ELSEVIER

Journal of Adolescent Health 38 (2006) 519–526

JOURNAL OF ADOLESCENT HEALTH

Original article

Acceptability as a key determinant of client satisfaction: lessons from an evaluation of adolescent friendly health services in Mongolia

Tugsdelger Sovd, M.D.[a], Kristin Mmari, Dr.PH.[b], Varja Lipovsek, Ph.D.[c,*], and Semira Manaseki-Holland, M.R.C.P.

[a]*Ministry of Health, Mongolia*
[b]*Johns Hopkins University, Bloomberg School of Public Health, Baltimore, Maryland*
[c]*Department of Child and Adolescent Health and Development, World Health Organization, Geneva, Switzerland*

Manuscript received November 23, 2004; manuscript accepted March 1, 2005

Abstract

Purpose: The primary focus of this study is to investigate which characteristics of health service quality are most likely to determine client satisfaction with health services among adolescents in Mongolia.

Methods: Data were gathered from 1301 male and female clients. Exit interviews were used to measure client satisfaction; 82 clinics were visited. All clients between the ages of 10 and 19 years were asked to participate in the client exit interview; those who agreed to participate completed the questionnaire. Bivariate and multivariate analyses were conducted to determine significant associations between service satisfaction and the independent variables. All variables showing a significant bivariate association with service satisfaction ($p \leq .05$) were retained for logistic regression analyses.

Results: The strongest determinant to client satisfaction related to acceptability: adequate facility physical environment, receiving adequate information about the facility, and if the facility was private (i.e., other people didn't know the services the client received). Additionally, clients who said they received some interruptions, either by other health workers or clients, were significantly less likely to be satisfied with the services.

Conclusions: This study demonstrates the importance of understanding and measuring different aspects of health service quality in defining client satisfaction. Although both accessibility and acceptability of services have been shown to be important in other studies, characteristics relating to acceptability emerged as critical in determining client satisfaction among adolescents in Mongolia. Efforts to improve health service delivery to adolescents need to understand and address the "adolescent friendly" characteristics that are most salient, and least fulfilled, in each particular context.

Keywords: Adolescents; Health services; Client satisfaction; Mongolia

There is a growing recognition among health care providers in the world that "adolescent-friendly" health services are needed if adolescents are to be adequately provided with preventative and curative health care. Among adolescent clients, the preferences for services are likely to vary between gender and age, and across countries, regions, and cultural milieus. For example, in one U.S. study, adolescents reported that their main reason for visiting a clinic was because it was a "teen-only" clinic and the services were free [1]. In contrast, adolescents in South Africa cited that the most important factor for visiting a clinic was provider and staff attitude toward young people [2]. However, regardless of the setting where such services are provided, certain "adolescent-friendly" characteristics are essential to ensure quality, effectiveness, and use of services.

*Address correspondence to: Dr. Varja Lipovsek, Department of Child and Adolescent Health and Development, World Health Organization, 20 Avenue Appia, 1211 Geneva, Switzerland.

E-mail address: lipovsekv@who.int

1054-139X/06/$ – see front matter
doi:10.1016/j.jadohealth.2005.03.005

Such characteristics typically include specific measures to ensure privacy, confidentiality, and accessibility for adolescent clients.

In Mongolia, the Ministry of Health in collaboration with international partners conducted a review of existing health services for adolescents [3]. The review found that adolescents were generally not aware of the services available to them, and it was their belief that many service providers had negative, judgmental attitudes and poor communication skills. For them, the fear that their privacy and confidentiality would not be protected appeared to be a major barrier to accessing health services.

To address these obstacles, the Ministry of Health worked with four United Nations (UN) agencies (United Nations Educational, Scientific, and Cultural Organization [UNESCO], United Nations Population Fund [UNFPA], United Nations International Children's Emergency Fund [UNICEF] and the World Health Organization [WHO]), in the context of the United Nations' Foundation-sponsored project "Meeting the development and participation rights of adolescent girls," to design an approach to implementing Adolescent Friendly Health Service (AFHS). As a first step, standards of quality of care for adolescents were developed, based on both the findings from the Mongolian review and AFHS characteristics [4] identified during the 2001 WHO Global Consultation on AFHS. Based upon these Mongolian-adapted standards of care, the AFHS initiative focused on training staff in adolescent health and development, including teaching new skills in communication and counseling; providing basic equipment and supplies to health facilities (e.g., weight scales, contraceptives); designing information and education materials on health and development issues, and distributing these materials to adolescents; and developing policies and procedures on confidentiality and applying these in participating sites. In 2002, the AFHS initiative was piloted in 51 health facilities located in the Arkhangai and Khuvsgul aimags (rural areas) and three districts of Ulaanbaatar City (Bayanzurkh, Chingeltei, and Songinokhairhan).

