

Assessment of women's satisfaction with reproductive health services in Urmia University of Medical Sciences

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تقييم رضی السيدات عن خدمات الصحة الإنجابية في جامعة أرمية للعلوم الطبية
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الخلاصة: تستهدف هذه الدراسة تقييم رضی السيدات عن خدمات الصحة الإنجابية في المختبر العام في جامعة أرمية للعلوم الطبية في عام 2003. وقد استوفت عينة عشوائية مؤلفة من 600 من السيدات المتزوجات اللاتي تتراوح أعمارهن بين 15 و49 عاماً استبياناً حول الرضى مستنداً على معايير بروس. وقد أبدى 76.2٪ منهن رضاهن و15.8٪ منهن رضاهن التام عن مجمل خدمات الصحة الإنجابية، في حين أبدى 34.0٪ منهن عدم رضاهن أو سخطهن التام على مقدمي الرعاية الصحية. وتمثلت العوامل التي تحتاج للتحسين في ما يلي: توفير جميع الوسائل الحديثة لمنع الحمل في المراكز الصحية، واستخدام مواد تثقيفية (مثل المطويات والنشرات) عند تقديم المشورة في الصحة الإنجابية، وتحسين المعلومات التي تعطى للمراجعات لضمان أن خياراتهن لأسلوب تنظيم الأسرة تستند على معلومات صحيحة.

ABSTRACT We assessed women's satisfaction with the reproductive health services in the population laboratory of Urmia University of Medical Sciences in 2003. A random sample of 600 married women aged 15–49 years completed a satisfaction questionnaire based on Bruce's criteria. Overall 76.2% of women were satisfied and 15.8% were completely satisfied with the total reproductive health service; however 34.0% of women were unsatisfied or completely unsatisfied with their health care provider. Factors that needed be improved were: providing all modern contraception methods in the health centres; using educational materials (e.g. pamphlets and brochures) at reproductive health consultations; and improving information given to clients to ensure informed choice of family planning method.

Évaluation de la satisfaction des femmes à l'égard des services de santé génésique à l'Université des Sciences médicales d'Ourmia

RÉSUMÉ Nous avons évalué la satisfaction des femmes à l'égard des services de santé génésique au laboratoire de population de l'Université des Sciences médicales d'Ourmia en 2003. Un échantillon aléatoire de 600 femmes mariées âgées de 15 à 49 ans a rempli un questionnaire de satisfaction fondé sur les critères de Bruce. Globalement, 76,2 % des femmes étaient satisfaites et 15,8 % étaient totalement satisfaites de l'ensemble du service de santé génésique ; en revanche, 34,0 % étaient insatisfaites ou totalement insatisfaites de leur prestataire de soins de santé. Des efforts devraient être faits pour : proposer toutes les méthodes de contraception modernes dans les centres de santé ; utiliser du matériel éducatif (dépliants et brochures) dans le cadre des consultations de santé génésique ; et améliorer les informations fournies aux utilisatrices pour qu'elles puissent choisir une méthode de planification familiale en connaissance de cause.

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Introduction

Women and their health are central to the primary health care agenda, not only as the focus of family planning and maternal and child health programmes, but also as conduits for improving the health of their children [1]. In their biological reproductive role, women are obviously and directly tied to the health of the fetus and newborn child [2]. One of the most important services which are delivered for women is reproductive health [3]. Reproductive health is an important component of public health. It is a prerequisite for social, economic and human development. After the International Conference on Population and Development held in Cairo in 1994, the terms reproductive and sexual health were widely disseminated among all community sectors. The definition of reproductive health includes many components, among which are family planning (FP), maternal and child health, prevention of harmful practices, reduction of the spread of reproductive tract infections and other sexually transmitted diseases (STDs) including HIV/AIDS, and provision of treatment for STDs and their complications [4].

Attempts to understand women's reproductive health needs have shown that the interaction between clients and the service is a critical and neglected dimension of programme efforts [5]. Concern for clients' rights in the provision of reproductive health in developing countries has promoted intense efforts by international experts to promote client-centred models of communication as a replacement for more provider-centred approaches [6]. Moreover, communication between service providers and clients is an essential component in the delivery of family planning services and the vehicle for information exchange, reporting, and informed choice of family planning methods [7,8].

Clients want quality services and providers strive to offer this quality. However, definitions of quality can differ. Higher satisfaction levels result in more involvement of the client, and consequently increase the effectiveness of health care services. Evaluation of clients' satisfaction plays a significant role in the improvement of health care quality. In general, a patient's satisfaction is a complicated phenomenon that is influenced by different factors, and patient feedback is the foundation for improvement of quality programmes.

