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Determination of Knowledge Requirements and Health Practices of Adolescent Pregnant Women

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Abstract

Background: Health practices in pregnancy could be defined as the activities affecting the health of mothers, fetus and newborns.
Objective: To determine knowledge requirements and health practices of adolescent pregnant women.
Design: Descriptive study
Methodology: The population is composed of adolescents women applying to pregnancy polyclinics of state hospitals for routine antenatal colsultation in Izmir, Aydın and Manisa provinces. 156 pregnant women between 13-21 years of age who accepted participating into the study and consulted to pregnancy polyclinics of state hospitals between March 2008 and March 2009 have composed the research sample. The data of the study was collected by "Self-Description Form" and "Health Practices Questionnaire in Pregnancy" prepared inlusive of literature information by researchers as well as from face-to-face interviews using a questionnaire. Descriptive statistics and t/F tests were used to describe and analyze data.
Results: The main three subjects about which the pregnant women required information have respectively been determined as "Problems related to pregnancy and coping with them (73.7%)", "Antenatal follow-up during pregnancy (72.4%)", "Tests held in pregnancy (67.3%). A statistically significant difference has been detected between age groups of pregnant women included in the study (t = -2.391, p =0.01), educational status (F = 9.648, p = 0.00), marital status (F = 7.684, p = 0.00), educational status of their husbands (F = 7.934, p = 0.00), working status of their husbands (t = 3.241, p = .00), family type (t = -2.227, p = 0.02), perceived income status (F = 5.800, p = 0.00), planning status of pregnancy (F = 6.057, p =0.00), the number of antenatal follow-up (F = 5.620, p =0.00), status of being visited at home by medical personal (t=2.116, p =0.03), status of being exposed to violence during pregnancy (t = -3.387, p = 0.00) and the mean score of health practice questionnaire.
Conclusions: Technically, the care for adolescents during pregnancy and labor does not differ very much from the care for adult pregnant women, although there are a number of problems occurring more often in them. Adaptation of care to the needs of the young girls is, thus, recommended.

Key words: Young pregnant women, Knowledge requirements, Health practices

Introduction

Birth of healthy generations can take shape depending on physical, psychological and social health of women (Köşgeroğlu, Açıkgöz & Ayrancı, 2004; Pasinlioğlu, 1997). Wellness of mothers is preliminary condition not only for their own wellness but also for their babies' and children's wellness (Çakmakçı & Eser, 2003). Health practices in pregnancy could be defined as the activities affecting the health of mothers, fetus and newborns. Health practices important for the

result of pregnancy should be determined and gained during prenatal care (Lindgreen, 2005).

About 16 million women between 15-19 years of age old give birth each year, which constitutes about 11% of all births in the world worldwide. In Latin America, the regional average rate of births per 1000 females 15-19 years of age is 78, in Europe 25. In South Asia, the early marriage of adolescents is common; and 25–35% of adolescent girls in Pakistan, Bangladesh, India and Nepal begin childbearing as early as 17 years. In some sub-Saharan African countries, one in five adolescent females gives birth each year (WHO, 2004a). Adolescent pregnancies in Turkey are caused by the marriages in early ages and intended pregnancies. The main effective factor in Turkey for pregnancies in early ages is the marriages in early ages (Çöl, Çalışkan & Akdur, 1994). According to the data of TDHS (2008), the initial marriage age is determined as 17 years for females. The study has demonstrated that 43% of women between 25-49 years of age are married before 20 years of age, 25% are married before 18 years of age, and 5% are married before 15 years of age (Ergöçmen, Eryurt & Adalı, 2008).