A year after implementation, the Mongolian Ministry of Health, in collaboration with WHO and UNFPA, carried out a joint evaluation of the AFHS program to determine whether the AFHS initiative improved the quality, delivery, and utilization of health services. The evaluation included a facility observation survey, a service provider survey, and an adolescent client exit survey. The Mongolian Ministry of Health approved the study protocols, in accordance with its requirements for research with human subjects. The findings of the AFHS evaluation concluded that the initiative not only improved service utilization among adolescents, but also demonstrated that both the clients and the health providers perceived major improvements in the provision of services for adolescents [5]. Moreover, clients who visited the project health clinics were more likely to respond that they were very satisfied with the services they received, would come back to the facility if they had a similar problem, and would recommend the services to their friends [5].

The evaluation, however, did not explore the factors that best explained why clients were satisfied with the services. Was it the providers' attitudes? The separate waiting area for adolescents? The signs and posters advertising the services? In an effort to further explain the evaluation results, the present study examines the question: what determined adolescent clients' satisfaction with the services they received? Knowing which characteristics are most important in determining satisfaction will enable program improvements and contribute to new program designs. In addition, because very few evaluations of efforts to improve health service delivery to adolescents have examined client satisfaction, the findings from this study will provide a basis for further investigation toward understanding what determines adolescents' satisfaction with the health services received.

Client satisfaction

Among adult clients, research has shown that client satisfaction is an integral component of service quality. Studies have demonstrated that a satisfied client is more likely to comply with medical treatment, more likely to provide medically relevant information to the provider, and more likely to continue using the health services [6–8]. In the family planning literature, client satisfaction has also been shown to influence whether clients seek care, where they go for care, whether they are willing to pay for services, whether clients continue to use their family planning method, and whether they will recommend the services to others [9–12].

Private-sector companies in developed countries, whether health-related or not, have long recognized that a focus on customer satisfaction makes good business sense. Satisfied clients make repeat purchases, spend more per purchase, produce positive word of mouth, and become loyal to a particular brand [13]. Dissatisfied clients, however, may tell twice as many people about their negative experiences as satisfied clients tell about theirs, and are far less likely to return to buy the product or service in the future.

However, some degree of confusion exists in the literature regarding how the concepts of client satisfaction and quality of services relate to each other [14]. According to the World Health Organization, three dimensions define the quality of health services: equity, accessibility, and acceptability. Characteristics that are associated with equity include policies and procedures that do not restrict the provision of health services, and equal treatment of all clients by health care providers and staff. Characteristics associated with accessibility include free or affordable health services, convenient clinic hours, convenient clinic location, adequate information and outreach about the services available, and support from community members for the services. The

third dimension, acceptability, includes characteristics such as client confidentiality, clinic privacy, an appealing clinic environment, provision of adequate information, and allocation of sufficient time to clients [15].

For evaluation and monitoring purposes, dimensions of quality are normally evaluated as service outputs, whereas client satisfaction is evaluated as an outcome [16]. In this model, clients' perceptions of quality (which are affected by personal, social, and cultural factors) determine the extent to which they are satisfied with the services. The present study uses the WHO dimension of quality, and includes variables corresponding to the accessibility and acceptability, which allows for a unique analysis in predicting client satisfaction by comparing the perceived importance of different quality dimensions. The dimension of equity, however, is not assessed in this particular study, as it is best measured objectively using facility and staff observations.

