Study of the perceptions of women of childbearing age about the effects of alcohol intake during pregnancy as a proposal for systematization of teaching practices by nursing for the prevention of fetal alcohol spectrum disorders

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Objective: to identify the knowledge of women about the effects of alcohol intake during pregnancy; to propose educational actions involving this topic for guidance on women's health in the pre-conception and gestational period. Method: exploratory study of quantitative character. The scenario was the Estacio de Sa University (campus Niterói-RJ). The subjects were 99 women. A structured interview was used for data collection and it was conducted after the research was approved by the Research Ethics Committee of the University. Results: analysis of the data collected has allowed to identify women's ignorance on the subject and reduced participation of the nursing professional in the orientation of these women. Conclusion: it is necessary to increase the disclosure of these damages to health through educational campaigns promoted by health institutions and greater participation of nursing professionals in the education of this target audience. Descriptors: Fetal alcohol spectrum disorders, Alcohol, Education, Public Health Nursing.

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ABSTRACT

Objective: to identify the knowledge of women about the effects of alcohol intake during pregnancy; to propose educational actions involving this topic for guidance on women's health in the pre-conception and gestational period. Method: exploratory study of quantitative character. The scenario was the Estacio de Sa University (campus Niterói-RJ). The subjects were 99 women. A structured interview was used for data collection and it was conducted after the research was approved by the Research Ethics Committee of the University. Results: analysis of the data collected has allowed to identify women's ignorance on the subject and reduced participation of the nursing professional in the orientation of these women. Conclusion: it is necessary to increase the disclosure of these damages to health through educational campaigns promoted by health institutions and greater participation of nursing professionals in the education of this target audience. Descriptors: Fetal alcohol spectrum disorders, Alcohol, Education, Public Health Nursing.

RESUMO


RESUMEN

Objetivos: identificar el conocimiento de las mujeres de los efectos de la ingestión de bebidas alcoólicas durante el embarazo; proponer acciones educativas envolviendo este tema para orientación sobre la salud de la mujer en el periodo previo a la concepción y gestación. Método: estudio exploratorio de carácter cuantitativo. El escenario fue la Universidad de Estácio de Sá (campus Niterói-RJ). Los sujetos fueron 99 mujeres. Para la recolección de datos se usó una entrevista estructurada realizada después de la aprobación de la investigación por la Comisión de ética de investigación de la Universidad. Resultados: el análisis de los datos recogidos ha identificado la ignorancia de las mujeres sobre el tema y reducida participación de enfermería en la orientación de estas mujeres. Conclusión: Se necesita aumentar la divulgación de estos daños de salud en campañas educativas promovidas por las instituciones de salud y una mayor participación de la enfermería en la educación de este público. Descritores: Transtornos del espectro alcoólico fetal, Alcoholismo, Enfermería en salud pública, Bebidas alcoólicas, Embarazo.
The abuse of alcohol can cause alcoholism - a public health issue that is worrying all nations, including Brazil, leading alcoholism to be inserted as a disease in the International Classification of Diseases (ICD) as Q86 by the World Health Organization (WHO). It is estimated that approximately two billion people worldwide consume alcoholic beverages, and that approximately 7.3 million people have diseases related to alcohol consumption, which classifies alcohol as the third leading cause of death worldwide, second only to cardiovascular diseases and cancer. It is estimated that, worldwide, alcohol is related to 3.2% of all deaths; and that in developing countries with low mortality, in which Brazil is included, alcohol consumption is the risk factor that contributes most to the burden of disease, accounting for approximately 6.2% of deaths. Still, drinking alcohol is socially and culturally acceptable in Brazil.

In Brazil, a study conducted in 2006 by Carlini et al., described as a household survey on the use of psychotropic drugs, showed an increase of approximately 10% in the number of alcoholics in relation to data collected by the same survey in 2001, which highlights a significant increase of almost 14% of alcohol consumption among women of all ages, mostly teenage girls, which clearly shows that women are increasingly drinking alcohol and becoming dependent, and that mother's alcoholism has become quite common in the poorest social classes.