Adolescent pregnancies have increased over the past years, which is being considered as a significant social and reproductive concern. Teenagers have greater exposure to poor nutrition and suboptimal prenatal care. In addition, socioeconomic and psychogenic factors such as race, economic status, emotional stress and insufficient education are also responsible for the poor outcome in adolescent pregnancies as well as abnormal uterine bleeding, a common gynecologic problem in adolescents. Most teenage mothers and their newborn infants are vulnerable to a variety of potentially serious obstetric problems, and accordingly need appropriate help and support by counseling the adolescent women (Imir et al., 2008; Mngadi et al., 2002; Singh & Darroch 2000; WHO, 2007). Pregnant adolescents vary greatly in their circumstances and behaviours, and consequently their health care needs. Lack of information about pregnant adolescents' needs means that service providers are ill equipped to deal with them. Failure on the part of communities to acknowledge and address the issues related to and stemming from adolescent pregnancy further complicates the situation. There are major barriers that preclude adolescents' access to maternal health-care services. Failure to address these barriers and needs seriously threatens a healthy outcome for these young mothers and their newborns, further compromising the already unacceptably high maternal mortality ratio and pregnancy-related morbidities (Mngadi et al., 2002; WHO, 2007).

Lack of knowledge and experience about pregnancy, undeveloped psychological and unsteady emotional conditions of adolescent women enhances the importance of prenatal care still more (Demirgöz & Canbulat, 2008; Treffers et al., 2001). According to Başer (2000), Bertan et al. reported that natal and postnatal follow-up are highly important in adolescent pregnancies. Primary healthcare should be given effectively so that pregnancies at tender ages can result healthy. The more mother-to-be is conscious the more prenatal process will be healthy. Therefore, medical needs of young pregnant women should be determined and necessary strategies should be developed (Başer, 2000). While there is no good argument that the content of antenatal care for adolescents should differ from that for adults, the delivery of the care should be adapted to the needs of adolescents. Facilities for antenatal care in developing and developed countries are often not oriented to the special needs of adolescents. The service may sometimes be too expensive with long waiting times and inadequate privacy. Health personel may behave in an unfriendly or rude manner (or are perceived to do so), and may openly disapprove of pregnant adolescents (Treffers, Olukoyab, Ferguson, & Liljestrand 2001).

Nurses are more in touch with healthy or ill individuals in the institutions they work than other medical personnel and they are especially in communication with pregnant women attending controls during preexamination or examination. In this period, they have the chance of determining the deficient or wrong knowledge and applications of person, and attempting intended to them. Nurses can play their educative roles by providing information about pregnancy, natal and postnatal care and by taking into consideration the cultural and individual characteristics of pregnant women.

This study is designed to determine knowledge requirements and health practices of adolescent pregnants.

Methodology

Sample

The population is composed of young pregnant women applying to pregnancy polyclinics of state hospitals for routine antenatal colsultation in

Izmir, Aydın and Manisa provinces. 156 pregnant women between 13-21 years of age who accepted participating into the study and consulted to pregnancy polyclinics of state hospitals between March 2008 and March 2009 have composed the research sample.

Procedures and Measures

The study was conducted between March 3, 2009, and March 15, 2009. The population is composed of young pregnant women applying to pregnancy polyclinics of state hospitals for routine antenatal colsultation in Izmir, Aydın and Manisa provinces. 156 pregnant women between 13-21 years of age who accepted participating into the study and consulted to pregnancy polyclinics of state hospitals have composed the research sample. After the women who fulfilled the study criteria were identified, they were informed about the study and informed consent was obtained. Self-Description Form developed by the investigators and were completed during face-to-face interviews. As Health Practices Questionnaire in Pregnancy are self-report scales, they were completed by the participants themselves.

To be able to hold the study has been granted from the Ethical Committee of Nursing High School of Ege University. Necessary permissions have been obtained from the state hospitals in Izmir, Aydın and Manisa provinces where the data was collected.Permission has been granted from Er who tested the reliability and validity of the scale in order that Health Practice Questionnaire-II (HPQ-II) is applied.

In the data collection stage performed by interviewing method, an appropriate interview environment convenient has been provided and written consents have been taken from themrespecting that they have accepted participating into the study.

