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Information Needs of Pregnant Women Referred to Health Centers in Behshahr City within 2016-2017

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ABSTRACT

Introduction: Lack of knowledge and low levels of information related to various issues of pregnancy among women can create problems and increase medical interventions. This study aimed to identity information needs of pregnant women referred to health centers in Behshahr city during 2016-2017.

Methods: The method utilized in this study is the Applied and Descriptive method. Statistical populations of this study include 188 pregnant women referred to all health centers of Behshahr city during 2016-2017. Data collection was done using a self-questionnaire and its validity and reliability was ascertained by a specialist and Chronbach Alpha method. Descriptive statistics, statistical test and SPSS software (version 17) were used for data analysis.

Results: Findings show that "information about the health of embryo" is the most important information need among pregnant people. Also women say that "Gynecologists" and "Specialist" are the most important resources of access to information, although there are other significant sources such as telegram networks, social media and mobile phones. . In addition, meaningful differences have been seen between some "Information needs" and "resources of access to information" based on pregnant demographic factors".

Conclusion: Pregnant women require diverse sources of information during the term of their pregnancy.. The importance of this information is reported to be high but specialists and managers of health systems can be effective providing in health knowledge and literacy for pregnant women by planning, making policy and regular trainings and educations.

Keywords: Pregnant Women, Health Information Needs, Health Information Behavior, Health Center, Behshahr

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Introduction

Health information needs are one of the most important information needs of people in their daily life. Health information includes a wide range of information such as prevention and the initial treatment which is one of the main concerns of most people. [1] Having information is the first step to a healthy life. Health information provides the conditions for improving one's health level as well as economic and social development of countries. Information plays a significant and critical role in helping, supporting and increasing health and social care for people in today's information society and a concept known as citizen health information is very important [2-3].

According to the World Health Organization's (WHO) reports, the access level of people to health information (in addition to access and use of treatment and health services) is one of the main elements of improving health systems in various societies [4] and this organization has emphasized on the importance of having access and obtaining information through self-care [5]. Necessity is defined as the need for increasing the level of knowledge, awareness, and health information literacy of every individual and various groups of the society including vulnerable groups.

Pregnant women are considered as members of the venerable groups in the society which has always been under the focus of health systems in various countries and a wide range of studies and researches were carried out regarding the aspects and dimensions related to them in developed and industrial countries of the world [6]. Today, health systems have devised their plans based on the heath of family women, and pregnant women are significantly important to them [7]. The previous studies referred to the fact that pregnancy condition is an important and a life changing situation in the lifetime of women and during this period, various biochemical, physiological and anatomic changes will occur in them [8]. Although pregnancy is not considered as a medical disease, but due to physiological changes in the mother's body and because of the health of the baby, this phenomenon needs special considerations [9]. Concern and mental stress resulting from these changes can lead to many impositions during pregnancy, and accessing information and the use of related information about pregnancy can be considered as a sufficient solution in order to make these major problems nonexistent [10].

In fact, it is noteworthy that lack of awareness and fear of unknowns in pregnancy brings many negative consequences for individuals during their pregnancy duration. Mental relaxation is highly important for the health of the mother and the chrysalis [11] and public or special information regarding the pregnancy time can have a special effect on the life quality of pregnant women during this period. We cannot ignore the importance of information and having access to information for e women during pregnancy because their health highly depends on their performance and activity and this fact needs access to proper and precise information. Having access to sufficient information can have significant effects on their lifestyle and behavior especially in the field of nutrition, sport and physical movements, methods of facing challenges and diseases related to pregnancy [12].

Additionally, treatment regarding pregnancy is another main subject in health and is considered a health index. Today in our country treatment during pregnancy is restricted to regular diagnostics performing typical tests and sonography. This is insufficient for mothers, thus lack of acquaintance and low level of information and knowledge about the problems of pregnancy can result in multiple problems and challenges [13]. Lack of awareness and lack of suitable information in this period is the major cause of increasing medical interventions and causing impositions for the mother and the chrysalis [14]. Unlike the third world and developing countries, pregnancy care is a systematic monitoring process (diagnosis and routine tests) along with information consults and most importantly presenting and conveying related knowledge and

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information for the health of the mother and the chrysalis in light of eradicating dissatisfactions and problems of mothers' pregnancy duration in the developed countries [15]. This suggests the importance of information during pregnancy and international studies has indicated that pregnant women realize the position of information during pregnancy and actively keep seeking health information in order forestall challenges during pregnancy [16]. Undoubtedly care and preventive measures cannot ensure a healthy community until the level of knowledge and awareness of individuals increases in relation to health issues. Therefore, pregnant women require correct, reliable and precise information so that they can improve their health conditions and this information can be effective in improving health literacy and consequently improve their health level. According to the mentioned content and the fact that no specific research has been carried out thus far regarding the information needs and references of pregnancy in the country. This study was carried out with the aim of investigating information needs and obtaining resources among pregnant women.