Besides the abuse of alcohol by women - a group little impacted in past decades - accounts for traffic accidents involving these women and absenteeism of them from work, another important aspect to note is that the use of alcohol during pregnancy can cause extensive damage to the embryonic and fetal development, such as decreased placental blood flow, low birth weight, changes in fetal metabolism or abortion, craniofacial signs and various levels of mental retardation. Total abstinence from drinking alcohol during pregnancy and while breastfeeding is recommended by WHO to prevent damage to the fetus. All these damages are diagnosed as Fetal Alcohol Syndrome (FAS), currently designated as "Fetal alcohol spectrum disorders", and have clinical picture based in the presence of pre and/or postnatal growth disability, specific craniofacial malformations, central nervous system dysfunctions. It is considered the most severe non-genetic pathological condition and the most common cause of non-genetic mental retardation caused by alcohol consumption during pregnancy and refers, thus, to the set of typical morphological and functional changes in the birth of children whose mothers drank alcohol during pregnancy, which were first reported by Lemoine and colleagues at the end of the 1960s in France. Such craniofacial abnormalities include cleft lip, cleft palate, maxillary hypoplasia, retrognathia, micrognathia or...
prognatia in adolescence, muscular hypotonia, prominent lateral palatine ridges, short palpebral fissures, thin upper lips, ears without parallelism, epicanthal folds, indistinct lip-philtrum, short nose, flat faces.

These data also point to the need for intense clarification of the female population in order to awaken a conscious reflection and behavioral change, encouraging the adoption of a healthy lifestyle, without drinking any amount of alcohol during pregnancy and breastfeeding.

Authors became interested in this study when they studied about the different types of effects on embryonic and fetal health from drinking alcohol during pregnancy, including the Fetal Alcohol Syndrome (FAS), as this issue was addressed during the discipline of Embryology of the nursing course. During this period, the authors of this study found, besides the increased percentage of women drinking alcohol in Brazil, the lack of educational campaigns on the theme in different media, schools and health centers, and the lack of correct knowledge about the subject by several women during informal talks on the everyday of each author.

Knowing that the health professional should initially conduct the planning of educational activities to be developed and implemented by the nursing professional, it is important to know what people (target audience) know on the subject we want to address, so that the health education can be used as a suitable tool for prevention, promotion and rehabilitation through messages that can be easily understood, considering factors such as environment, approach and level of customer interest. 6, 10-12

Based on these, the following questions emerged: what is the knowledge of a group of women of childbearing age in Niterói (RJ) on the possible effects of drinking alcohol during pregnancy on the embryonic and fetal development? Did women who have become pregnant receive proper guidance on the matter? And what are the best strategies for education in women’s health that need to be developed and/or implemented by the nursing professional?

To answer these guiding questions, the following objectives were established: to identify the knowledge of a group of women of childbearing age about the possible harmful effects on embryonic and fetal development caused by alcohol consumption during pregnancy; to assess whether the women in this study group who had already got pregnant received appropriate guidance on the theme during pregnancy and to identify which nursing education initiatives for health promotion involving this theme are possible to guide women’s health during pregnancy.
Characterization of the research

It is a quantitative and exploratory study that constitutes the "manipulation of numerical data through statistical procedures, in order to describe phenomena or assess the magnitude and reliability of relationships between them". The setting of the research was the campus Niterói of Estacio de Sa University, Rio de Janeiro, Brazil. The study subjects were 99 women of childbearing age who were contacted in classrooms, hallways and courtyard of the campus and who were interested in contributing to the study. Inclusion criteria were: being female, being of childbearing age, consenting to participate and being over 18 years old. The exclusion criterion was not wanting answer or being under 18 years old. It should be noted that for the development of this study, there was prior authorization of the Research Ethics Committee of the Estacio de Sa University of Rio de Janeiro (CEP UNESA-RJ) (Protocol: Certificate of Presentation for Ethical Consideration No. 0110.0.308.000-10). The selected subjects were informed about the nature of the study and agreed with the proposed terms, signed the Informed Consent Term in respect to ethical issues of research with human beings and following the protocol required by Resolution 196/96 of the National Ethics Research Committee - CONEP. The anonymity of the participants was guaranteed, as well as the right to withdraw from the study when they considered necessary.