Instruments

Self-Description Form

The data of the study was collected by "Self-Description Form" and "Health Practices Questionnaire in Pregnancy" prepared inlusive of literature information by researchers.Self-description form is a survey form composing of 34 questions including socio-demographic characteristics, family type, obstetric information, the number of control attendance in pregnancy and education requirements of adolescent pregnant women who are incorporated to the study. From face-to-face interview tecnique was used during the data collecting.

Health practice questionnaire-II (HPQ-II)

Health practice questionnaire-II (HPQ-II) is a 34 articles scale developed by Kelly Lindgreen to evaluate the health practices in pregnancy regarding the results of pregnancy. HPQ-II, the adequacy of health practices measures in six areas. These areas are: rest and exercise to compare, safety measure, nutrition, avoid using harmful substances, and to learn to contain health care. In addition, all of a item describes the health practices during pregnancy. The Cronbach's alpha value after the application was found to be .81 (Lindgreen, 2005).

Five point likert-type response options include in scale between 1 ile17. substances changing every time and any time. Any time (a) = 1 point, rarely (b) = 2 points, occasionally, (c) = 3 points, often (d) = 4 points, and each time (e) = 5 points is as calculated. For questions from the 18th until 34 items is given the appropriate options and these options are the 5 pieces, 1 to 5 are dappled. Some items reverse coded scores. These are: 6, 7, 8, 22, 23, 24, 25, 26, 27, 33 and 34 items. This item reverse coded scores from 5 to 1. An overall score of the sum of all the items are obtained. High points, yielding high-quality health behavior in pregnancy represents. The lowest score of the scale to be obtained 34, the highest score is 170 (Lindgreen, 2005).

Reliability and validity of the Turkish adaptation of the scale was performed by Er (2006). The scale has been determined to be valid and reliable in Turkey, and cronbach's α has been calculated as .74 (Lindgreen, 2005). In this study Cronbach's α was found as .71.

Data analysis

Data of the study SPSS 15.0 software package was used for statistical analysis. The number and persentage analysis were used for the proportions of the groups. Student t-test and ANOVA to assess relationship between age groups, educational status, marital status, educational status of their husbands, working status of their husbands, family type, perceived income status, planning status of pregnancy, the number of antenatal follow-up, status of being visited at home by medical personnal, status of being exposed to violence during pregnancy of pregnant women and the mean score of health practice questionnaire. A value of $p<.05$ (95% confidence

interval) was considered statistically significant (Özdamar, 2002).

Results

The average of age of the young pregnant women included in the study 19.08±1.48; the fact that 79% of them are in 15-19 age group, 77% of them are in 20-24 age group; 71.8% of them are primary school graduates; 19.9% of them are not civil married; 51.9% of them are married for less than a year; 84.6% of them are housewives; 53.2% of them are members of extended families; 68.6% of them whose husbands are primary school graduates; 41.0% of them whose monthly income is 240-400 euro; 52.7% of them whose monthly income is less their monthly outgoings have been designated. 40.4% of adolescent pregnants live in Manisa and 42.3 of them in Aydın, and 17.3% of them in İzmir.It has been designated that 71.2% of the pregnant women whose first pregnances, 71.2% of them haven't used contraceptive method before pregnancy, 71.2% of these pregnancies are planned. It has been determined that the average gestational week is 28.32±8.79, 33.4% of the pregnant women attended antenatal controls for one-three times, and 34.6% of them for four-six times; in addition, 85.3% of them haven't been visited by medical personnal at their homes, and 4.5% of them have been subjected to violence by their husbands. The subjects about which the pregnant women required information have respectively been determined as "Problems related to pregnancy and coping with them", "Antenatal follow-up during pregnancy", "Tests held in pregnancy", "Pregnancy and nutrition", "Sexual life in pregnancy", "Individual care in pregnancy", "Violence in pregnancy", "Sleeping and resting in pregnancy", "Exercises during pregnancy", and "Hair dyeing, using computer, and harms of mobile phone in pregnancy" (table 1). According to results the from this study; Health Practice Questionnaire Scale the mean score was calculated as 107.53±12.70 (table 2). A statistically significant difference has been detected between age groups of pregnant women included in the study (t = -2.391, p = 0.01), educational status (F = 9.648, p = 0.00), marital status (F = 7.684, p = 0.00), educational status of their husbands (F = 7.934, p = 0.00), working status of their husbands (t = 3.241, p = 0.00), family type (t = -2.227, p = 0.02), perceived income status (F = 5.800, p = 0.00), planning status of pregnancy (F = 6.057, p = 0.00), the number of antenatal follow-up (F = 5.620, p = 0.00), status of being visited at home by medical personal (t=2.116, p = 0.03), status of being exposed to violence during pregnancy (t = -3.387, p = 0.00) and the mean score of health practice questionnaire (table 3).