Methods

This research was carried out by a descriptive browsing (cross section) method. The population of the current study consists of pregnant women referring to the healthcare center of Behshahr during October 2016- March 2017. These women were selected by non-sampling methods and were considered accidently. A research questionnaire was used for collecting information. This questionnaire was designed by studying and reviewing the internal and external background of resources, which is then divided into 4 sections and 29 questions. The first section of the questionnaire discusses the demographic information of the women. The second part is about information needs of the pregnant women and includes 13 questions. The third part of the questionnaire studies the references and the entries of women for accessing their areas of interest and is measured by 11 questions. The fourth part of the questionnaire focuses on providing information needs of the individuals in the study by social media.

The questions were produced on the basis of a LIKRIT 5 options range and the validity of the questionnaire was investigated and confirmed according to the opinions of specialists of information and knowledge, health information management, the administration of health care services and also medical documents. The cronbach's alpha was used for investigating durability of the questionnaire and it was equal to 0.89 and the durability of the questionnaire was confirmed. The questionnaire was distributed randomly (random sampling) among 197 pregnant women referring to the Imam Khomeini, Shohada, Mehr and other health centers that are numbered 1-6 in Behshahr and 9 questionnaires that were filled incorrectly were put away and 188 questionnaires were investigated. Descriptive statistics, statistical tests (ANOVA and Correlation) and SPSS software (version 17) were used for data analysis.

Results

The average age of studied women was 24.6 and varied in a range of 18 to 39 years old. The demographic properties of the pregnant women referring to health care centers of Behshahr are presented in Table 1.

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Table 1. Demographic information of pregnant women referred to Behshahr's Health Center

Variable		Number and percentage	Variable		Number and percentage
Education status	Not educated	13 (%6.9)	Living Location	City	82 (%43.6)
	Diploma and less	96 (%51.1)		Town	106 (56.4%)
	Graduated	59 (%34.1)	Age	Up to 20	36 (%19.1)
	Masters or higher	20 (%10.6)		21-25	51 (%27.1)
Occupation status	Housekeeper	118 (%62.7)		26-30	59 (%34.1)
	Self-employed	30 (%16)		31-35	30 (%16)
	Public-employed	16 (%8.5)		More than 35 years	12 (%6.4)
	Student	24 (%12.8)	Family revenue level	Less than 10 million (Rial)	29 (%15.4)
Number of pregnancy	The first time	107 (%56.9)		10 to 20 million (Rial)	116 (%61.7)
	The second time	63 (%33.5)		20-50 million (Rial)	32 (%27.1)
	The third or more	18 (%9.6)		More than 50 million (Rial)	11 (%5.8)

Table 2 shows the information needs of pregnant women in different parts and fields of health information. The findings indicated that the need to receive information with regards to chrysalis and its health was detected as the most important information need of studied persons with an average of 4.49.

Table 2. Information needs of pregnant women in various information fields

Information needs of health of pregnant women	Very high	High	Medium	Very low	Low	Mean ±SD
Information related to the chrysalis (health, movement, weigh, heart and etc.…)	125 %66.5	42 %22.3	12 %6.4	4 %2.1	5 %2.7	4.49 ±0.87
Information related to the impositions resulting in diseases of the mother on the chrysalis	102 %54.3	49 %26.1	22 %11.7	9 %4.8	6 %3.2	4.23 ±1.04
Information related to problems, risks and diseases during pregnancy	87 %46.3	46 %24.5	28 %14.9	14 %7.4	13 %6.9	3.96 ±1.24
Information related to sufficient nutrition during pregnancy	99 %52.7	35 %18.6	35 %18.6	8 %4.3	11 %5.9	4.08 ±1.18
Information related to sufficient sports during pregnancy	61 %32.4	76 %40.4	27 %14.4	15 %8	9 %4.8	3.88 ±1.10
Information related to sufficient drugs and supplements during pregnancy	58 %30.9	67 %35.6	41 %21.8	12 %6.4	10 %5.3	3.80 ±1.11
Information related to personal health care	57 %30.3	54 %28.7	46 %24.5	19 %10.1	12 %6.4	3.66 ±1.19
Information of dental and oral care	62 %33	58 %30.9	42 %22.3	15 %8	11 %5.9	3.77 ±1.16
Information related to effects of smoking, drug addiction and alcohol on chrysalis	63 %33.5	40 %21.3	45 %23.9	24 %12.8	16 %8.5	3.58 ±1.30
Information related to health care centers specific to pregnant women	52 %27.7	71 %37.8	36 %19.1	13 %6.9	16 %8.5	3.69 ±1.17
Information related to services of care centers specific to pregnant women	74 %39.4	45 %23.9	33 %17.6	23 %12.2	13 %6.9	3.77 ±1.28
Information related to tests and filtering during pregnancy	69 %36.7	55 %29.3	39 %20.7	17 %9	8 %4.3	3.85 ±1.14
Information related to childbirth, methods and impositions	98 %52.1	53 %28.2	20 %10.6	10 %5.3	7 %4.3	4.20 ±1.02

