early alcohol and other drugs in the population, it is very relevant to discuss this issue for prevention and health promotion. Given the above and the relevance of the topic for the prevention and promotion of adolescent’s health, the following guiding questions emerged for this study: What knowledge of adolescents and youth people about the physiopathology of alcohol? Can the knowledge of adolescents and young people about the effects of alcohol influence their consumption? Therefore, this study aims to analyze the perception of adolescents and young people from high school about the physiopathology of alcohol and its influence on its consumption.

METHOD

Exploratory and descriptive study of a qualitative approach, with 24 adolescents and young people of the 1st to 3rd year of high school in a public school in the municipality of Cuité (PB), which met the inclusion criteria of belonging to the age group between 10 and 24 years old; attending educational institution regularly and signing the consent and informed form. Those who were not in the institution at the time of data collection were excluded.

Data were collected in July 2014, using a semi-structured interview guide as an instrument, contemplating guiding questions in line with the proposed objectives. The interviews were conducted at the school, under the authorization of the director, individually, at a time and previously scheduled time with the students, after authorization by the Ethics Committee in Research and formal consent of the major players of 18 years old and parent or responsible for minors by their signing (TCLE). Each interview was duly recorded with the help of mp3 player device, with an average duration of 40 minutes, and then transcribed to guarantee the reliability of the information. The participants were identified with the letter S of student and the number of the interview order to protect their identity and confidentiality.

For analysis of the empirical material, the content analysis technique in the theme category was used. It is a technique comprising an exhaustive reading of the interviews, and its organization is through the categorization of data.

The research was conducted by the assumptions of Resolution 466/2012 of the National Health Council (CNS) and approval by the Ethics Committee in Research at the
The analysis of the material enabled to see the perception of adolescents and youth about the physiopathology of alcohol and its influence on its consumption, listed in two thematic categories.

Category 1: From euphoria and sadness to addiction and death: awareness of young people about the acute and chronic effects of alcohol on the body

Drugs are substances that produce different effects in the body due to change any existing communication between neurons.10 About alcohol, the initial effects on the organism are merely stimulating, triggered by the release and stimulation of neurotransmitters.11 The result is a stimulation of depression of brain tissue and not an excitation because the apparent stimulation that occurs is the result of inhibitory control mechanisms that make different areas have their activities uninhibited.12,13 This is due to inactivation of the receptors excitatory and facilitating the activation of inhibitory receptors. Thus, the individual shows sedation, relaxation, and anxiety cognition disorders.14 These cognition disorders such as altering perception, memory are listed in the following reports:

People often lose lucidity of the acts that they do (S1)
It makes the person with lower reasoning; they cannot think right (S9)
The person is losing some of his memory capacity without knowing what to do, the direction to do, so he is talking about nothing with nothing, doing nothing with nothing (S11)
I think it’s forgetfulness, lack of memory [...] (S12)

It is noticed that for adolescents and young people, empirically, alcohol consumption causes cognitive changes such as the absence of sobriety at the time of intoxication, causing them to lose direction and the direction of their behavior, which may induce them to present compelling attitudes, but the blackouts of memory make them forget.

The overuse of alcohol on individuals can take them to present a blackout, that is, momentary loss of memory consumption. This is due to an acute hippocampal dysfunction that prevents the conversion of recent memory in memory to the long term.15

RESULTS AND DISCUSSION

By neurological disorders caused by alcohol, especially the cerebral cortex, integrating control of functions, some neural processes are affected, which may also influence the individual consumer behavior,16 as mentioned by respondents:

I see people who have different aspects: sadness, violence [...] (S5).
 [...] When they drink, they are completely out of control. Euphoria [...] (S7).
You drink, you have all that joy [...] (S18).
 [...] It is aggressive; you are a person who is not the real person. (S13).
Mood changes a lot; the person gets angry (S20).

