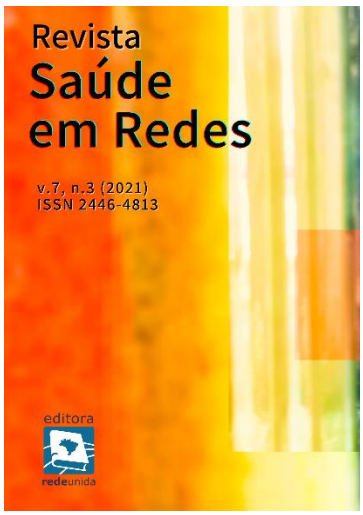

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Previous pregnancies influence the health care, health conditions and expectation of pregnant women? A cross-sectional study

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Abstract

Health care must consider the integral health of the pregnant woman and the fetus. Taking into account the experience acquired in previous pregnancies, it is possible that the pregnant woman develops skills and abilities for the current pregnancy. Objective. The aim of this study was to analyze associations between the condition of gestation (primigravid or multigravid) and health care (eating habits, physical activity, self-medication); health conditions (joint pain) and expectation (demand) to participate in a health education program. This is a cross-sectional study, involving the participants of a group of users of a primary health care service located in the City of Salvador (Bahia-Brazil). 94 pregnant women accepted to participate in the present study. The grouping variable was the pregnancy (primigravid or multigravid) of the study participants. The non-parametric Chi-Square test was used to compare categorical variables. The data were tabulated in Excel and then exported to SPSS (version 21.0). The data were analyzed by absolute frequencies and percentages. Multigravid women were less likely to adhere to a health education program ($\chi 2 = 15.84$; $p < 0.01$) as well as they were more likely to use medications without the guidance of a qualified professional ($\chi 2 = 18.09$; $p < 0.01$). On the other hand, the multigravid condition was more associated with the presence of joint pain ($\chi 2 = 8.28$; $p < 0.01$). Our findings point to the importance of understanding this characteristic of pregnant women from the perspective of formulating strategies for the development of health education programs.

Keywords: Health Education; Pregnant Women; Health Planning.

Resumo

Cuidados em saúde devem considerar a saúde integral da gestante e do feto. Levando em consideração a experiência adquirida em gestações anteriores, é possível que a gestante desenvolva competências e habilidades para a gestação atual. Objetivo: analisar associações entre a condição

de gesta (primigesta ou multigesta) e os cuidados com a saúde (hábitos alimentares, realização de atividade física, automedicação); as condições de saúde (dores articulares) e a expectativa para participar de um programa de educação em saúde. Métodos: Trata-se de um estudo de corte transversal, envolvendo as participantes de um grupo de usuárias de um serviço de atenção primária em saúde localizada na Cidade de Salvador (Bahia- Brasil). 94 gestantes aceitaram participar do presente estudo. A variável de agrupamento foi a Gesta (Primigesta ou Multigesta) das participantes do estudo. O teste não-paramétrico Qui-Quadrado foi utilizado para a comparação das variáveis categóricas. Os dados foram tabulados no Excel e em seguida exportados para o SPSS (versão 21.0). Os dados foram analisados por frequências absolutas e porcentuais. Resultados: As multigestas eram menos propensas a aderir a um programa de educação em saúde ($\chi2=15.84$; $p< 0,01$) assim como eram mais propensas à utilizar medicamentos sem a orientação de um profissional qualificado ($\chi2=18.09$; $p< 0,01$). Por outro lado, a condição multigesta apresentava maior associação com a presença de dores articulares ($\chi2=8.28$; $p< 0,01$). Conclusões: Nossos achados apontam para a importância de compreender esta característica das gestantes na perspectiva da formulação de estratégias para o desenvolvimento de programas de educação em saúde.

Palavras-chave: Educação em Saúde; Gestantes; Planejamento em Saúde.

Introdution

Prenatal care aims to ensure a safe pregnancy, with the least possible complications [1-4] Prenatal care reduces the occurrence of maternal and neonatal morbidities and mortality[5-9]. Health care must consider the integral health of the pregnant woman and the fetus. Thus, several health-related skills and abilities are important for pregnant women[10-13].

The practice of regular physical activity, the rational use of medicines and the consumption of healthy foods, are examples of good practices to be taught and stimulated to pregnant women with the objective of protecting their health; the prevention of injuries; harm reduction and health maintenance[14-18].

However, it is noteworthy that during pregnancy many physiological and anatomical changes occur and it is common for the pregnant woman to start using new drugs[19-21] or even to increase the presence of pain in different parts of the body[22-24].

