

## Women's attitude to group prenatal care and their satisfaction

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### Abstract

**Objective:** To evaluate the attitude and satisfaction level of women attending prenatal clinics for getting group care in Iran.

**Methods:** The descriptive-analytical study performed from 2009 to 2010, comprised of 701 pregnant women with gestational age of 20 weeks or more who had undergone at least two visits at 15 prenatal care centres in Zanjan, Iran. Detailed questionnaire regarding overall satisfaction, communication skills, quality of the care, existing attitudes about group prenatal care, availability and costs of services etc was filled up through face-to-face interviews with each subject. Data was analysed using SPSS 11 and analysis of variance.

**Results:** Of the total, 489 (71%) subjects claimed that they preferred group prenatal care. The satisfaction level was found to be statistically significant according to the type of insurance ( $p < 0.001$ ). The least and the most disappointed were subjects with private and social security insurances respectively. There was no significant relationship between satisfaction and age or level of maternal education, but the subjects said that the relationship with others in the group would have a severe effect on their learning. The overall satisfaction rate was more than 99% ( $n=694$ ).

**Conclusion:** The high satisfaction level suggests good quality of care is being provided by the centres concerned. Moreover, most of the mothers had a positive attitude towards the concept and practice of group prenatal care.

**Keywords:** Group prenatal care, Attitude, Satisfaction, Cost, Education. (JPMA 63: 50; 2013)

### Introduction

Historically, the goal of prenatal care has been to maximise medical outcomes for mothers and their infants by providing regular screening and medical care for the pregnant woman and her foetus while preparing the former for the delivery of her infant. In recent years, the adequacy of traditional prenatal care to improve pregnancy outcomes has been challenged with rising rates of premature births and low birthweight (LBW) deliveries.<sup>1-3</sup> Prenatal care recommendations include expanding the scope of prenatal care beyond the more prevention of adverse maternal and neonatal outcomes to include added emphasis on teaching and social support for pregnant women.<sup>4,5</sup> One model of prenatal care that has evolved from these recommendations is group prenatal care programme that provides patients with expanded opportunities for educational and social enrichment.<sup>1</sup> On the other hand, one of the important problems faced these days is the lack of good-quality prenatal care and attainment of satisfaction. The responsibility rests with healthcare authorities. It is essential to first assess the attitude towards prenatal clinic

services and the satisfaction of a target community through research projects. In fact, the satisfaction of patients attending health centres is a very important index used to assess the quality of healthcare and the services provided by medical personnel. It can be considered an ultimate and satisfactory outcome in improving healthcare services in a community. Patient satisfaction can only be seen in the context of striking a balance between expectations and the provision of care according to the physical, mental and social needs of the patients.<sup>2</sup> Eight factors are mostly taken into consideration in studies available in literature: communication skills between patient and personnel, quality of technical equipment used, easy availability, cost, the physical environment, equipment, continuous healthcare provision, and feedback.<sup>3,4</sup> A direct relationship exists between observing the recommendations of healthcare personnel and patient satisfaction and it plays an important role in the patient's decision about whether or not to return for further visits. On the other hand, healthcare systems will be successful only if they achieve the cooperation of patients and this will not become practical unless patients' attitude to care provision system gets positive. It is essential, therefore, to study patients' views, expectations and needs. If health centres fail to fulfill the needs of their patients and to gain their satisfaction, they may gradually lose their general acceptance and will be unable to perform their duties properly.<sup>3,4</sup>

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By assessing the attitude and satisfaction of pregnant women, this study broadly aimed at improving the quality of prenatal care and to provide uniform healthcare services for pregnant women attending different clinics.

### Subjects and Methods

This descriptive-analytical study comprised 701 pregnant women with gestational age more than 20 weeks with at least two visits to one of the 14 active urban prenatal clinics or to the Vali-e-Asr Clinic in Zanjan, Iran. The study was performed from 2009-2010. All those attending and meeting the inclusion criteria were enrolled, and there was no need for sampling. Informed consent was obtained from the subjects. The questionnaire comprised 23 questions related to satisfaction about the environment of the health centre (physical environment and equipment), communication skills of the personnel and the quality of the care provided, existing attitudes about group prenatal care, availability and costs of services. In addition, questions pertaining to demography, type of insurance, and the reason for choosing a particular health centre were also part of the questionnaire. All these factors had several sub-sections. For example providers' skill assessed in four groups of personnel as doctors, midwives, nurses and family planners. Also attendant's satisfaction about their insurance was studied based on the five types of insurance defined in Iran's health sector. Moreover, for assessing their preference about the providing procedure, the questionnaire was designed to study women's interest in getting services either in groups (with >12, <12 participants) or on an individual basis.