Table 1. The subjects on which the young pregnant women required information during pregnancy

Subjects asked to learn	N (N=156)	%
Problems related to pregnancy and coping with them	115	73.7
Antenatal follow-up during pregnancy	113	72.4
Tests held in pregnancy	105	67.3
Pregnancy and nutrition	101	64.7
Sexual life in pregnancy	87	55.8
Individual care in pregnancy"	81	51.9
Violence in pregnancy	72	46.2
Sleeping and resting in pregnancy	67	42.9
Exercises during pregnancy	65	41.7
Hair dyeing, using computer, and harms of mobile phone in pregnancy	59	37.8
Journey in pregnancy	57	36.5

Table 2. Health Practice Questionnaire-II Mean Score

Factors	Health Practice Questionnaire for Pregnancy				
	N	Mean	Sd	Min	Max
HPQ-II Scale	156	107.53	12.70	75.00	140.00

Table 3. Factors affecting the health practices of young pregnant women in pregnancy

Factors	Health Practice Questionnaire for Pregnancy				
	N	Mean	Sd	t/F	p
Age Groups					
13-18 years	48	103.93	13.66	-2.391	0.01
19-21 years	108	109.12	11.98		
Educational Status					
Illiterate	17	101.00	15.02	9.648	0.00
Primary School Graduate	112	106.47	11.52		
High School or equal level	27	116.03	12.22		
Marital Status					
Official Marriage	64	105.96	11.30	7.684	0.00
Imam Marriage	20	103.00	13.80		
Both official and imam marriage	61	112.54	12.45		
Living-in	11	97.09	10.62		
Educational Status of Their Husbands					
Illiterate	2	98.50	0.70	7.934	0.00
Primary School Graduate	107	104.89	11.93		
High School or equal level	42	112.71	11.62		
University Graduate	5	124.00	15.79		
Working Status of Husband					
Yes	145	108.41	12.41	3.241	0.00
No	11	95.90	11.14		
Family Type					
Large family	83	105.43	13.49	-2.227	0.02
Nuclear family	73	109.91	11.37		
Perceived income level					
Income lower than expenditure	82	104.38	12.61	5.800	0.00
Income equal to expenditure	69	111.27	12.01		
Income higher than expenditure	5	108.20	12.91		
Planning Pregnancy					
Unplanned	24	99.75	14.20	6.057	0.00
Planned	111	109.36	11.65		
Afore ready but then not	21	106.76	13.45		
The number of antenatal follow-up					
1-3 times	52	104.75	12.99	5.620	0.00
4-6 times	54	105.61	11.69		
7-12 times	50	112.28	12.27		
Status of being visited by medical personal at home					
Yes	23	112.65	13.17	2.116	0.03
No	133	106.64	12.46		
Being exposed to violence during pregnancy					
Yes (spouse)	7	92.14	10.52	-3.387	0.00
No	149	108.25	12.36		