As noted, individuals who use alcohol have vagaries of mood from joy to sadness; causing them to adopt behaviors intolerant to certain situations, with aggressive attitudes and often being violent. In short, alcohol ends up influencing the ability to make rational decisions depriving a person of liberty to decide on what comprises morally be the best approach to accomplish what determines the effect of alcohol.

Social repercussions of the effects of the irrational use of alcohol can be disastrous. A study conducted in Rio de Janeiro with adolescents corroborated this data, showing that the effect of alcohol may come involvement them in higher risk situations and sometimes with serious consequences, since under the influence of drugs, adolescents lose the critical sense and control of actions, feeling more autonomous for transgressions to believe being magically protected from accidents.17

The effects of acute alcohol consumption are explained physiologically by the release of endogenous opioids causing euphoria, which by the perception of the study participants, it is associated with times when they flee from reality that they are beside themselves. However, these initial effects are passengers, appearing later, upon activation of the inhibitory GABA type A receptor, sedative, anxiolytic and incoordination.14 The feeling of pleasure and well-being, in turn, is caused by the release of dopamine in the limbic system, a neurotransmitter with stimulating activity.18 However, in some cases, it is possible to have a different effect, such as the inhibition of behavior, modulation of mood and excitation. This is due to the role of monoamines such as serotonin (5-hydroxytryptamine) that in alcohol, it is a complex and varied, depending on the types and subtypes of targets receptors present for this neurotransmitter.18

Other effects are also observed with systemic action on the human organism, which
contributes to the development of various other clinical diseases such as gastritis, hepatic steatosis, cirrhosis, withdrawal syndrome among others. These changes are influenced by several factors such as the amount and frequency of consumption. About this topic, studies indicate that individuals who consume sporadically and/or ingest a relatively significant amount of alcohol may exhibit a range of symptoms that arise from the ethanol concentration in the bloodstream. Individuals with blood alcohol values around <50mg/dl have the commitment of some tasks that require skill, increased talkativeness and relaxation; blood alcohol parameters> 100mg/dl cause ataxia, hyperreflexia, difficulty thinking, lack of coordination, mood and behavioral changes, prolonged reaction time and slurred speech; blood alcohol concentration>200 mg/dl causes amnesia, diplopia, dysarthria, hypothermia, nausea and vomiting. Finally, blood ethanol level>400mg/dl may develop respiratory depression, coma, and death.

When metabolized, ethanol inhibits pathways of energy production, and may lead to hypoglycemia. This causes symptoms and autonomic called neuroglycopenic, both as a function of glucose lowering in the CNS. The neuroglycopenic occur due to stimulation of neurons located in the hypothalamus and are feeling hot, asthenia, confusion, and difficulty concentrating, fainting, dyslalia, blurred vision, headache; and autonomic happen by stimulation of the autonomic nervous system whose symptoms are sweating, hunger, paraesthesia, tremor, tachycardia, anxiety and nervousness. Therefore, there is not even the pathophysiological mechanism explaining the presence of alcohol in the body, adolescents, and young people show certain signs and symptoms mentioned above.

 [...] Feeling pain in the body (S1). The next day, you wake up with your head ‘of this size,’ dying of a headache and, the situation is great [...] like a body response (S2). I felt a huge migraine. I felt nauseous too. I was weakened [...] (S4). I think, you are sweating (S7). [...] Weakness, Weakness in the body (S12). I felt a lot of heartburn [...] (S14). The effect that it does is evil and be great right? Dizziness [...] (E18).