Methods

This study uses the findings from the client exit survey; results from the facility observation survey and the service provider survey are described elsewhere [5]. The client exit surveys were conducted among 1301 male and female clients to measure client satisfaction. For 1 week, a team of five researchers visited 82 clinics (51 of which were sites for the AFHS intervention and 31 of which were used as controls). All clients between the ages of 10 and 19 years were asked to participate in the client exit interview; those who agreed to participate completed the questionnaire. The questionnaire was pilot-tested in a health center in Ulaanbaatar among subjects not included in the evaluation sample, and was administered by trained local researchers. After the data were entered and cleaned, 124 client questionnaires were excluded from data analysis. The main reason for exclusion was that the clients were below the age of 10 years or had no age recorded [5].

Service satisfaction was assessed by the question: "In general, do you feel satisfied with the services you just received?" Response answers included: "very much," "not very much," or "not at all." For the analyses, the response answers, "not very much" and "not at all" were combined to create a dichotomous variable of service satisfaction, due to minimal variation between these two categories. New response categories for this variable were "yes, satisfied," and "no, not satisfied."

To determine what variables best predict service satisfaction, variables from the client dataset were organized according to the quality dimensions of accessibility and acceptability. Regarding accessibility, clients were asked about how easy it was to get to the facility, how long it took them to get to the facility, whether they had to make an appointment, how long they had to wait to see a health provider, and whether they had to pay for any of the services they received. The dimension of acceptability, meanwhile, was classified according to the facility environment, the treatment they received from the staff and health providers, and confidentiality of the services received. Specifically, with regard to the facility environment, clients were asked about the waiting area, the quality of the toilet facilities, and the reading materials available in the waiting area. Staff and health provider treatment was assessed by asking clients about the introduction and greeting of the health provider, if they were given the opportunity to ask questions to the health provider, how well the health provider explained things, how well they were treated by the health provider, whether they received adequate information, whether they expressed opinions different from the health worker, if there were outside interruptions during the visit with the health provider, and if the health provider and other staff were friendly. Finally, confidentiality of services was assessed by asking clients about parental consent, whether they thought other clients could overhear their talks with the health provider, and if there was a private and separate waiting area for adolescents.

To determine how well the variables corresponded to the different dimensions of accessibility and acceptability, principle component analysis was performed. For the most part, aspects of accessibility and acceptability were found to be best measured by single-item questions. However, the analysis did show that some variables could be combined into two-item and four-item indices; reliability analyses of the indices, using the Cronbach alpha test, showed that the variables included had high internal consistency.

Once the variables and indices were created, bivariate and logistic regression analyses were conducted to determine significant associations between service satisfaction and the independent variables. All variables showing a significant bivariate association with service satisfaction ($p \leq .05$) were retained for logistic regression analyses. In the final regression model, additional tests for outliers and multicollinearity were also conducted to be able to conclude that the model fit the data the best. Table 1 presents the operational definitions of the independent variables used in the final statistical model (does not include variables that did not have significant bivariate association with the outcome). Control variables included age, gender, and treatment group (pilot vs. control).

Limitations

The evaluation design provided postintervention data only; therefore, it is not possible to control for differences between pilot and control health facilities before the intervention. Furthermore, communities and clinics were not randomly assigned to "pilot" and "control" groups, thus there is a possibility that selection bias could have occurred. However, after examining the sociodemographic variables between the two groups of clients, it was shown that there were no significant differences (Table 2). Still, unobserv-

Table 1
Operational definition of the variables included in final logistic regression model

Variable	Definition
Control variables	
Age group	Asked by: How old are you?
Sex	Male or female
Facility type	Pilot or control facility
Accessibility dimension	
Waiting time	Asked by: Was the waiting time too long?
Dimensions of quality	
Information received	Assessed by four questions examining whether clients received adequate information on working hours of facility, tests carried out, treatment, and follow-up arrangements, $\alpha = .77$.
Confidentiality	Assessed by two questions asking whether health worker explained that services were confidential and whether there was a separate waiting area for adolescents.
Treatment by health worker	Assessed by four questions investigating whether clients felt the health worker listened carefully to them; whether the health worker gave them an opportunity to ask questions; whether they were able to ask all the questions they wanted to; and whether they were treated in a manner they wanted to be treated, $\alpha = .75$.
Interruptions received	Assessed by two questions asking whether staff interrupted talks with health worker and whether other clients interrupted talks with health worker
Waiting area	Asked by: Was waiting area comfortable?
Privacy of facility	Asked by: Could you prevent other people from knowing the services you received?
Privacy with health worker	Asked by: Were your talks with the health worker done privately?
Toilet facilities	Asked by: How would you rate the quality of the toilet facilities?
Other	
Reason for coming to facility	Asked by: Why did you come here?

able differences could have occurred between the two groups. In the multivariate analysis that predicted client satisfaction, the treatment group was included in the model to control for selection bias.