Discussion

In this study, the subjects on which the pregnant women required information were determined as "problems related to pregnancy and coping with them (73.7%), antenatal follow-up (72.4%), tests in pregnancy (67.3%), pregnancy and nutrition (64.7%), sexual life in pregnancy (55.8%), individual care in pregnancy (51.9%), violence in pregnancy (46.2%), sleep and rest in pregnancy (42.9%), physical activity in pregnancy (41.7%), and "hair dying, computer use, and harms of mobile phone in pregnancy (37.8%)", respectively (table 1). The studies in the literature have been focused more on post-partum period. However limited study, partly information requirements

related to pregnancy have been identified. As reported by Bowman (2004); Howard and Sater (1985) collected data from adolescents during the first 8 months after childbirth. Howard and Sater found that first-time adolescent mothers wanted to learn about maternal incision care, what happens to mothers during childbirth, sick infant care, and sick infant recognition. Pregnant girls need to be well informed about protecting their own health and that of their babies-to-be. For an effective self-care to be effective, a pregnant adolescent needs relevant knowledge and the skills, means and support to use it. Important lifestyle factors include good nutrition, giving up smoking, problems related to pregnancy, antenatal follow-up and sexual life in pregnancy. All adolescents, but especially pregnant ones those who are pregnant, need support to achieve this. A pregnant adolescent also requires opportunities to learn about immunization, hygiene, infant feeding and neonatal care (WHO, 2006; WHO, 2007).

According to our study findings HPQ-II mean score was founded 107.53±12.70 (table 2). In the study conducted by Er (2006) HPQ-II mean score was 127.19±11.84. The reason different from this study of the findings from our study the sample consist of the adolescent pregnant women. Because young maternal age, low educational level and poverty generally describe women who receive little or no care. Adolescents are more likely to enroll late and make fewer visits before delivery than older women (Treffers, 2011; WHO, 2004a).

In this study, it have been statistically significant difference between HPQ-II mean scores and age group, education level, marital status, spouse education level, family type, income level, pregnancy planning status, the number of antenatal follow-up, the number of home visits during pregnancy and being exposed to violence during pregnancy. Er (2006) reported that, it were no statistically significant differences between age group, duration of marriage, employment status, spouse's occupation, number of pregnancies, pregnancy planning status and the number of home visits during pregnancy of pregnant women and mean scores of HPQ-II. On the other hand, it were statistically significant difference between between the education level, spouse education level, family type, income level and HPQ-II the mean scores.

In a study of 90 pregnant women, the entire period positive behavior scores received of pregnant women graduated from high school, were higher than those of primary school education (Çakmakçı & Eser, 2003). These results, in almost every area of education factor, as in the case of an individual's health a factor thought to stem from the direct effect.

As in our findings, in the study by conducted Er (2006), positive behavior scores in all specific periods of pregnancy of pregnant women spouses who graduated from high school, were higher than pregnant women who spouses primary education, too. As a result of the the studies, the spouses to education where of pregnant women to education is seen as important for health protection and maintenance.

Our study findings are in line with the level of the Er's study (2006), HPQ-II mean scores were higher of pregnant women who well income level than pregnants who low income level. Because the economic situation of the family, pregnant women who receive health care, nutrition, hygiene habits, family relations, stress, adversely affect the (Baysal, 2003).

HPQ-II mean score of adolescent pregnancies living in the core family study was higher than pregnants living in extended family. Similarly, in the the Er's study (2006) mean score of pregnant women living in the core family of was higher. The core families, the mother, father and child / children occurred because of the large families, in addition, mother-in-law, father-in-law, spouses of persons, such as siblings, given the higher per capita family income is a fact that the core families. As household size increases the risk of poverty (Statitstics Institute of Turkey, 2009). The number of people in the family food, shelter, basic needs such as hygiene are thought to affect. In this case, in the core families HPQ points higher than the average may be shown as reason for having.

HPQ-II mean scores of adolescents who not planning pregnancy were lower and statistically significant difference was not found between pregnancy planning status and HPQ-II mean scores in the study. On the contrary research findings, in the other study, could not be obtained with no significant difference planning pregnancy status of pregnant women and HPQ-II scale mean scores (Er, 2006). To get, because the difference in our study, is that adolescent pregnancies. To be ready for the role of motherhood, baby come around and can not be expected to give adequate of adolescents not complete whom their own developmental characteristics care. However, if she want the pregnancy, this will be motivation for her.