To maintain the confidentiality of information, the participants were identified in the interview form header by the letter "R" (interview record), followed by the number corresponding to the order of interviews (R001, R002, R003 ...R099).

Instrument for collecting and analyzing data

The process of collecting and analyzing data occurred concomitantly between the months of May 2011 to July 2013 and enabled, in addition to the construction of hypotheses, generating knowledge that advance the understanding of the nurse's role in public health education.

In this study, women were interviewed based on a data collection form containing a questionnaire composed, in the first part, of nine closed questions, aiming to initially identify/evaluate sociodemographic conditions, and of 17 closed questions on knowledge of these women about the possible effects of alcohol consumption during pregnancy, and seven of these questions have been answered only by respondents who had already been pregnant previously or who were pregnant during the interview.

The questions were prepared by the authors of this study based on the reasons raised from the literature review, using articles from 1995 to 2012, searched in the Lilacs, Scielo and Pubmed databases with the key words, fetal alcohol spectrum disorders, alcohol, pregnancy,
alcoholism, public health nursing. A total of 10 questions were applied, aimed to assess the knowledge of all respondents, regardless of whether the respondent had or not been pregnant before. Then, only the women interviewed who had been pregnant at least once were asked to answer seven questions involving the realization of specialized monitoring during the prenatal period and whether they had received educational guidance on the subject during this period by health professionals.

At the end of each interview, information was provided about the harm to the fetal development of drinking alcohol during pregnancy.

After data collection, the interview forms were analyzed individually and the analysis was performed from the answers given by the subjects, by computing the frequencies of answers in percentage data.

With the transcription of the interviews, we performed the steps envisaged by the thematic analysis: a) pre-analysis, which consists in selecting the material of analysis, relating them to the objectives proposed by the research; b) exploration of the material, where we seek to understand the text through exploration, with subsequent encoding; and c) treatment of results and interpretation, and the analyzed responses were organized in Excel spreadsheets and quantitatively analyzed descriptively using frequency tables.

RESULTS AND DISCUSSION

The results indicate important aspects, helping to characterize the knowledge of a group of women of childbearing age in Niterói (RJ) on fetal alcohol spectrum disorders. The analysis of data collected was started by the evaluation of sociodemographic data of respondents.

Main sociodemographic characteristics of the study subjects

The distribution of the study population by age group revealed that approximately 3% of participants were between 41 and 45 years old, 12.1% were between 35 and 40 years old, 14% between 29 and 34 years old, 26.2% were between 24 and 28 years old and 47.4% were between 18 and 23 years old, representing most of the study subjects.

According to the data analyzed, 59% of the women interviewed had formal education up to incomplete higher education, 29% had completed higher education, 13% had completed high school and only 2% had not completed high school and 5% had incomplete primary education. Approximately 79% of respondents reported being single and 17% married. Only 3% were divorced and there were no widows among the female members of the surveyed
population. As for the number of pregnancies, 72% of women interviewed had not been pregnant and 28% had been pregnant at least once.

Knowledge on the effects of drinking alcohol during pregnancy and on FAS and on the appropriate means of prevention

When asked whether they considered that the alcohol intake would be safe for embryonic and fetal development, without causing any damage, approximately 97% of participants responded negatively, however, surprisingly, only 19% of women interviewed knew that there is not a safe minimum quantity to intake of any type of alcohol during pregnancy, and about 60% of the respondents had no knowledge of the harm caused by alcohol use during pregnancy. Over 70% of respondents claimed to know the definition of Fetal Alcohol Syndrome (FAS, currently designated as Fetal Alcohol Spectrum Disorders), but approximately 81% of the women interviewed in this study were unable to identify any symptoms and/or effect related to these fetal alcohol disorders.