Second, one of the main limitations in using client exit interviews to predict client satisfaction is the problem of "courtesy bias." Courtesy bias occurs when clients are reluctant to express negative opinions of services, especially while they are still at the service site [17]. However, for this study, there was a sufficient amount of variability in this measure of service satisfaction (more than 30% answered "not very much" and "not at all"), which suggests that many adolescents felt comfortable enough to express dissatisfaction, although the level of dissatisfaction may still be underreported. As a result, the strength of associations between satisfaction and other covariates may be biased downward.

Results

Descriptive results

Table 2 presents summary data on the background characteristics of the adolescent respondents. The mean age of all the respondents was around 15 years, with males from the pilot clinics being the youngest (mean age = 14.6 years). Overall, most clients resided in urban areas; slightly more respondents from the control clinics lived in urban areas, but this was not statistically significant. Notably, the vast majority of clients were currently in school (96%), but there were no statistical differences between gender or treatment group (pilot vs. control). The high rate of school enrollment among young adolescents is common in Mongolia; the dropout rate does increase with older age categories, but about 84% of all adolescents complete secondary schooling [18]. Most respondents (72%) were also not in any relationship, although more males than females reported having a steady partner.

Approximately one-third of the clients reported that it was their first visit to the health facility, with slightly more males from the control clinics (41%) reporting so, but again, this was statistically insignificant. When asked how clients found out about the services, parents (33%) and friends (29%) were the most frequently mentioned. Newspapers and siblings were the least mentioned ($< 10\%$ for each category).

Client satisfaction

Table 3 presents the percentage distribution of those clients who were satisfied with the services. As found in the overall evaluation, clients who visited the pilot clinics were significantly more likely than clients from the control clinics to report being satisfied with the services. This was true among both males and females, among those living in urban and rural areas, and among those who were younger (below the age of 15) and 15+ years. Slightly more females than males in the pilot clinics reported being satisfied with their services (74% vs. 66%), but this was not statistically significant. The majority of clients who came to the facility for the first time (63.2%) were also satisfied with the services they received; however, this was significantly higher for those who visited the pilot clinics for the first time compared with those who visited the control clinics. Clients who came to the facility to get information and counseling were most likely to be satisfied with the services (76%) as op-

Table 2
Selected background characteristics of respondents, by treatment group and gender

Characteristic	Pilot		Control		Total
	Males (n = 372)	Females (n = 610)	Males (n = 131)	Females (n = 179)	
Age					
Mean age	14.6	14.9	15.0	14.8	14.8
Residence					
% Urban	67.2	61.6	79.4	83.8	68.1
% Rural	32.8	38.4	20.6	16.2	31.9
% In school	94.6	96.5	96.9	96.6	96.0
Relationship status					
% Married	.3	.5	.0	.6	.4
% Boy/Girlfriend	28.1	26.4	35.7	23.8	27.6
% No relationship	71.6	73.1	64.3	75.6	72.0
% First visit to facility	27.4	31.2	40.8	31.5	31.1
How clients found out about service					
Newspaper	6.1	6.0	7.9	4.0	5.9
Friend	30.6	33.2	21.4	14.8	28.7
Siblings	7.5	5.5	4.8	9.7	6.6
Parents	33.3	25.1	46.0	48.9	33.0
Health providers	22.5	30.2	19.8	22.7	25.8

Note: All the characteristics in table above were tested between pilot and control; none were found to be statistically significant.

posed to those who came for preventative checkups and who were not feeling well. However, clients who visited the pilot clinics, as opposed to the control clinics, for any of these reasons were significantly more likely to be satisfied with the services. Such findings suggest the success of the efforts to improve health service delivery, as perceived by the clients.