It is determined statistically significant difference that between going to the antenatal visits during the pregnancy and HPQ-II mean scores. In the same way, in the study by Er (2006) statistically significant difference were obtained between going to the prenatal care during the pregnancy and HPQ-II mean scores. Pregnant women to control the further analysis, and over 5 times to 1 times, 2 times and 4 times the control, according to the HPQ-II mean scores pregnant women found to be greater. In a study carried out by Edirne et al. (2010) on 1872 adolescent pregnant women, they determined low education level, increased violation of close partner, insufficient use of prenatal care. Many studies from developed and developing countries found a positive relationship between good antenatal care and positive pregnancy outcome for mother and child (Treffers, 2001). According to WHO (2004b), in the USA, found that five or fewer antenatal visits were strongly associated with low birth weight. Maternal-fetal attachment begins felt the baby's first movements. Generally mother's interest tend to the health of the baby and in and develop commitment between the mother and fetus. Mothers focus the receiving prenatal care and on making changes in the way of life to be the safe for the fetus as well as for herself in this period (Gilbert & Harmon, 2002). Adequate prenatal care can also increase the awareness with pregnancy-related health practices of pregnant women.

HPQ-II mean scores of pregnant women visited at home than pregnant women not visited was found to be more in the our study. One of the most important from health care services aimed protecting maternal and child health is prenatal care. It was determined in the studies that morbidity and mortality rates are high on mothers and children born to mothers without prenatal care (WHO, 2007).

In this study, HPQ-II mean scores were founded higher than not being exposed to violence of pregnant women who being exposed to violence during pregnancy. There are studies that obtained similar findings in the literature. A prospective study on of abuse during pregnancy among women of low income in Baltimore and Houston (United States) also suggested that women who suffered from violence during pregnancy were more likely to delay antenatal care than other women. While most of the women in this study were between 20 and 29 years of age, 31% were adolescents. Another study in the United States found that women who delayed entry into antenatal care were more likely to have reported physical violence, compared with women who entered antenatal care early. They were also more likely to be younger, less educated, unmarried. Parker et al. (1994) reported data obtained during the antenatal care of 1203 pregnant women below the poverty level in Baltimore and Houston: 20.6% of teens and 14.2% of adult women reported abuse during pregnancy. The abused adolescents and adults were more likely than non-abused women to enter into antenatal care only in the third trimester (WHO, 2004b). Exposed to violence during pregnancy will negative affect both request to receive antenatal care of pregnant women and the health behaviors related to pregnancy. Physical abuse and violence were also associated with adverse pregnancy outcomes. Abuse during pregnancy is related to LBW, significantly greater risk for poor weight gain, first or second trimester bleeding, smoking and alcohol use among adolescents (WHO, 2007).

Conclusions

According to the study findings, it was determined that information requirements related to pregnancy of adolescent pregnant women were more and HPQ-II mean scores were to be low of are more. This situation has confirmed that adolescent pregnant women did not have enough information to look at her babies, to show the essence to health care practices due to lack of social support systems.

In many developed and developing countries, adolescent pregnancies are an important health issue due to physical and social concerns. Technically, the care for adolescents during pregnancy and labor does not differ very much from the care for adult pregnant women, although there are a number of problems occurring more often in them. Adaptation of care to the needs of the young girls is, thus, recommended (Treffers, 2001).

Midwifes and nurses must educate to intend adolescense pregnant and her spouse to improve antenatal care and outcomes of pregnancy. The nurses were involved in parent education, the enhancement of the woman’s informal support systems, antenatal education, improving diet, monitoring weight gain, eliminating the use of cigarettes, alcohol and drugs, abuse in pregnancy, teaching parents to identify pregnancy complications and encouraging regular rest, appropriate exercises and good personal hygiene

(WHO, 2007; WHO, 2009). Also, STI counselling, safe motherhood, individual counselling about danger signals requiring emergency obstetric care and use of the health-care services must consist of this training.

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