Taking into account the experience acquired in previous pregnancies, it is possible that the pregnant woman develops skills and abilities for the current pregnancy. In addition, age can play a particularly important role for pregnant women, with pregnant teenagers having different needs than other pregnant women with regard to prenatal care. Remains a controversial issue, whether the determining factor for the health conditions of the pregnant woman and for the good development of the fetus is the age of the pregnant woman or the experience in previous pregnancies. In this perspective, we formulate the hypothesis that previous experiences would be decisive for the health conditions and the need for health information for pregnant women. Making this understanding more clear, can assist in the planning and execution of health education actions that are in fact effective and have good acceptability, considering, in fact, the need of the pregnant woman.

Considering the above, this study aims to analyze associations between the condition of pregnancy (primigravid or multigravid) and health care (eating habits, physical activity, self-medication); health conditions (joint pain) and expectation (demand) to participate in a health education program, a future development of the present study.

Methodology

This is a cross-sectional study, involving the participants of a group of users of a primary health care service located in the City of Salvador (Bahia-Brazil). All 174 pregnant women registered at the health establishment were contacted and invited to participate in the study, however, 80 pregnant women did not participate in the study because they did not respond to the contacts made (phone calls and text messages) or did not show up on the days proposed for the application of the questionnaires. Thus 94 pregnant women, after being informed about the objectives of the study, agreed to participate in the interview, signed the free informed term of consent (FITC). Data collection was carried out through interviews with pregnant women in February 2020. The project was approved by the Research Ethics Committee of the Centro Universitário Estácio FIB (process number 3.816.054).

Social and economic data (age, marital status, color and number of children) were collected. Next, we applied a questionnaire that contained: The Nordic Questionnaire, an instrument that allows, through the image of the human body divided into several segments, to identify the regions in which the respondent feels pain and discomfort[25]. The level of physical activity was determined using the International Physical Activity Questionnaire - IPAQ, an instrument with good test-retest reliability for pregnant women[26]. Thus, pregnant women were initially stratified into four groups: a) Very active; b) Active; c) Irregularly active and d) sedentary. In possession of this information, we chose to form only 2 new categories: The participants a) very active and b) active were again categorized in the group: 1) active and the participants c) Irregularly active and d) sedentary were recategorized for the group: 2) sedentary.

Eating habits are determined by asking a question: What is your weekly frequency of fruits and vegetables? With two response options a) daily consumption or b) do not consume daily[27]. Respondents who reported consuming daily were categorized as consumers and respondents who reported not consuming daily, as non-consumers.

The practice of self-medication was defined as the practice of taking medications without the advice and / or monitoring of a qualified health professional. For this study, we asked the participants to make a reminder equivalent to their gestational period.

The demand for health education was determined through a question: “Would you like to participate in an educational process and exchange experiences with other pregnant women and health professionals? Respondents initially answered 1) yes or 2) no. Those who declared that they wished to participate, could expose their motivations and expectations for health education meetings.

The grouping variable was the pregnancy (primigravid or multigravid) of the study participants. The non-parametric Chi-Square test was used to compare categorical variables: Presence of joint pain (s); Perception of the level of physical activity (low or high); Self-medication practice; Eating habits (daily use or not of fruits and vegetables) and Desire for Health Education actions). The data were tabulated in Excel and then exported to SPSS (version 21.0). The data were analyzed by absolute frequencies and percentages.

Results

94 pregnant women were evaluated The sociodemographic profile shows that 63 (67%) participants were brown, 23 (24.5%), black and 08 (8.5%), white. 61 (65%) had previous pregnancy or

pregnancies. Age varied between 19 and 39 years.83 participants (88%) declared to be married or to have a stable union. Sociodemographic variables are shown in table 1.

The relationship between pregnancy and the presence of joint pain (s); perception of the level of physical activity (low or high); self-medication practice; eating habits (daily use or not of fruits and vegetables) and desire for Health Education actions) is shown in tables 2-6. Among our findings, we observed an association between gestation (Multigravid / Primigravid) and 1) the presence of joint pain (OR = 3.59; 95% CI = 1.47-8.72); 2) The practice of self-medication (OR = 0.14; 95% CI = 0.05-0.36); and

3) the demand for health education (OR = 0.15; 95% CI = 0.06-0.41). There was no statistically significant difference for the association between pregnancy and the variables food and physical activity. The chi square test is shown in table 2-6.

Discussion

Our study aimed to identify the association between pregnancy of the participants and the adoption of habits and health care. Our main objective was to seek subsidies for the structuring of a future health education intervention. Our understanding was that if we understood the particularities of our group of pregnant women, accompanied in a primary health care unit, we could structure a health education program that would meet the motivations and demands for health education of our participants. This understanding is supported by several authors[28-31]. In fact, our results demonstrate that multigravid women were less likely to adhere to a health education program ($\chi 2 = 15.84$; $p < 0.01$) as well as they were more likely to use medications without the guidance of a qualified professional ($\chi 2 = 18.09$; $p < 0.01$). On the other hand, the multigravid condition was more associated with the presence of joint pain ($\chi 2 = 8.28$; $p < 0.01$). We noticed, however, that the multigravid women had an average age higher than the primigravid women, which may explain this difference related to the presence of pain[32]. Another variable associated with pain is the gestational period, data found in a study that shows that pain is more frequent during the second trimester of pregnancy[33]. Other variables also associated with pain in pregnant women are sleep patterns, mobility and sexual activities of women[34]. However, considering the objective of our study, which was to provide subsidies for the structuring of a health education program, we did not take into account the age difference between the study participants.