The main objective of this research was to assess women's satisfaction with the reproductive health services in the population laboratory of Urmia University of Medical Sciences. Urmia is the centre of West Azerbaijan province of the Islamic Republic of Iran and the population laboratory in this city was founded in 2001 with a target population of about 45 000 comprising 11 756 households.

Methods

The study design was descriptive and cross-sectional.

Selection of population and study sample

The Urmia city population laboratory includes 3 health centres which were chosen for the study: Aghdash, Shahrokhabad and Jalili. The study population was all women aged 15–49 years who had been married at least once and were referred to the health centre. The sample size was estimated to be nearly 400 using the statistical formula, P (proportion of women's satisfaction) = 50%, $Z = 1.96$, $d = 0.05$ and confidence level $\alpha = 0.05$. To adjust for sample loss, e.g. from unusable responses, the sample size was increased by 50% to 600. The target group was 6300 married women in the age 15–49

years in the 3 health centres. A total of 600 married women were divided into 3 parts due to nearly equal populations in the selected health centres; 200 women from each centre were selected by systematic random sampling from the household files and interviews were carried out with selected women who were referred to each health centre and continued until completion of the target sample size.

Questionnaire design

Bruce's key points regarding quality in reproductive health were chosen in designing the questionnaire [9]. These are: (1) selection of a FP method, (2) technical skill of service providers, (3) relationship between service providers and client, (4) consistency and follow-up, (5) comprehensiveness of service and (6) presenting information to the clients. A total of 30 questions were prepared for all 6 aspects and these were tested for their validity and reliability. A Likert scale was used for responses to questions about satisfaction with aspects of services (completely satisfied = 5, satisfied = 4, no view = 3, unsatisfied = 2, completely unsatisfied = 1). Reliability analysis of the questionnaire showed that Cronbach's alpha coefficient = 0.8316.

Selection and training interviewers

A group of 10 volunteer female students from the School of Public Health of Urmia University of Medical Sciences were chosen, trained and supervised by researchers to interview the selected women. All 600 women (100%) responded to the questions in the interview.

Data entry and statistical analysis

SPSS software was used for data entry and analysis based on response codes 1–6 in the questionnaire. The quality score of each factor in separate health centres was

calculated. Descriptive analysis such as frequency, means, standard deviation (SD) and analytical tests (Spearman correlation and chi-squared tests) were used to study the relationship between variables.

Results

Population study and women's profiles

The results showed that the majority (51.0%) of the 600 women in the study were aged 25–35 years and a minority (37.0%) were aged 15–25 years. The mean age was 29 (SD 18) years, range 16–48 years. Concerning the education level of women, 36.5% had diploma or high-school education, 34.8% guidance (pre-high-school level), 17.5% primary school, 6.2% were illiterate and 5.0% university level.

Family size showed that 47.5% of women had 0 children, 36.2% had 1 child, 12.7% had 2 children, 3.0% had 3 children and 0.6% had 4+ children. All the women surveyed were using contraception: most of them (49.5%) were using oral contraceptive pills, 20.7% intrauterine device (IUD), 13.2% condoms, 9.7% natural methods, 3.5% tubectomy and 3.5% injectable contraceptives.

Women's satisfaction

The assessment of women's overall satisfaction with the reproductive health service indicated that 76.2% were satisfied, 15.8% were completely satisfied, 7.3% had no view and 0.7% were unsatisfied.

Table 1 shows the results of women's satisfaction with the reproductive health services regarding informed choice of family planning method and service provider skills. Almost all the women (93.3%) indicated satisfaction (completely satisfied or satisfied) that their choice of FP method

Table 1 Satisfaction of the women (n = 600) with reproductive health services: informed choice of family planning method and provider skills

Questions	Completely satisfied		Satisfied		No view		Unsatisfied		Completely unsatisfied	
	No.	%	No.	%	No.	%	No.	%	No.	%
Informed choice about FP method										
Choice of method was free and informed	356	59.3	204	34.0	19	3.2	14	2.3	7	1.2
Given names of all preventive methods	327	54.5	210	35.0	32	5.3	27	4.5	4	0.7
Preventive methods were explained	286	47.7	208	34.7	60	10.0	43	7.2	3	0.5
Information about location of other contraceptive services	188	31.3	207	34.5	124	20.7	72	12.0	9	1.5
Information about limitations of contraceptive methods	155	25.8	182	30.3	93	15.5	138	23.0	32	5.3
Information about referral service	140	23.3	149	24.8	133	22.2	147	24.5	31	5.2
Provider skills										
Provider selected by client	93	15.5	112	18.7	191	31.8	151	25.2	53	8.8
Knowledge of provider	282	47.0	216	36.0	72	12	23	3.8	7	1.2
Experience of provider	297	49.4	223	37.2	62	10.3	15	2.5	3	0.5
Promptness of provider	265	44.2	231	38.5	58	9.7	40	6.7	6	1.0
Skilfulness of provider	283	47.2	233	38.8	68	11.3	13	2.2	3	0.5