In order to ensure the content validity, the method of test re-test was used with a resulting correlation coefficient of 95%. The validity of the questionnaire was assessed and confirmed by experts, and the scientific reliability of the questionnaire was assessed within an interval of 14 days through presenting to 10 experts who were qualified for participation in the project.

The questionnaires were filled up through interviews performed by midwives who were not employees of the health centres. While three questions had been allocated to attitude assessment, the level of satisfaction in the other factors was specified as 'totally satisfied' (0), 'satisfied' (1), 'indifferent' (2), 'unsatisfied' (3), and 'totally unsatisfied' (4). But in order to facilitate the test, the options were reduced to 2 groups: 1) 'satisfied' (the combination of 'completely satisfied' and 'satisfied'), and 2) 'not satisfied' (the combination of 'not satisfied', and 'completely unsatisfied'). Data was entered into SPSS 11 and absolute and relative frequency distributions and

analysis of variance (ANOVA) tests were used for statistical analysis and total scores ranked between 0-92 based on the scores calculated for each subjects.

### Results

The mean age of mothers was 26.23±5.66 years (range: 14-45). The mean number of pregnancies was 1.93±1.19. Among them 391(55.8%), 261 (37.3%) and 49 (6.9%) had up to primary, secondary, and high-school level of education, respectively. The most common reason to choose a particular health centre was its distance to their home (n=514; 73.3%), and the least common reason was their insurance (n=2; 0.3%). The highest rates of satisfaction were for specialists (100%); midwives (n=694; 99%); observing religious matters (n=694; 99.7%); and regular follow-up visits (n=969; 99.2%). Overall, the subjects were so satisfied that 694 (99%) planned to return to the same centre for future visits (Table).

Total scores specified in the questionnaire were calculated (minimum 0, maximum 92) in order to determine the overall satisfaction rate. 'Satisfaction' was considered to be present when satisfaction rate was above 70%. The outcome variable was estimated in the form of overall satisfaction. After combining both 'satisfied' and 'unsatisfied' cases, the highest dissatisfaction was found to be related to prolonged waiting period (n=45; 6.4%), teaching deficiencies such as failure to teach the danger signs of pregnancy (n=57; 8.1%); teaching personal

Table: Satisfaction with prenatal centres.

(%)	Dissatisfied n (%)	Satisfied n
Wishing to return to the same center	7 (1)	694 (99)
Guiding signs	10 (1.4)	691 (98.6)
Staff of reception	9 (1.3)	692 (98.7)
Speed of making medical file	28 (4)	673 (96)
Waiting time for physical examination	45 (6.4)	656 (93.6)
Cleanness of clinic environment	13 (2)	688 (98)
Communication of midwife	7 (1)	637 (99)
Communication of specialist physician	0 (0)	75 (100)
Communication of Interns	1 (1.4)	69 (98.6)
Quality of Visit by doctor	4 (1.2)	342 (98.2)
Teaching about danger signs of pregnancy	66 (9.4)	635 (90.6)
Teaching about personal hygiene	77 (11)	624 (89)
Teaching about use of complementary drugs	47 (8.1)	654 (91.9)
Teaching how to cope with routine problems	57 (9)	642 (92)
Teaching about nutritional facts during pregnancy	77 (11)	624 (89)
On time prenatal care	6 (0.8)	659 (99.2)
Adequate Equipment and devices	17 (2.3)	684 (97.7)
Informing patients about future visits	8 (1.1)	693 (98.9)
Observing religious matters by medical staff	2 (0.3)	690 (99.7)
Medical Staff	40 (5.7)	661 (94.3)

hygiene (n=78%; 11%); teaching how to cope with routine problems (n=47; 6.7%); teaching nutritional facts during pregnancy (n=66; 9.4%); and about the type of insurance (n=55; 7.9%). As for the insurance factor, the insured women, most dissatisfaction existed among those who did not use any form of insurance ( $31.2\pm 2$ ), followed by subjects with social security ( $30.14\pm 7.4$ ) or treatment services insurance ( $30.70\pm 6.8$ ). Self-insured women had the lowest dissatisfaction rate ( $21\pm 0$ ).

Satisfaction rate was found to be statistically significant according to the type of insurance ( $p<0.001$ ), such that the least and the most disappointment were seen in subjects with private and social security insurances, respectively. There was no significant relationship between satisfaction and age or level of maternal education using ANOVA. Finally, 497 (71%) subjects claimed that they preferred group prenatal care and said that the relationship with others in the group would have a severe effect on their general information. A positive approach to group prenatal care was thus observed among the subjects.