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Findings of this study indicated that women and childbirth specialists are the most important resources of obtaining health information by the pregnant woman with an average of 4.34. Table 3 presents the resources and entries of obtaining information from studied individuals separately.

Table 3. Resources and channels of obtaining health information of pregnant women.

Resources of obtaining information	Very high	High	Medium	Very low	Low	Mean ±SD
Specialist doctors (human information resources)	105 %55.9	44 %23.4	20 %10.6	13 %6.9	6 %3.2	4.22 ±1.09
Women and childbirth specialists (human information resources)	108 %57.4	51 %27.1	16 %8.5	11 %5.9	2 %1.1	4.34 ±0.94
Obstetricians and nurses (human information resources)	81 %43.1	49 %26.1	35 %18.6	18 %9.6	5 %2.7	3.97 ±1.11
Other specialists of health care field (human information resources)	79 %42	47 %25	19 %10.1	30 %16	13 %6.9	3.79 ±1.32
Books (printed information resources)	61 %31.8	46 %24	53 %27.6	21 %10.9	11 %5.9	3.65 ±1.20
Newspapers (printed information resources	45 %23.9	38 %19.8	55 %28.6	26 %13.5	28 %۱۴/۶	3.24 ±1.34
Public and specialist journals (printed information resources)	70 %37.2	45 %23.9	36 %19.1	22 %11.7	15 %8	3.71 ±1.29
Brochures and catalogues (printed information resources)	59 %31.4	39 %20.7	49 %26.1	30 %16	11 %5.9	3.56 ±1.24
National radio and television (audio and video resources)	83 %44.1	38 %20.2	42 %22.3	18 %9.6	7 %3.7	3.91 ±1.17
Satellite receiver (audio and video resources)	81 %43.1	31 %16.5	47 %25	19 %10.1	10 %5.3	3.82 ±1.24
Internet, websites and weblogs (internet information resources)	35 %18.6	36 %19.1	60 %31.9	27 %14	30 %16	3.10 ±1.32

Social media used by the studied women for receiving health care information is presented in Table 4. Telegram and Facebook were recorded (with an average of 4.16 and 3.07) as the most and least important social media among all items that we examined.

Table 4. Social media used for receiving health information among pregnant women

Social Media	Very high	High	Medium	Very low	Low	Mean ±SD
Telegram	100 %53.2	47 %25	20 %10.6	13 %6.9	8 %4.3	4.16 ±1.13
Instagram	72 %38.3	55 %29.3	30 %16	18 %9.6	13 %6.9	3.82 ±1.23
Facebook	41 %21.8	21 %11.2	50 %26.6	62 %33	14 %7.4	3.07 ±1.27
Whatsapp	64 %34	46 %24.5	43 %22.9	22 %11.7	13 %6.9	3.67 ±1.25
Viber	57 %30.3	37 %19.7	42 %22.3	44 %23.4	8 %4.3	3.48 ±1.41

There are significant differences between demographic factors and pregnancy information needs.

There are significant differences between demographic factors, resources and channels for access and obtaining information

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The results of ANOVA indicated that there is a significant difference between "information needs" of pregnant women in terms of their demographic properties (except for three of them), but there is a significant difference between "information needs" and "the number of pregnancy". Those women who experienced pregnancy for the first time in comparison to other groups mentioned the need for obtaining health information and related issues at a higher level. Moreover, the need for obtaining information was significantly higher between the pregnant women in groups of "up to 20 years old" and "21 to 25 years old" compared to other groups. Also the women who "their family's revenue was higher than others" have mentioned the importance of health information and the need for obtaining health information significantly higher than other groups.