FP = family planning.

was free and informed. More than half the women (56.1%) were completely satisfied or satisfied with the information about the limitations of the FP service and the preventive methods, while 28.3% of them were completely unsatisfied or unsatisfied. The most unsatisfactory aspects of reproductive health services were the items "information about limitations of contraceptive service" (28.3% of women unsatisfied) and "information about referral services" (29.7%).

Concerning provider skills, the majority of women (86.6%) had high satisfaction with the experience of the FP provider, while one-third (34.0%) were completely unsatisfied or unsatisfied with the provider they had selected.

Table 2 indicates the results of women's satisfaction with the reproductive health services concerning the categories inter-

personal relationship and consistency and follow-up. The great majority of women (92.5%) were completely satisfied or satisfied that the behaviour of the service provider was polite, while 29.2% of them were unsatisfied or completely unsatisfied with the item about the use of educational tools in the consultation. The majority (83.0%) of women had satisfaction (completely satisfied and satisfied) that they had enough information about follow-up visits.

Concerning consistency and follow-up of service, 8.2% of women were unsatisfied (completely unsatisfied or unsatisfied) about the item "I know where to go if side-effects occur".

Table 3 identifies the women's satisfaction about the comprehensiveness of services and information given to clients. The great majority of women (94.1%) had

high satisfaction (completely satisfied or satisfied) with the vaccination service, while 32.8% of women were completely unsatisfied or unsatisfied about the Pap smear service.

Concerning the information given to clients, the majority of women (88.3%) had high satisfaction (completely satisfied and satisfied) with information they received about the use of their chosen FP method, while one-third of women (32.3%) were unsatisfied or completely unsatisfied with the item about distribution of information from pamphlets and booklets.

Table 4 shows the Spearman correlation between the mean total of women's satisfaction and the 6 reproductive health services

factors, adjusted based on the correlation coefficient from maximum to minimum. The results showed that the highest Spearman test coefficients were related to information given to clients ($r = 0.606$) and informed choice about FP method ($r = 0.527$) and the lowest was related to comprehensiveness of the service ($r = 0.436$).

Table 5 shows a comparison of women's satisfaction between the 3 health centres. Women's satisfaction (satisfied or completely satisfied) with the reproductive health services were 95.1% in Agdash, 89.5% in Shahrokhabad and 91.0% in Jalili. Moreover, chi-squared tests showed that there was a significant difference between the total percentage women's satisfaction

Table 2 Satisfaction of the women ($n = 600$) with the reproductive health services: interpersonal relationship and consistency and follow-up

Questions	Completely satisfied		Satisfied		No view		Unsatisfied		Completely unsatisfied	
	No.	%	No.	%	No.	%	No.	%	No.	%
<i>Interpersonal relationship</i>										
Felt able to ask questions	355	59.2	197	22.8	22	3.7	19	3.2	7	1.2
Behaviour of provider was polite	364	60.7	191	31.8	26	4.3	12	2	7	1.2
Had confidence in provider	341	56.8	203	33.8	41	6.8	13	2.2	2	0.3
Was asked about problems and aims of FP	260	43.3	218	36.3	74	12.3	39	6.5	9	1.5
Consultation was easy and understandable	308	51.3	229	38.2	42	7.0	14	2.3	7	1.2
Consultation used educational tools	130	21.7	178	29.7	116	19.3	111	18.5	64	10.7
<i>Consistency and follow-up</i>										
FP methods are always available in health centres	320	53.3	216	36.0	30	5.0	25	4.2	9	1.5
Have enough information about follow-up visits	344	57.3	214	35.7	29	4.8	10	1.7	3	0.5
Follow-up given by health centre	226	37.7	247	41.2	81	13.5	35	5.8	11	1.8
Know where to go when side-effects occur	264	43.8	212	35.5	75	12.5	42	7.0	7	1.2
Would like to come to this centre again	299	49.8	222	37.0	62	10.3	11	1.8	6	1.0
Would be supported and guided if side-effects occur	266	44.3	226	37.7	79	13.2	18	3.0	11	1.7

FP = family planning.

and health centre ($\chi^2 = 15.798$, $df = 6$, $P < 0.015$).