## Discussion

It is impossible to improve the services provided by health centres without paying attention to the opinions of patients attending these centres. The initial step is to collect adequate information from those who have made use of these services. It is only by knowing their attitude and level of satisfaction that we can overcome deficiencies and improve abilities. The results of the current study indicate that most patients attending these centres were satisfied with the communication skills of the receptionist and the overall process of admission (98.7%). Moreover, most of them (71%) preferred to be in groups for taking prenatal care to improve their information and be in relationship with others who are in a similar position. A study also emphasised the role of a patient's attitude in healthcare effectiveness.<sup>5</sup> It said that the value ascribed to prenatal care by women and physicians' perceptions of women's attitudes about care contrasted sharply. It stressed that the link between women and physicians providing obstetric services can be fragile, and the physicians should be aware of patients' expectations, should try to improve their satisfaction by good relationship.<sup>5</sup> Just as our findings showed, the participants like group care and have positive attitude about it in a study which systematically reviewed the literature on prenatal care related to patients' satisfaction.<sup>1</sup> It noted that there was some improved outcomes among patients who chose group care and most of the reviewed studies promoted group care as a better option for patients than the traditional individual care.<sup>1</sup>

However, there are some disadvantages of the concept of group care. So we should understand why some women do

not choose group care, and offer them equally appealing and effective options for care by further studies which are planned to investigate women's attitude to prenatal care.

Based on our findings, satisfaction rate was more than 99% among patients seeking prenatal care in the health centres of Zanjan. Another study also showed that most patients were relatively satisfied with the process of patient admission.<sup>6</sup> Another study in the Iranian city of Sabzevar, women were found to be satisfied with the overall process of admission.<sup>7</sup> According to another study, around 13% of patients were dissatisfied with the behaviour and inappropriate reaction of the personnel.<sup>8</sup> There are studies stressing the point that the behaviour of the personnel and patients is so important that it could be counted as an effective factor in overcoming the needs and improving the level of healthcare even if the physical environment was of low standard. Therefore, it seems that changes must be made in the way that health services are provided to patients and to simultaneously produce changes in medical education, thereby increasing patient satisfaction rate based on their attitudes and needs.<sup>9,10</sup> Regarding the psycho-social aspects which impact patient's attitude and views, making good relationship with the patient has been found to be more effective in gaining their satisfaction than other factors.<sup>3,8-12</sup> A study has confirmed that psycho-social aspects are a decisive criterion of prenatal healthcare satisfaction of the parturient. Psychological competencies of healthcare providers and staff are an inseparable part of their overall competence alongside communication skills.<sup>13</sup>

The current study showed that 6.4% of patients were disturbed by the long waiting period until they were examined by the doctor. A study involving 1100 cases to determine satisfaction rate among women attending prenatal clinics, found that around 24.5% of patients were disappointed with the long waiting period.<sup>14</sup> Yet another study stated that the most common complaint of patients was the long waiting time.<sup>8</sup> The waiting period, according to another study, is a factor which can be used to predict satisfaction rate for all people, especially those with free insurance. This is because women are disturbed by the thought that the health system does not pay enough value to their time.<sup>9</sup> In the present study, this problem may be attributed to the overpopulation of some health centres. However, patient satisfaction can be ensured by minimising the waiting time. In addition to reducing the waiting time, other methods can be used to help make efficient use of the waiting period. For example, mothers can be amused with magazines, television programmes or educational films such as programmes about becoming familiar and ready for delivery, breastfeeding, and taking

care of the newborn. Over 99% of the patients expressed satisfaction with the behaviour of midwives, while the rate was 100% with specialist physicians. Besides, 98% were satisfied with the visit paid by the centre's physician. An earlier study in Iran also showed that 92.2% of patients were satisfied with the behaviour of health personnel.<sup>15</sup> One study found that satisfaction rate was higher among patients who were visited by midwives than those who were visited by doctors.<sup>16</sup> In another study, it was seen that pregnant mothers had relative satisfaction about the technical abilities of the health personnel.<sup>17</sup> On the other hand, one study came up with a high percentage (42%) of women who were dissatisfied with the relationship with doctors, and they complained about the lack of social skills of doctors and medical personnel.<sup>18</sup> In any case, it seems that satisfaction with the attitude of doctors and health personnel play an important role in the prevention and treatment of diseases. Both physical and mental improvement is directly related to the satisfaction rate. Two studies concluded that satisfaction of patients depends on patient-doctor relationship.<sup>19,20</sup> These abilities include personal social skills of the doctor, making eye contact, listening to the patient in detail and allowing them to express themselves. It must also be kept in mind that in Iran, higher respect is paid to doctors, and patients are less expectant which may itself affect the satisfaction rate.