Additionally, the results of ANOVA regarding "resources and entries of obtaining information" and "demographic properties" in women indicated that those women with the education level of "masters or higher" used internet information resources (internet, websites and weblogs) significantly more than other groups. Also the women with graduate degrees as well as "masters or higher" were more active in using of "books" and "scientific journals" in comparison to other groups and they significantly emphasized on more use of them. Findings regarding use of human information resources (specialist doctors, specialists of females, nurses and other specialists of health care field) indicated that there is no significant difference between various groups, while other groups emphasized on the importance and use of individuals without any significant difference.

Discussion

Information and having access to it is a critical element in the capability of a woman to have her body transformed by activities of health improvement and prevention for pregnant women and the chrysalis. Without sufficient realization of health care, it is problematic or even impossible for a pregnant woman to make informed decisions leading to good results for herself and her family [17]. The level of knowledge and awareness of pregnant women is significant because of two reasons. First, pregnancy could be the first confrontation of a woman with health care systems. Moving in this complicated path for the first time even with high level of knowledge and information skills can be a horrifying thing to do. The second reason is that the health conditions of a woman and her understanding of health related information before pregnancy, during pregnancy and during evolution years have a direct influence on the baby and the chrysalis. Since the access of women to health information and improving their knowledge and health literacy level is critical for her and the baby's health, this study is aimed to investigate information needs and the resources for obtaining information in pregnant women referred to health care centers.

The results of this study indicated that the need for receiving information regarding the health of the chrysalis is the most important information need for pregnant women. Additionally, the information related to the impositions of mother diseases transferred to the chrysalis is another case that studied individuals emphasized on its importance and its position. Some of the studies in this field indicated that pregnant women consider the chrysalis's health as their most important concern [18-19]. Moreover the feeling of responsibility as well as love of the child is another important and effective fact that made them nervous about the health of the chrysalis and the subjects relating to it. In this light, it is necessary to produce and develop consulting centers specifically e for pregnant women in health care centers of the country and women specialist doctors, obstetricians and nurses to provide information consulting to women regularly.

Moreover, the results indicated that the information regarding childbirth, the methods and impositions relating to it is another data that the studied participants emphasized on, in terms of its access and availability. Many of the carried out studies in Iran and with respect to the concern and stress about pregnancy period indicated that the pregnant women emphasized highly on the fear of

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childbirth (both natural and caesarian operation) and evaluated this event as very important and necessary [20-22].

Also it should be noted that fear, stress and pain are three factors that played a significant role in childbirth and if this fear and stress is eradicated, mental and physical relaxation will be experienced. . Presenting sufficient information by the doctors, specialists and other actors of the health field and preparing pregnant women for performing this phenomenon through improved awareness and knowledge level, can create a platform for increasing relaxation in women during childbirth and can prevent any probable problems and impositions after child birth as much as possible. The results of Etghaei (2010) indicated that presenting useful information related to proper childbirth and its method can have a very positive effect on maintaining mental health and relaxation of pregnant women, which it is in accordance with the findings of this study [23].

Information related to sports and movements proper for pregnancy is one of the needs mentioned by the studied women. In this field it should be noted that proper and enough physical activities during pregnancy can have significant effect on the mother and the process of growth of the chrysalis. Recent researches suggest that following a sufficient sport plan with a smooth intensity in women who have a healthy childbirth result in improved health for the women and do not harm the growing chrysalis. Unfortunately, normally the pregnant women choose an inactive lifestyle. Therefore it is necessary that during pregnancy, information and awareness related, as well as special plans for improving physical activities in pregnant women will be conveyed to them and the importance and method of performing proper physical activity presented to them. Shakeri (2012) and Kadr (2014) also emphasized on the importance of conveying and presenting sufficient information regarding movements and physical activities of pregnant women and it is in accordance with the findings of this study [24-25].