When asked whether they knew the ways of preventing the FAS, approximately 62% reported lack of knowledge and 84% were unaware of any form of treatment for these disorders.

Of the 26 respondents who had already been pregnant at least once, regardless of education level, five (19%) of them did not perform any prenatal consultation. Of this total, when asked whether they had consumed some type of alcoholic beverage during pregnancy, only 12% reported having done this intake, but all said they had made use of a small amount of alcohol and that they had rarely made it.

Among the eight women interviewed who reported having already been pregnant at least once and who had completed higher education, 56% of them underwent prenatal care and received guidance by health professionals, during the first follow-up visits, about the risks for gestational development if there was any alcohol consumption during pregnancy, and 44% of those interviewed did not perform any prenatal examination. The survey revealed that 82% of the 11 interviewed women who were with higher education in progress undergo prenatal care, and all these (100%) had received guidance on the issue, and 18% of them did not undergo prenatal care and also did not receive any information by a health professional on this subject. Among the four interviewed who had completed high school, all (100%) underwent prenatal care, but none reported receiving any guidance regarding the prohibition of alcohol intake during pregnancy.

Therefore, in this study it was found the existence of lack of knowledge about the symptoms of fetal alcohol spectrum disorders – a set of damage caused by alcohol consumption during pregnancy – in our population sample, which highlights the importance of encouraging the increased participation of nurses in direct contact with the patient in educational activities of daily life, as well as in developing educational campaigns for dissemination by the media.

We also noticed that, even among those women who reported having rarely ingested small amounts of alcohol, regardless of education level, there have been concern about a
possible deleterious effect on gestational development, although they reported being unaware of what these effects were, and did not know how this would occur.

It was also possible to realize that a portion of the women interviewed who had become pregnant did not undergo any prenatal care, even though the importance of this monitoring is widely publicized over a decade. Importantly, according to the Ministry of Health, prenatal care is essential to ensure a healthy pregnancy and a safe delivery and also to provide guidance and to answer questions of future mothers.

The analysis of our results also identified that among the interviewees, even though there were a lot of women attending college, which should allow most critical development and perception of health care and the environment, more than 2/3 were unaware of any of the effects of alcohol use during pregnancy, including the FAS, even though they did not deem using these beverages a safe practice to fetal health. This leads us to believe that there is a slight perception of these women about such harm. However, this information is neglected due to lack of disclosure in health campaigns and little guidance on the subject in routine gynecological consultations. A study conducted by Kaup et al in 2001 \(^1\), interviewing only pregnant women, found that many of them reported they had been asked by health professionals as to tobacco use, however, they had not been asked and counseled on the need for the exclusion of alcohol throughout pregnancy and breastfeeding.

Our study also identified that almost all the women interviewed perceived the need for greater disclosure on the subject.

There is consensus among the researched authors that the use of alcohol during pregnancy brings harm to the fetus and that the harm is dependent on dose, and the abuse in the first trimester of pregnancy can cause many anomalies. \(^1\) Our study found that the women studied did not know if there is a safe minimum quantity to alcohol consumption during pregnancy. WHO recommends total abstinence to alcohol consumption and any other medications (e.g. mouthwashes) using ethanol in its composition throughout pregnancy and during breastfeeding. Different authors have reported the habits of groups of pregnant women in relation to alcohol consumption during pregnancy, also assessing the average ingested amount and the type of alcoholic beverage most consumed among them, and found that beer is the type of alcohol most drunk by this group of women. \(^6, 18, 19\)

Nurses’ participation in women’s health education to prevent the effects of drinking alcohol during pregnancy and FAS

Among the 19 respondents who reported having undergone prenatal care, 73% reported receiving guidelines from the health professional, and 50% of these had been directly oriented by the gynecologist and only 14.3% of them reported having received guidance from nurses. Moreover, 12.3% of the women interviewed did not remember which health professional had guided them on such risks.