Discussion

The satisfaction questionnaire survey was conducted among a specific target group: clients of health centres that provide FP and other reproductive health services. The great majority of the study women (92%) were satisfied or completely satisfied with the reproductive health services in Urmia. Other studies have been conducted in the Islamic Republic of Iran: a study in health houses in rural areas of Urmia showed 94% satisfaction [10] and in Tonkabon the majority of the study group were satisfied with the reproductive health services [11]. Research carried out in rural women in Bali Indonesia showed 73.1% of respondents were satisfied with women's health services available in their area and 94.5% of

ever-users of contraception were satisfied with family planning services [12]. Another study carried out in Cape Town, South Africa showed that 72% of women were satisfied with reproductive health services [13]. Respondents in that study listed 3 important satisfaction factors: good relationship between clients and health workers; comfortable and free discussion during the consultation; and less waiting time than they expected. In Alexandria, Egypt, 69% of the nearly 600 women interviewed said they were satisfied with their most recent FP methods [14]. Our results agree with the above studies and show that the total percentage of women's satisfaction with the reproductive health services were 76.2% satisfied and 15.8% completely satisfied.

A study in Egypt in 1994 showed that 69% of the women surveyed were using FP methods, 91% of them were using the IUD, 5% were using oral contraceptives,

Table 3 Satisfaction of the women ($n = 600$) with reproductive health services: comprehensiveness of service and information given to clients

Questions	Completely satisfied		Satisfied		No view		Unsatisfied		Completely unsatisfied	
	No.	%	No.	%	No.	%	No.	%	No.	%
<i>Comprehensive service</i>										
Monitoring of child growth	384	63.9	172	28.7	37	6.2	5	0.8	2	0.3
Sexually-transmitted diseases service	131	21.8	166	27.7	230	38.3	61	10.2	12	1.9
Medical service	286	47.6	224	37.3	64	10.7	24	4.0	2	0.3
Vaccination service	379	63.3	185	30.8	29	4.8	5	0.8	2	0.3
Antenatal care service	374	62.3	177	29.5	33	5.5	9	1.5	7	1.2
Pap smear service	86	14.3	51	8.5	266	44.3	119	19.8	78	13.0
<i>Information given to clients</i>										
All preventive methods	308	51.3	207	34.5	46	7.7	35	5.8	4	0.7
Use of chosen method	293	48.8	237	39.5	47	7.8	18	3.0	5	0.8
Choice of method	274	45.5	234	39.0	65	10.8	25	4.2	2	0.3
Problems of forgotten pills and side-effects	277	46.2	214	35.7	71	11.8	26	4.3	12	2.0
Pamphlets and booklets	83	13.8	144	24.0	179	29.8	134	22.3	60	10.0
Side-effects of chosen method	248	41.3	229	38.2	62	10.3	44	7.3	17	2.8

Table 4 Correlation between mean total women's satisfaction and reproductive health services

Reproductive health service	Spearman coefficient	P-value
Information given to clients	0.606	< 0.001
Informed choice about FP method	0.527	< 0.001
Interpersonal relationship	0.525	< 0.001
Provider skills	0.510	< 0.001
Consistency and follow-up	0.439	< 0.001
Comprehensive service	0.438	< 0.001

FP = family planning.

2% were using injectable contraceptives, and only 2% were using condoms and other methods [14]. In our study 49.5% of women were using oral contraceptives, 20.7% condoms, 3.5% injectable contraceptives and 3.5% tubectomy.

With regard to client's satisfaction with informed choice of FP method, statistical analysis showed there was a significant difference between the total percentage of women's satisfaction and informed choice of FP method. The most unsatisfactory aspects of reproductive health services were the items "information about limitations of contraceptive service" (28.3% of women unsatisfied) and "information about referral

services" (29.7%). In a study in Egypt, clients said that counselling about their choice of FP method and side-effects was a major element of quality services, as were costs and access. Clients said they were satisfied when they received information about only 1 method or a limited number of methods [14].

According to Bruce, reproductive health providers should have good experience, knowledge and skills [9]. Our findings about provider skills showed that the majority of women (86.6%) had high satisfaction with the provider's experience in FP. Satisfaction with these services was 49.4% completely satisfied and 37.2% satisfied. Spearman correlation showed there was significant correlation between satisfaction and the provider's skill. But, among these services in detail, 34.0% of women were unsatisfied or completely unsatisfied with the provider selected by them and 7.7% with the promptness of the service provider. A study in Nairobi, Kenya showed more than three-quarters of 900 women interviewed were satisfied with FP services. However, 20% listed problems with service delivery including long distance to clinics, long waiting times, unfriendly providers, lack of access to desired FP methods, unskilled providers and insufficient information [15].