Our study has some limitations. When calculating the estimates, we do not take into account any confounding factors such as age, marital status, social-economic level or education. In addition, our sample represents pregnant women from an open health primary care service, which provides free care to low-income women in a city in a country with a medium level of development. It is expected that, in other social realities, these associations may not be as evident as those found in this study. A country's set of laws can also lead to conflicting results when trying to reproduce these findings. Even in countries with medium or high level of economic development, it is possible to obtain several medicines, even in supermarkets, without the need for a qualified professional's prescription or even without the guidance of the pharmaceutical professional, which makes self-medication a recurring practice in some countries[35-37].

Health interventions or psychosocial support groups for pregnant women are often targeted at age groups, such as groups of adolescents. Despite the particularities and idiosyncrasies of age, one of the findings that we consider most important in this study was the understanding that the experience of participants in previous pregnancies will determine care in the current pregnancy and, in our understanding, this aspect is more important than consider the age of the participants when

formulating health education strategies. So, instead of creating groups of teenagers and groups of older women, we can set up a health education program, groups of multigravid women and groups of primigravid women.

In addition, our findings motivated us to seek motivational strategies to incorporate participants who declared they had no interest in participating in our future health education program, with an emphasis on the group of multigravid women. For the participants who declared they were not interested in participating in the health education program, we made a second contact asking if we could send cards via smartphones for at least a week, with provocative questions related to gestational health. If the participants found the educational material interesting, we could continue the action. For this group, we thought about identifying health issues that still have a low level of evidence or lack of scientific evidence. Our understanding is that the aspects to be addressed in a health education program must start from the current knowledge of the participants and we must progressively increase the level of complexity so that, in fact, there is the development of competencies and skills for health promotion. After this second invitation, only 7 (7.4%) study participants still declared they had no interest in participating in the intervention.

Final considerations

The aim of this study was to evaluate the possible differences in health conditions, behaviors that affect health and demands for health information. Our main interest was to look for elements that would allow the structuring of a Health Education program aimed at pregnant women, which would prove to be effective and attractive to the participants. In general, we realized that there is an association between pregnancy and study variables with an important emphasis on the concern of primigravid women in seeking professional guidance on the use of medicines and the desire to participate in a health education program. The investigation of associations between the variables analyzed was an important mechanism for the formulation of strategies for the development of a health education program and the search for appropriate strategies to approach potential participants who were not at first likely to participate in a program health education.

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Apêndice

Table 1. Demographic and Clinical Characteristics

Characteristics	Participants (n=94)
Age (years), mean (SD)	24.9 (0.5)
Education (%)	
Elementary degree	48 (51.1)
High school	28 (29.8)
University	04 (4.3)
NR	07 (7.4)
Race (%)	
White	08 (8.5)
Black	23 (24.5)
Multiracial	63 (67.0)
Indegenious	-
NR	
Marital status (%)	
Married/ Lives with partner	73 (77.7)
Single	21 (22.3)
Gestational Period (%)	
I Trimester of pregnancy	20 (21.3)
II Trimester of pregnancy	29 (30.9)
III Trimester of pregnancy	45 (47.9)

Table 2. Association between Variables Measured (Joint Pain and condition of gestation)

	Joint Pain n (%)			
	Yes	**No**	χ2	**p**
Multigravid	41 (67.2)	20 (32.8)	8.28	.004
Primigravid	12 (36.4)	21 (63.6)		

Table 3. Association between Variables Measured (Physical Activity and condition of gestation)

	Physical activity n (%)			
	Yes	**No**	χ2	**p**
Multigravid	18 (29.5)	43 (70.5)	7.07	.01
Primigravid	19 (57.6)	14 (42.4)		

Table 4. Association between Variables Measured (Self Medication and condition of gestation)

	Self-medicationn (%)			
	No	**Yes**	χ2	**p**
Multigravid	15 (24.6)	46 (75.4)	18.09	.001
Primigravid	23 (69.7)	10 (30.3)		

Table 5. Association between Variables Measured (Feed and condition of gestation)

	Feed (fruits and vegetables) n (%)			
	Yes	**No**	χ2	**p**

Multigravid	31 (50.8)	30 (49.2)	3.12	.077
Primigravid	23 (69.7)	10 (30.3)		

Table 6. Association between Variables Measured (Demand for Health Education and condition of gestation)

	Demand for Health ducation n (%)			
	Yes	**No**	χ2	**p**
Multigravid	20 (32.8)	41 (67.2)	15.846	.001
Primigravid	25 (75.8)	08 (24.2)		

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