We also sought to evaluate, among those who had already been pregnant, their perception on the need to receive adequate guidance on the damage to fetal embryonic development if the mother drinks alcohol during pregnancy. On being questioned about this, 88% reported believing it is very important that women of childbearing age and also pregnant
women routinely receive guidance on this subject and only 12% deemed it is not necessary to receive guidance on this theme.

Considering the current health scenario in our country, there has been an increasing valuation of primary health care through public policies for the population. Thus, it is essential to reflect on the role of nurses in health promotion. The nurse has three different roles in the current context: he/she is a training actor and a trainer, as well as political actor and the care actor. As stated above, the nurse must be constantly learning and changing to meet the needs of society. Still, the nurse is responsible for training future professionals (nursing technicians and nurses), so they need to reflect on praxis for innovation/renovation of nursing care and nursing autonomy. In a comparative study of 124 pregnant adolescents and 264 adults in Pennsylvania, it was observed that the average daily volume of alcohol consumed before pregnancy is higher in adult women. Drunkenness rate in the first trimester of pregnancy is highest in the group of teenagers. In a study using as a sample of 692 primiparous young people in Sweden, Dejin-Karlsson and colleagues reported that 32.8% continued consuming alcohol during pregnancy, but in moderation.

The role of the nursing professional in health education activities about the possible effects on health of the fetus and gestational development due to alcohol intake is essential, since the nurse is a professional able to identify the target audience’s questions and problems, to outline a care plan on collective and individual health, being able to approach the population in question and to establish a therapeutic relationship of trust. It is understood that health promotion is more than a healthy practice, it transcends the sector of health services and involves the whole society, it is the understanding of health-disease process itself, the co-responsibility and the transformation of the context in which it is inserted, so as to meet requirements and to modify favorably the environment. The involvement of nurses in health is still very much related to the technique, which, actually, is still highly valued in the workplace and in educational institutions. However, there will only be changes if nurses perceive themselves as active subjects in relationships and understand the importance of their political role. Care actor is the role most developed by nurses.

Nursing professionals need use tools that enable communication with the target audience, such as the establishment of partnerships (either with non-governmental institutions, schools, neighborhood associations, other health professionals, among others) throughout the development of their action to promote health education. Thus, the nurse stands out as a health promoter to be inserted mainly in national and international health programs. So that nurses can act as a complete professional, they must develop the three roles simultaneously, contributing to the development of a nursing truly committed to the political and structural transformations of women and child health care.

Considering, therefore, that women have started using alcohol at an increasingly younger age, and that the nurse is present during several important moments in women’s lives, the development of nursing work in health education for prevention of alcoholism and of fetal alcohol spectrum disorders need to be in all these stages, from pre-adolescence to women’s maturity.

During health care to pregnant women, it is required more commitment to investigate, through detailed anamnesis, whether there was in women’s history the consumption of licit,
illicit and medicinal drugs, with attention also to alcoholic beverages, which most do not consider "dangerous drug". Similar efforts should be applied to the guidance of women since adolescence. Education for prevention is the most effective way to change the current paradigm, since prevention is the only way we have to avoid fetal alcohol spectrum disorders, which can only be done with abstinence from alcohol throughout pregnancy.

Alcohol use by women, in addition to effects related to family, work and social relations, is still associated with a strong prejudice from society related to the gender idea, to the role and behavior expected from women. This linking with the moral character often prevents alcohol consumption by women, as it is this a social habit of men, but on the other hand, this evaluative standard increases stigma on women who drink, causing that they do not seek health services for treatment for the problem, and makes them somewhat invisible in the polls, with percentages below the actual situation. A questionnaire called T-ACE has long been used to identify women who drink alcohol during pregnancy and who could benefit from information about the alcohol abuse during this period. However, some studies carried out in Brazil by applying the questionnaire did not show satisfactory results.