Table 4 presents data on the characteristics clients liked best and least about the services. Interestingly, although control clients were less satisfied in the services they received compared with the pilot clients, the types of characteristics they liked the best and least were the same. Approximately half the respondents (49%) reported that they liked the attitudes of the staff the best, whereas the remaining half were divided between liking the environment of the facility and the counseling. Conversely, when asked about the characteristics clients liked least, about a third of the respondents said they didn't like the long waiting hours and another third said they didn't like the environment of the facility. Relatively few respondents (13% overall) reported concern about lack of confidentiality.

Table 5 presents the results of the logistic regression analysis. Interestingly, the strongest determinant of client satisfaction was the perception that the toilet facilities were good: adolescents who perceived that the toilet facilities were of good quality were more than 17 times more likely to report that they liked the services. Even those who perceived the toilet facilities to be moderately good were more than three times as likely to be satisfied with the services, although this association was significant only at the $p > .10$ level.

Other characteristics found significantly related to service satisfaction were if the clients received adequate information at the facility and if the facility was private (i.e., other people didn't know the services the client received). Additionally, clients who said their visit had been interrupted, either by other health workers or clients, were significantly less likely to be satisfied with the services.

With regard to their interactions with the health care provider, the results show that what really matters to clients is that they are provided with adequate information and that the health provider can prevent interruptions. Concerning the accessibility dimension, it was somewhat surprising to

Table 3
Percentage distribution of satisfied clients, by selected variables, according to treatment group

Variables	Pilot	Control	Total
Sex			
Male	66.3**	45.3	60.8
Female	74.3**	44.6	67.6
Age groups (years)			
10–14	70.3**	48.4	65.3
15+	72.4**	44.2	65.4
Residence			
Urban	71.2**	42.9	63.1
Rural	71.7**	54.4	69.3
First visit to facility	84.9**	15.1	63.2
Reason for coming			
Preventive check up	77.5**	22.5	62.2
Information/counseling	91.9**	8.10	76.0
Not feeling well	75.4**	24.6	57.8

** $p \leq .01$; comparisons are between sub-categories of pilot and control groups. Example: males visiting pilot clinics were significantly more likely to be satisfied with the services received compared to males in the control clinics (66.3% vs. 45.3%).

Table 4
Characteristics clients liked best and least about services, by treatment group and gender

Characteristic	Pilot		Control		Total
	Males (n = 372)	Females (n = 610)	Males (n = 131)	Females (n = 179)	
Characteristics clients liked best					
Facility environment	27.6	22.6	25.7	25.2	24.7
Staff attitude	49.1	50.6	46.7	48.4	49.2
Counseling	23.3	26.8	27.9	26.4	26.1
Characteristics clients liked least					
Facility environment	24.6	24.8	31.2	27.9	26.0
Staff attitude	14.0	14.2	8.6	10.7	12.9
Lack of confidentiality	14.5	12.7	11.8	12.3	13.0
Long waiting hours	30.4	32.0	35.5	38.5	33.1
Other	16.4	16.3	12.9	10.7	15.0

Note: All the characteristics in table above were tested between pilot and control; none were found to be statistically significant.

discover that none of the accessibility variables were related to service satisfaction among adolescents: only "waiting time" was retained in the final model due to its significant association at the bivariate level, but was found to be non-significant at the multivariate level. Instead, characteristics related to the dimension of acceptability appear to make more of a difference for determining client satisfaction. However, this may be because the questions in the client exit survey concentrated on aspects of acceptability, and therefore additional or different questions would need to be developed to adequately capture the domain of accessibility. More research is needed to support this finding.

Discussion

Although there is relatively little published evidence on what determines client satisfaction among adolescents, the findings from this study are a bit unexpected given that most of the literature on adolescent-friendly service programs emphasize that changing the attitudes of health care providers should be a first priority [1,19,20]. This is not to say, however, that health care provider attitudes and treatment do not matter to adolescents in Mongolia. Instead, what the results show is that basic structures in the facility environment, such as toilet facilities, need to be addressed in service improvement efforts. Adolescents want to visit a clinic that is appealing to them; toilet facilities that are dirty or otherwise inappropriate can influence their overall satisfaction.