It is assumed that they were knowledgeable, by their experiences against the consumption of alcohol, which showed various symptoms, and showing that the disorders caused by alcohol are not only local but generalized. After chronic ethanol exposure, the body develops compensatory mechanisms to adapt to the depressive effects on the body. This is due to the reduced number of receptors depressants and alterations in function and increase in glutamate binding site at NMDA receptors. As a result of this stimulation, as a first signal, the individual has generalized tremors, which is accentuated after 24 to 36 hours from ingestion of the last dose, followed by autonomic hyperactivity signals as tachycardia, flushing and hyperreflexia related to high levels catecholamines in their blood and increased levels of their metabolites in the liquor. Thus, ethanol is a substance that initially cause neurological and physical changes of reversible character; and later, due to the continuous and gradual use, it can destroy vital organs leading them to failure, that is, irreversible damage and consequently death. The liver begins to stop doing some functions (S4). Having cirrhosis, also the ulcer. Fatty liver. In the pancreas also (S6). I know it has something harmful to the kidneys (S8). I think gastritis, I think ulcer to death also (S12). Liver cancer [...] (S14). I think becoming alcoholic, very much alcoholic (S24). This drug will harm your whole spiritual and unspiritual being [...] everything that is inside the body (S13).

Among the problems, rather discussed these data, the liver changes were in the comments, showing that adolescents and young people are knowledgeable of liver disorders, from acute problems such as steatosis to chronic, such as cirrhosis. They also showed that alcohol could affect not only the body, organs but spirituality and possibly lead to the death of the individual. Alcoholic hepatic steatosis is characterized by the accumulation of fat in hepatocytes, it can regrow within a few weeks before the end of alcohol consumption or otherwise progress to alcoholic liver cirrhosis, an irreversible destruction of liver cells, whose characteristic symptoms are nausea, vomiting, weight loss, ascites, abdominal pain, choluria, edema among others. Similar to cirrhosis in chronic pancreatitis, the pancreas undergoes a process of replacing the functional tissue by a dysfunctional and fibrotic tissue, whose clinical manifestations may be intermittent and invariable chronic pain and epigastric pain radiating to the
subscapular region. Gastritis is an inflammatory process that focuses on the gastric mucosa and may be of acute and/or chronic. It is manifested by symptoms such as a headache, nausea, heartburn, belching. The ulcer is an erosion that occurs in the esophagus, pylorus or duodenum due to the ineffectiveness of the gastric tissue in supporting the action of hydrochloric acid. Symptoms include massive pain, constipation, heartburn, diarrhea, and bleeding. This pathology has as etiologic agent the presence of ethanol, Helicobacter pylori, smoking and others.

It is also associated with the development of cancer as a result of alcohol consumption in the long term, which has been highlighted as one of the carcinogenesis of generating factors in different tissues as oral cavity, pharynx, larynx, esophagus, breast, liver, ovary, colon, rectum, stomach, and pancreas. Adolescents and young people continually exposed to alcoholic beverages can become excessive consumers throughout life developing called as alcoholism, where the individual displays a pattern of uncontrolled and continuous consumption. Alcohol dependence conceptualized in a physical and psychological disorder in which the carrier has a compulsive desire to consume continuously or periodically alcohol, which may cause various chronic diseases with severe behavioral disorders.

Category 2: Consume alcohol or not: knowing the effects then decide

Knowing the physiopathology of alcohol is not always more exciting and pleasurable for adolescents and young people, but the momentary effects that alcohol causes were one of the major factors that lead to curiosity to prove it. In this sense, possibly individuals that make use of alcohol, first do the sensations of pleasure and well-being that this provides.

It is worth mentioning the respondents interest in enjoying and takes advantage of what the alcohol provides them with its effect, by the desire to experience the pleasurable sensations, or by matching to their peers, seeking for respect in the group as the most important factors. Thus, for some students know whether or not, the consequences of the consumption of this substance does not affect its use, which can be found in the following reports:

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No, because at the time he wants to drink, he wants to taste the drink, he wants to know how it is (S2).

Nothing! [...] The person wants to feel in another world [...] (S13).

If they only want to match with the friends that offer the drinks, he did not think about it, even though he knows he will not think more (S16).

It depends on it, right? There are people who drink to glamorize because there are many adolescents who think that experiencing it, they think they will be more man (S21).