Our results showed that 90% of patients were satisfied with the hygiene of the waiting and examination rooms. Other studies have also emphasise the fact that women pay special attention to the cleanliness of these rooms and they have less desire to receive health services provided by health centres and clinics which fail to obtain an appropriate level of hygiene.<sup>3,9,12</sup> The physical environment has been counted as one of the important factors involved in patient satisfaction.<sup>3,7,9,12</sup>

Regarding patient education, the results of our study showed that 8.1%, 11%, 6.7% and 9.4% of patients were dissatisfied with the teaching of danger signs of pregnancy, personal hygiene, how to cope with routine problems, and nutrition during pregnancy, respectively, and the least dissatisfaction rate was for teaching how to use complementary drugs (1.4%). The quality of health education provided during pregnancy had better results in the public health system than the private sector in Sanandaj city.<sup>21</sup> The study showed that the public sector was more successful in providing education than the private sector.<sup>21</sup> An earlier study said that the easier the availability of cooperative consultation or educational services about pregnancy and nutrition, delivery, lactation, and parenthood, the higher rate of satisfaction would be achieved.<sup>11</sup> Another study reported higher satisfaction

rate among women seeking prenatal care from centres providing high-quality teaching services.<sup>10</sup> One study showed that 8.1% patients were dissatisfied with the inadequate amount of teaching materials.<sup>15</sup> In one study, 24.7% and 29.4% of patients were dissatisfied with the prenatal care teachings and nutritional education, respectively.<sup>14</sup> Similar results have been reported by other studies.<sup>17,18</sup> As compared to other case studies, our study showed the highest dissatisfaction rate for teaching, which may be due to two factors. First, health personnel working in busy health centres are unable to put enough time and effort for patient education; second, in case of different languages, the health staff and pregnant women do not communicate in an easy manner. In this case it would be possible to minimise dissatisfaction by arranging classes for small groups of these people. Pregnant women can become ready for delivery and acceptance of the role of motherhood and taking care of the newborn by becoming more familiar with the physical changes and associated problems and the ways to cope with them. Least dissatisfaction existed for the observance of religious aspects by the medical staff since most personnel working in the prenatal clinics were women (with the exception of male interns in Vali-e-Asr Hospital).

Overall, 94.3% of subjects were satisfied about the cost they paid and the services they received. This rate was approximately equal to the study in Tehran.<sup>14</sup> Around 7.9% of patients were dissatisfied with the treatment costs, even though prenatal services are of little cost and almost free of charge in Iran. Maybe the cost of pregnancy-related pre-clinical tests impose some financial burden on the families. Although insurance has decreased this unfavourable effect, but it seems that dissatisfaction can be reduced by compensating for the extra costs. The type of insurance dissatisfied 7.9% of the subjects. Patient satisfaction was related to type of insurance such that the least and the most dissatisfaction existed for subjects with private (free and military) and social security or health services insurances, respectively. In an earlier study, there was no significant statistical relationship between the type of insurance and patient satisfaction, but most (55.8%) patients with military insurance were dissatisfied.<sup>14</sup> In the current study, we found no statistical relationship between satisfaction and age or level of education, which is in accordance with an earlier study.<sup>14</sup> However, other studies in Yazd and Barikani, Iran, showed that the satisfaction rate had an inverse relationship with the level of education. They also showed that the satisfaction rate was directly related to age.<sup>14,22,23</sup> On the other hand, one study found no relationship between the satisfaction rate and age,<sup>11</sup> but it noted that the satisfaction rate had a direct relationship

with patient's expectations, such that subjects with lower level of education had less expectations and their rate of satisfaction was higher than subjects with higher education.<sup>11</sup> Mothers with higher education were satisfied harder, probably due to the fact that they had more knowledge about the prenatal care required for the convenience and comfort of the process of pregnancy. The subjects in the current study were mostly from the middle and poorly educated class (93% of women had primary and secondary school education). They were probably easier to please and about 99% of them decided to return for future visits since they were satisfied with the prenatal services provided by the respective health centre. Results indicate that the health service system in Iran is able to easily satisfy most patients.

According to our study, the satisfaction rate was more than 99% among patients seeking prenatal care in the health centres of Zanjan. This is a high rate and it reflects on the good quality of care given by these centres. In addition to the relationship of the care provided and different factors such as personal, cultural and social characteristics, lifestyle and general health of patients,<sup>23</sup> it seems that the personality of the health staff has more effect on satisfaction than the character of the service recipients.<sup>7,9,12</sup>

## Conclusion

By improving the process of admission, timing of prenatal visits, spending more time for educational materials (about delivery and lactation), decreasing the costs of tests, the quality of prenatal care, can be increased even further. It will increase satisfaction of clients and eventually get closer to the worldwide standards.

## Acknowledgement

We are grateful to the Deputy of Research, Zanjan University of Medical Sciences, for approval of the research proposal and its subsequent financing. Thanks are also due to the management of Vali-e-Asr Health Research Centre for its cooperation. We are also grateful to the Deputy of Health as well as to the entire staff of every health centre that participated in the study.

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