Table 5 Comparison of women's satisfaction in different health centres

Satisfaction	Agdash		Sahrokhabad		Jalili		Total	
	No.	%	No.	%	No.	%	No.	%
Unsatisfied	0	0.0	3	1.5	1	0.5	4	0.7
No view	9	4.5	18	9.0	17	8.5	44	7.3
Satisfied	145	72.5	155	77.1	157	78.5	457	76.2
Completely satisfied	45	22.6	25	12.4	25	12.5	95	15.8
Total	199	100.0	201	100.0	200	100.0	600	100.0

$\chi^2 = 15.798$, $df = 6$, $P < 0.015$.

Women's satisfaction from the point of view of interpersonal relationships is of great importance. In this regard, Bruce pointed to the quality of relationship between clients and health providers, such as consideration given to respect and confidentiality [9]. In a study carried out in Egypt, clients said that the important element of quality was that the providers treated them with respect (regardless of education or income) and that FP services should be integrated with other health services, be affordable and accessible and that they have a choice of FP methods [14]. Our findings concerning interpersonal relationships showed that the great majority of women were completely satisfied or satisfied with the behaviour of the service provider.

The quality of reproductive health services is very important from the point of view of consistency and follow-up [16]. Our findings showed a significant correlation between total mean women's satisfaction and consistency and follow-up. Moreover, among these services 83% of women had high satisfaction with the item "I have enough information about follow-up visits" while 8.2% were unsatisfied with the item "I know where to go if side-effects occur".

Comprehensiveness of services in the health centre is important. Our findings showed that the majority of women (94.1%) had high satisfaction with the vaccination service, while 32.8% of them were unsatisfied with the Pap smear service. The Spearman test showed that there was a significant correlation between women's satisfaction and comprehensiveness of services.

Bruce pointed out that information given to clients is important with regard to accessibility, availability and variety of printed information such as pamphlets and booklets, and also that human and physical resources for counselling should be considered [9]. In our study, overall 32.3% of women were

completely unsatisfied or unsatisfied with the distribution of educational materials. A study in central and eastern Java showed when women were asked what information they would like to help them make contraceptive decisions, more than one-third said they wanted information on side-effects, while 23% wanted information about method safety and 21% wanted information on efficiency [17]. Lack of information was a concern expressed by women in the Egypt quality care study [4]. A study conducted in Tanzania showed that 50% of women were unsatisfied with lack of communication and nonexistent distribution of educational materials [18]. Patten et al. studied reproductive health in Bali and Indonesia and found that 73.1% of respondents were satisfied with the women's health services available in their area and 94.5% of ever-users of contraception were satisfied with FP services. However, women indicated a need for more information on AIDS and other STDs; 52.2% had never received any information about AIDS and 69% had not been counselled about STDs [19].

Our analysis of correlations between the mean total women's satisfaction and reproductive health services showed the highest correlations with the categories about information given to clients ($r = 0.606$) and informed choice about FP method ($r = 0.527$). These factors are therefore important for increasing women's satisfaction with reproductive health services in the health centres of Urmia population laboratory. Comparison of the total percentage of women's satisfaction across different health centres showed that women were generally satisfied with reproductive health services, but women in Agdash health centre were the most satisfied.

There are some limitations to the study. Quality is a broad concept that no single approach can adequately and fully measure.

Client satisfaction interviews are just one part of an overall quality evaluation effort. They should be used in conjunction with other quality evaluation instruments such as direct observation, reviews of client records or focus group discussions. The most important limitation of this study is that the quality elements of service provision and client satisfaction in Bruce's criteria were designed for FP services, but in this research these elements were applied to all reproductive health services. Client satisfaction is the most important reason for the quality of services, but does not cover all aspects of service quality.

The strengths of our study are that it raises some useful ideas for the implementation of programmes of quality care in reproductive health units. The meaning of quality care for the women who receive reproductive health services was examined to describe the service from the women's point of view.

Conclusion

This study demonstrated the importance of using a questionnaire which was prepared

based on Bruce's 6 key measures of quality in assessing the reproductive health services [9]. The majority of women in the population laboratory of Urmia University of Medical Sciences were satisfied with reproductive health services and considered that the services in these health centres were effective. The following factors affecting the women's satisfaction need to be improved: providing all modern contraception methods in health centres; using educational materials (e.g. pamphlets and brochures) at reproductive health consultations; and improving information given to clients to ensure an informed choice of family planning method.

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