The results from the overall evaluation of the AFHS program in Mongolia support these findings. Clients who visited the pilot clinics were significantly more likely to rate the quality of the toilet facilities as good or very good. According to data obtained from the facility observation survey (data not shown), control clinics often kept the restrooms locked for staff needs only or charged adolescent clients for their use [5]. The results in this study would suggest that dimensions of acceptability are more important in the Mongolian context than dimensions of accessibility. This may be in part because Mongolia has a fairly widespread public health structure: it is the quality of the services (i.e., their acceptability), that may need improvement.

In addition to exploring the determinants of client satisfaction among adolescents, this study also showed the value in conducting multivariate analysis as a means of better explaining the results of the overall evaluation. To date, most evaluations of adolescent or youth-friendly health service programs have conducted only bivariate analyses. However, using multivariate techniques enables researchers to examine the associations between service satisfaction (or other service outcomes) and each specific variable in the model, net of the effect of others. Such analyses should be given higher priority in evaluations of health services in the future, as they can better explain which aspects of quality are most important to the target audience.

At the same time, however, client satisfaction should not be the only means of evaluating the quality of a program. Although the client's perspective is crucial in determining the use of health services, clients are unable to make meaningful evaluations of every aspect of service quality [14]. For example, few clients are able to assess whether health care providers have sufficient technical competence. Experts in the field of health services, on the other hand, may be better positioned to objectively evaluate the competence of a health care provider and can ascertain whether service providers adhere to correct clinic procedures and standards. However, these factors will probably not be evident to the untrained client, and therefore, he/she will be more likely to base his/her evaluation of the service providers' abilities on more subjective criteria.

For future programs and evaluations of Adolescent Friendly Health Services, this study suggests several recommendations. Programmers and researchers first need to examine what dimension of quality is most important to clients: accessibility, acceptability, or equity? Within these dimensions, it is necessary to determine which characteris-

Table 5
Determinants of client service satisfaction

Variables	Odds ratios	95% Confidence interval
Facility type		
Pilot	3.20*	(1.00–10.13)
Control	1.00	
Sex		
Female	.68	(.23–1.99)
Male	1.00	
Age group (years)		
10–14	1.28	(.46–3.57)
15+	1.00	
Reason for coming to facility		
Preventive check-up	1.36	(.21–8.57)
Counseling/Information	1.97	(.71–5.44)
Not feeling well	1.00	
Information received		
I received great information	3.38†	(1.03–11.07)
I received some information	1.81	(.50–6.65)
I didn't receive information	1.00	
Confidentiality		
Services were confidential	1.63	(.41–6.59)
Services partially confidential	1.07	(.28–4.14)
Services weren't confidential	1.00	
Treatment by health worker		
I was treated very well	5.57	(.59–52.46)
I was treated okay	3.69	(.36–37.61)
I didn't like how I was treated	1.00	
Interruptions received		
I received many interruptions	.35	(.07–1.76)
I received some interruptions	.13**	(.43–0.43)
I received no interruptions	1.00	
Waiting time		
Too long	.86	(.30–2.52)
Okay	1.00	
Waiting area		
Comfortable	2.11	(.02–365.63)
Moderately comfortable	.58	(.00–110.22)
Not comfortable	1.00	
Toilet facilities		
Good	17.75**	(3.90–80.78)
Moderate	3.69†	(.88–15.50)
Bad	1.00	
Privacy of facility		
Yes	2.58†	(1.00–7.87)
No	1.00	
Privacy with health worker		
Yes	1.10	(.40–3.06)
No	1.00	

† $p \leq .10$; * $p \leq .05$; ** $p \leq .01$; odds ratios are adjusted for all variables in final regression model.

tics should be given highest priority. Within acceptability, it is apparent that basic amenities and their quality are as important to client satisfaction as other dimensions of quality. In fact, this study suggests that if basic structures of a public facility are not in place, or are not appealing to adolescents, other dimensions of service quality will not play a major role in shaping client satisfaction. In addition, the study also suggests that once accessibility of services is ensured, it is the acceptability dimension that provides stronger determinants to client satisfaction. It is an important lesson for both assessing and planning priority interventions to improve health service delivery to adolescents.