In the study coordinated by PhD Aparecida de Mattos Segre, member of the Pediatrics Society of São Paulo, published in 2010 on the effects of alcohol on pregnant women, on the fetus and on newborns, the following strategies for prevention of these disorders are suggested: 1) primary prevention strategies: primary prevention programs are aimed to educate a broad target audience about the risks of drinking during pregnancy, to be directed mainly to alcohol-related harm and not only to its consumption; implementation of high taxation in alcoholic beverages in order to reduce their consumption. 2) secondary and tertiary prevention strategies: strategies targeted to a specific group of women, namely to all pregnant women, or more precisely those who had abused alcohol in a previous pregnancy, depending on the population involved. The strategy can be represented by a short intervention, with goal setting, distribution of educational material written to inform and help the target audience, and the development and implementation of techniques for behavior modification, which can be applied in any healthcare facility. Furthermore, the expanded intervention strategies are aimed at high-risk women, habitual drinkers. In this case, pregnant women should undergo multiple sessions, during weeks or months, with practitioners, social workers and experts in the subject. The results of our study reinforce the need to implement these strategies so that the guidelines on the relationship of the use of alcoholic beverages with various negative effects on the health of the fetus and the embryo, and also on the gestational development are better spread.

Therefore, programs in Public Health for the development should be created by the Ministry of Health, state departments and local health departments to meet the proposals of primary, secondary and tertiary prevention strategies in order to clarify and advise pregnant women about the disastrous effects of alcohol on the fetus, pointing out that the consequences are irreversible and there is no treatment possible. On the other hand, the Medical Societies of the specialties involved also have an important role in the dissemination and guidance on the numerous problems caused by intrauterine exposure to alcohol. It is essential to encourage the nurse, which is the healthcare professional who has the
professional skills necessary for the implementation of all prevention strategies, to participate in helping to eradicate this public health problem.\textsuperscript{28,29,30,31}

Besides the participation of multidisciplinary health teams as educators on the subject, society should remain involved in the control and reduction of the consumption of alcohol in our country to also prevent behavioral effects still little studied and social effects and also uncertain implications on health, but which have long effect and thus interferes with the future quality of life for these patients. Therefore, the FAS will only be prevented by action on the risk factor\textsuperscript{3, 31}.

**CONCLUSION**

After analyzing the data collected in this study, it was concluded that, due to little specific information publicized, it is necessary to list for pregnant women of childbearing age the consequences that alcohol can cause to themselves and to the fetus. It is important to highlight the role of nurse in prevention, promotion and guidance, actively participating in the development and pregnancy process in order to reduce the problems that alcohol causes in these women and in the fetus.

With the preparation of this work, we realized that a group of women of childbearing age lacked information about the harm caused by alcohol use during pregnancy. It is also realized that there is still much ignorance on the part of these women on ways of prevention and treatment of fetal alcohol spectrum disorders. It was also found that lack of information is given for several reasons: lack of guidance given on the matter by the health care provider during routine visits in prenatal care and in gynecology outpatient care, during routine consultations on women’s health programs in public and private network, lack of constant educational campaigns in the media promoted by the Ministry of Health and, finally, the failure to undergo prenatal care.

There is need for greater involvement of nurses and other professionals involved in women’s health for health promotion aimed at educating the public about the risks of drinking alcohol during pregnancy, also guiding them on the harm of using this substance to the health of any woman, even those not in pregnancy in order to eradicate in the medium to long term the routine use of these beverages and alcoholism. It is also concluded that the nurse must keep constantly updated on the subject, working directly in the transmission of knowledge to women, either during the nursing consultation or developing public policies that approach the subject through routine lectures to be performed by nurses in gynecology clinics and in communities (schools, universities, churches, among other places), seeking to disseminate information to assist in the development of knowledge and of reflective critical thinking of these women, preventing thus the development of disorders to the health of the fetus and of women.
Given the above, it is expected that this study will stimulate further research in different municipalities in Brazil and promote health education about the consequences of drinking any amount of alcohol during pregnancy.

REFERENCES