[...] For me no matter what it would bring me, you know? What mattered was the time (S23).

Concerning knowledge by adolescents and young people about the subject, there are important gaps that need to be filled. A study conducted in Coimbra with adolescent students showed that the misperception about the physiopathology of alcohol is linked to two reasons: the acquired empirical knowledge from myths and/or false concepts learned in its context; and the deficit of scientific knowledge covered in the daily life of these people.

Diverging from the above fact, a study conducted in Bahia with students of the 3rd year of high school of a public school found that young people little know the effects of alcohol, and more than half said they know them. In one of the arguments, the student explains the relationship between the use of alcohol and the influence of friends. Research conducted in Jacareí and Diadema (SP) with adolescents on Family School program have revealed that having friends who are alcohol users was a predisposing factor for its use. Thus, being around people who consume alcohol is to be conducive to its use.

In this sense, a study conducted in three federal schools in Juiz de Fora and Rio Pomba (MG), with high school students revealed a strong association between alcohol use and positive effects as facilitating social relationships, positive evaluation of themselves and wellness sensations. However, another study showed the reports of adolescents and young people who were on continuous use of alcohol, weakness, that is the vulnerability of the negative effects associated with alcohol. Adolescents and young people during their maturity process seek a way to identify and at the same time that makes them feel good, which can instigate the new discoveries, and thus representing a vulnerability factor. In this regard, a study conducted with registered
adolescents in the Health Strategy units in Curitiba (PR), found that looking for fun, pleasure, pressure from friends and colleagues the routine breakage and reduction of anxiolytic and stress symptoms were among the factors that motivated to use alcohol.39

Adolescents with so many characteristics of this phase changes and the need to assert in society adopt certain behaviors aggravating their life.40 Given this context, society needs to play a role demystifying taboos and paradigms not interfering with the choices of adolescents and youth people.

Unlike previous reports, some students believe that adolescents and young people adopt certain behaviors because they ignore the problems that may arise due to the use and abuse of alcohol.

Sometimes influences. I have a friend that he does not drink because of that, I will not, I do not want to get drunk, falling, throwing up all over the corner, I do not have any disease, so sometimes influences (S15).

I think that influence, knowing the effects that give that will hurt him; I do not think I would start not, I would not take the first drink (S22).

Yes, you can. A young man in a smart way, because if you know, you will drink to get drunk, the first time, and kind, did not stop, I think it's stupid [...] I think that today we have a very great misinformation on this issue: alcoholism, alcohol in the body. So many people do not know. If me with a young friend [...] wanted to know if alcohol had any effect, I even had to search the internet, searched the doctor after I had my first drunkenness, looked the doctor, not because I'm sick, but I wonder if I continued with that I would cause more problems in the future (S14).

In these reports, it was noted that the scientific basis could be a protective factor, prevention consumption, given that it can inform, guide students to make positive choices in their lives. Search information on the proper functioning of their body is essential to achieve a healthy development. It is still observed the need to know on the subject before the deficit pointed out by the respondent. He had to search and seek medical help for better understanding of the possible consequences from the use of alcohol. Thus, with these arguments, it is observed how these students have misinformation of the adolescents and youth people as a factor that can be decisive for consumption.

In this context,41 a relevant tool for prevention and health promotion of adolescents and young people are the educational activities through lectures, video lesson, and others, because they have the ability to induce them to think and rethink their habits, to direct them to have a good quality of life. Therefore, to identify the real needs and vulnerabilities of young people and adolescents in this issue is a long way to go. At that time, not only adolescents or young people are urged to go, but family, friends, society, school and government officials, all in an environment that aims to build and policy elaborations, notably promotion and prevention programs for alcohol use among this people.42

There will be only major changes in this reality when mainly professional educators mobilize and resolve to give a new direction of their practices. Thus, it is important to encourage discussions, new teaching practices such as the creation of materials to address certain issues related to adolescence and youth people, the most exciting and possible characteristic.44

In the following arguments, respondents were extremely resolute as the reality show saturation of information about sexuality, sexually transmitted infections, drugs, though it is not discussed least of alcohol.