Additionally, the findings indicated that the studied women act consciously about receiving information regarding medicines and sufficient supplements during pregnancy time and referred to it as suitable information during this period. The previous studies indicated that pregnant women do not use supplements (Iron pill, vitamins etc.) properly and regularly due to various reasons such as lack of awareness and lack of sufficient information. Additionally, it is necessary that not using drugs wastefully and generally not self-medicating, which are the biggest social health economic problems of our country should be prevented so that there will be no drug resistance, lack of treatment and healing, poisoning and unwanted impositions in them. Results of Bagheri et al (2014) in this field indicated that lack of knowledge and low level of awareness regarding medicines and supplements as well as use of drugs spontaneously can increase the probability of chrysalis's diseases significantly and emphasized on the need to educate pregnant women in this field [26]. As a result, it is necessary that information related to methods and the quantity of supplement and drug usage and also preventing spontaneous use of drugs should be taught to pregnant women and health care specialists have a critical role in this field.

The results of this study also indicated that women and childbirth, specialists, doctors and generally specialists of health system of the country (human information resources) are recognized as the most important entries and resources of health information obtaining by pregnant women. This indicates that the pregnant women believe more in the capability and responsibility of female doctors and specialists and trust in the knowledge and awareness of this group. Additionally, health consult with the specialists of this field and having access to medical information through doctors and specialists of women can lead to increase of knowledge, decrease of stress (in facing new health problems or stressing situations), increase of capability in defeating risky factors, recovering more quickly, increase of self-caring capabilities and also effective contribution to clinical and health related decision making in pregnant women. The results of many carried out

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studies in this field including Riahi et al (2016) and Choi (2011) indicated that people significantly refer to doctors and specialists for having access to health information and this is in accordance with the findings of this study [27-28]. Moreover the results of the study of Nasrollahzadeh also referred to the fact that time deficiency of doctors and not answering to mental needs of the pregnant women are the most important factors of dissatisfaction in this group of persons [29] and there has to be proper and sufficient measures by the specialist doctors and other actors of health system for ensuring better interactions with the pregnant women.

Printed information resources such as books and public and private journals are other important information channels in meeting information needs of people. The results of this study indicated that there has not been any significant tendency in use of printed information resources among pregnant women. This tendency that emphasizes on the principle of the least attempt and economic parsimony pattern in informing is justifiable according to the results of Medlock (2015). The acquaintance of pregnant women with health doctors and specialists and believing in their efficiency has led to a feeling of trust in them and caused the pregnant women to significantly refer to these resources and people and in contrast low acquaintance with other unofficial resources such as books and journals etc. which leads to ignorance about their advantages.

It also indicated that audio and video Medias, radio and television and most importantly satellite receivers are effective in obtaining health information among the studied individuals and are in a valuable position. National radio and television organization of Iran can play a significant role in increasing and improving awareness level of people in the society by creating and establishing specialist networks regarding health and increasing plans related to pregnant women. It is also necessary to have other measures because pregnant women are less willing to use and obtain health information from satellite receiver and not Iranian Farsi language channels which always present controversial information and use various and reliable programs of internal channels. The previous studies indicated that audio and video Medias have an undeniable effect on the process of inactive obtaining of information by the individuals and groups and it is in accordance with the findings of this study [31].

Internet and mobile social media especially telegram are the other methods of accessing health information by pregnant women and they use these applications considerably. In this regard it should be stated that the appearance and daily growth of social media made accessing the internet consequently rapid and accessing these applications through smart phone is easier and the pregnant women obtain a considerable fraction of their required information in this way. The pregnant women can interact with the persons and the groups that share information about health and pregnancy and be beneficiary from them according to their subject of interest. Although information can be available easier and cheaper and without any spatial and time limit through social media and mobile phones but these people must be careful with respect to validation and correction of the content and quality of information and also spread of rumors or incorrect information. Studies in the field of social media and smart phones indicated that these tools are one the most important and most critical resources of obtaining health information and are in accordance with the findings of the current study that emphasize on this fact [32-33]. We recommend production of health based informing application for the pregnant women and presenting information services through smart phones in this field (which is used extensively in developed and industrial countries).

Conclusion

We can conclude that women need a variety of information in order to survive the duration of pregnancy. The importance of this information is reported extensively by the population of the study. Moreover they need information resources in different forms and figures and they search for information through health field specialists, printed information resources, audio and video resources

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and even internet and social media. Health care centers, networks, hospitals and subsidiary educational centers in this field can be effective and can play a major role. The managers and officials of the country's health system especially actors in the women and child birth section can reduce some of the problems and challenges faced by pregnant women by proper planning, suitable policies, performing suitable actions and measurements in light of increasing awareness level and knowledge of the pregnant women through feeding them information, regular and continuous education and improving the conditions for increasing the health level of women and their children.

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Conflict of Interest

None declared by authors.

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