Acknowledgment

This study was initiated and technically guided by the World Health Organization, and funded by the United Nations Foundation. The authors wish to acknowledge and thank, in alphabetical order, the following people who contributed to the study: Ms. Oyun Banzragch, Ministry of Health, Mongolia; Ms Anjana Bushan, WHO Western Pacific Regional Office; Dr. Venkatraman Chandra-Mouli, WHO Geneva; Ms Frances Cosstick, UNICEF Mongolia Country Office; Ms Kathleen Fritsch, WHO Western Pacific Regional Office; Mr Robert Hagan, WHO Mongolia Country Office; Ms Erdentuya Sukhee, Ministry of Health, Mongolia; Ms Navchaa Suren, UNFPA Mongolia Country Office.

References

[1] Transgrud R. Adolescent Reproductive Health in East and Southern Africa: Building Experience, Four Case Studies: A Report Prepared for the Regional Adolescent Reproductive Health Network. Nairobi, Kenya: Family Care International, 1998.

[2] Herz E, Olson L, Reis J. Family planning for teens: strategies for improving outreach and service delivery in public health settings. Public Health Rep 1988;103(4):422–30.

[3] National Commission for Human Development (NCHD), World Health Organization (WHO). Health Services for Adolescents: the Way Forward in Mongolia. Review of Existing Health Services for Adolescents. Ulaanbaatar, Mongolia: NCHD, WHO, 2002.

[4] McIntyre P for the World Health Organization. Adolescent Friendly Health Services: An Agenda for Change. Geneva, Switzerland: World Health Organization, 2002.

[5] Sovd T. Assessment of Adolescent-Friendly Health Services Initiative in Mongolia. Ulaanbaatar, Mongolia: Admon, 2004.

[6] Wouters A. Essential national health research in developing countries: health-care financing and the quality of care. Int J Health Plann Manage 1991;6:253–71.

[7] McPake B. User charges for health services in developing countries: a review of the economic literature. Soc Sci Med 1993;36(11):1397–405.

[8] Aharony L, Strasser S. Patient satisfaction: what we know about and what we still need to explore. Med Care Rev 1993;50:49–79.

[9] Kols AJ, Sharman JE. Family planning programs: improving quality. Popul Rep J 1998;47:1–39.

[10] Delbanco T, Daley J. Through the patient's eyes: strategies toward more successful contraception. Obstet Gynecol 1996;88(3 suppl): 41S–7S.

[11] Dimatteo M. The physician-patient relationship: effects on the quality of health care. Clin Obstet Gynecol 1994;37(1):149–61.

[12] Gilson L, Alilio M, Heggenhougen K. Community satisfaction with primary health care services: an evaluation undertaken in the Morogoro region of Tanzania. Soc Sci Med 1994;39(6): 767–80.

[13] Barsky J. World-Class Customer Satisfaction. New York. NY: Richard D. Irwin, 1995.

[14] Bertrand J, Hardee K, Magnani R, et al. Access, quality of care and medical barriers in family planning programs. Int Fam Plan Perspect 1995;21:64–9.

[15] World Health Organization. Adolescent friendly health services: making it happen and the global consultation on adolescent friendly health services: a consensus statement. Geneva, Switzerland: World Health Organization, 2001 [cited 2004 Oct 30]. Available from: http://www.who.int/child-adolescent-health/publications.htm

[16] Williams T, Schutt-Aine J, Cuca Y. Measuring family planning service quality through client satisfaction exit interviews. Int Fam Plan Perspect 2000;26(2):63–71.

[17] Brown L, Tyane M, Bertrand J, et al. Quality of care in family planning services in Morocco. Stud Fam Plann 1995;26(3):154–68.

[18] Ministry of Health, Mongolia, and Mongolia United Nations Country Team. Mongolian Adolescents: Needs Assessment Survey Report. Ulaanbaatar, Mongolia: Admon, 2000.

[19] Bender S. Attitudes of Icelandic young people toward sexual and reproductive health services. Fam Plann Perspect 1999;31:294–301.

[20] Ginsburg K, Slap G, Cnann A, et al. Adolescents' perceptions of factors affecting their decisions to seek health care. JAMA 1995; 273(24):1913–8.