Today we have one or two lectures on drugs and sexually transmitted disease, but we do not have many things that today we go through it, and we do not have any knowledge about it. I think it should be taught more often in schools [...] It is an appeal that I do here [...] to take my desire as a young man, as a person who, in a certain way, tried alcohol more leading all young people for this to be discussed more in schools. [...] (S14).

I believe it was to have enough lectures in schools on alcohol usually you see more about drugs, sex talk, but alcohol always comes at last, you know! And when it comes it does not come to that strong talk, it is weak. The colleges nowadays just want more talks of drugs and sex, alcohol which is, let's say, the main the beginning of everything he misses, you know? (S18).

It is noted a concern regarding the need to address this issue in schools. An appeal drew attention when requesting educational interventions to further discussion about alcohol, which should be guided in the school context, and it is not. Thus, it is necessary that the school, a provider of knowledge, is committed to the social and cultural issues of their students because they are inserted in a society full of enticements and direct them earlier to explanations arising from their behavior, between them, the use of alcohol, weaning them from possible injuries.

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Also, the school can and should be seen as a protective institution against alcohol consumption, involving prevention and education issues in the educational process of adolescents, such as presenting information related to the deleterious effects of alcohol on the health of adolescents and youth people. This environment is a guide for the student to build his self, his personality permeated from the knowledge learned and apprehended, shared feelings, the experience, and conception of displayed values and principles.45

These people need to be looked beyond their behaviors, and both should be the targets of public policies that should also be implemented in the school environment, which has been placed as the primary space for running promoting interventions to health of these individuals, although not is being an enabling environment for discussions and interventions on the use and abuse of alcohol.42

It is necessary to include actions that support comprehensive care for young and adolescents who are alcohol users to achieve the multidimensionality of dysfunction they cause to the individual, that is, cover all damages in all areas associated with individuals and psychiatric comorbidities, problems potential in schools, family, friends and society.46

The dissemination of information through health education in schools is one of the best ways found to work to the use of alcohol prevention targets. These actions subsidize and encourage adherence to self-care practices from the information and guidance given, which contribute to healthy growth and development and therefore a good life expectancy for this person.47,48

**CONCLUSION**

Addressing this theme enabled to note that adolescents and young people surveyed have insufficient knowledge about alcohol physiopathology. However, it was important the fact that, although some believe that even with this knowledge would consume alcohol, others did hint that they had information on the effects of drinking, people would have a chance to rethink their choices and demand better interventions in the face of institutions promoting information, whether schools and the media, among others.

Thus, it is fostered a need for rapid and effective intervention in the training of adolescents and young people so they can rethink the attitudes and decisions regarding their health. Thus, it is up to the expansion of public policies that emphasize the real needs of this population, to develop strategies that contribute to a reduction in the rates of use and abuse and alcohol use. It is necessary the expansion of educational activities that are devoid of criticism and judgments but geared for self-reflection and self-care that can support the adherence of young people to healthy lifestyle habits. Therefore, it is necessary scientific information, but in accessible language and easy to understand so that they can learn the necessary knowledge and multiply it among peers as a builder agent self-care, subject of the story, responsible and committed to life. Limitations were considered to the study by the lack of information regarding the knowledge of adolescents and youth people about the correlation of compensatory body mechanisms against the ethanol presence, since the relevance of the knowledge of the effects of the use of psychoactive substances to the body, and possible influence it for consumption.

Given this proposition, it is urgent that all those involved in attention to adolescents and youth people, including parents, teachers, health professionals and managers are prepared for the implementation of education initiatives in health and continuing education that may include this issue as a transversal facing the prevention and promotion in the health of this group still neglected by public policies. Thus, the whole society will proceed apace in search of better health, education, and citizenship.

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