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CLIENT SATISFACTION WITH ABORTION CARE IN THREE RUSSIAN CITIES

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Summary. This paper explores client satisfaction with abortion care, looking at overall satisfaction and satisfaction with hygiene, comfort and courtesy. The analysis aimed to determine whether client satisfaction was related to the characteristics of the client, in order to guide quality improvement efforts. The analysis is a secondary analysis of data collected in a survey of 489 abortion clients who attended a limited number of hospitals in three cities in Russia. The data were analysed using logistic regression. Client characteristics, in general, did not affect overall satisfaction though there were significant differences in overall satisfaction for unmarried versus married women (OR=0·29, CI=0·13, 0·63). Similarly, most characteristics of the abortion visit were not related to client satisfaction, although women who were awake for the procedure were less likely to be satisfied (OR=0·37, CI=0·16, 0·89). Information provided to abortion clients about self-care was the most important predictor of overall satisfaction for abortion clients (OR=3·55, CI=1·64, 7·69). This suggests that improving the information provided to clients, through training providers and other staff, is important in these settings.

Introduction

This paper explores client satisfaction with abortion care, looking at satisfaction overall and with hygiene, comfort and courtesy. Women's perceptions of abortion care only gained attention in the 1990s and are not well studied. Most of the research has been done in the US and Western Europe, and in the US a large-scale study was first published in 1999 (Picker Institute, 1999).

Client satisfaction is commonly considered an important indicator of the quality of health care (Donabedian, 1988; Williams, 1994; Alderman *et al.*, 2000). The dearth of information on satisfaction with abortion care reflects the limited attention given to the quality of abortion services. Guidelines for quality abortion care exist but tend to reflect the clinician's perspective and neglect some aspects of quality.

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Information on client satisfaction can help in designing services that better meet women's needs.

This analysis aimed to determine whether client satisfaction was related to the characteristics of clients in three Russian cities. If client characteristics are the main determinants of client satisfaction, addressing the way clients are treated would be an important area for intervention. If, however, information offered to abortion clients or specific aspects of the abortion visit are more important, interventions can target them. The initial hypothesis was that the care abortion clients receive and their satisfaction with that care are related to their personal characteristics.

Background

Abortion in Russia

Russia has one of the highest abortion rates in the world (Alan Guttmacher Institute, 1999). Given an estimated abortion rate of 56 per 1000 women aged 15–49, the average Russian woman will have between two and six abortions in her lifetime (Entwisle & Kozyreva, 1997). In the study cities, a household survey in 1999 found abortion rates of 46–64 per 1000 women aged 15–44 (David *et al.*, 2000). The main reason for the high abortion rate is that abortion has historically, and continues to be used as the primary form of contraception (Stetson, 1996). During the Soviet Era contraceptives were not available and abortion was widely accepted as birth control (Popov, 1991; Popov *et al.*, 1993). Political developments and social values have also been suggested as reasons for the high abortion rate (Stloukal, 1999).

With regard to abortion services, three types of abortion were reported by project sites: mini, regular and late-term abortions. Mini-abortions, which are often out-patient procedures at Women's Consultation or Family Planning Centres, occur within six weeks of conception and are either manual vacuum extractions or medical abortions. Though Russian medical standards do not specify the type of facility at which different abortion procedures can be performed, in this study the regular and late-term (more than 12 week) abortions were generally performed in hospital gynaecology departments. These abortions were done using dilation and curettage, a method that is inappropriate before 12 weeks (Paul *et al.*, 1999).

The use of anaesthesia for abortion has been of particular concern in Russia. According to many accounts, it was often not used during the Soviet Era (Stetson, 1996; Anderson, 1998) but now it appears that women receive general anaesthesia (N. Vartapetova, personal communication). Unfortunately, general anaesthesia has greater risks than local anaesthesia (Hern, 1984) and limits physician–patient interaction; it is not appropriate or necessary for abortion procedures.

Patient satisfaction

Information on patient satisfaction has three main uses: to describe health care from the patient's perspective, to identify problems with care, and to evaluate care. In this study, the focus is on the identification of problems because this can help to improve the quality of services. In this case, satisfaction ratings are ideally an evaluation of the process of care rather than outcomes but whether they can be

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separated is unclear (Wright, 1999). Attempts that have been made to limit the extent to which outcomes are incorporated in client evaluations may not be applicable to abortion. For example, asking about satisfaction just after a procedure may not work as it would for medical procedures because successful termination may be the main outcome desired.

Information on the satisfaction of abortion clients is sparse and existing studies have used different approaches to data collection and analysis. For example, the time between the abortion and the interview varies. In some studies women were asked to evaluate care just after the procedure (Guilbert & Roter, 1997) while in others they were asked about procedures that occurred up to 30 years in the past (Sihvo *et al*., 1998). Each approach has its benefits – short time-frames focus on the process of care whereas longer follow-up is likely to lessen the influence of the initial relief at obtaining the desired termination – but the range of approaches used limits the comparability of studies.

At the same time, the results of studies conducted in different countries and using different methods have some common results. All studies show that women report high satisfaction with abortion services. In one US study, 98% of clients felt that their care was excellent, very good, or good (Picker Institute, 1999). A study of abortion clients at two US clinics showed that 73% disagreed or strongly disagreed that care could be better (Zapka *et al*., 2001). Studies in Canada and Finland also found high satisfaction, with 87% very or moderately satisfied and 82% satisfied, respectively (Guilbert & Roter, 1997; Sihvo *et al*., 1998). Studies specific to medical abortion again show high levels of satisfaction, ranging from 84 to 100% in one study (Winikoff *et al*., 1997) and 87 to 94% in another (Elul *et al*., 2001). In general, patient satisfaction ratings of medical care are consistently high so these results are not surprising (Williams, 1994).

Based on the high satisfaction ratings, some authors (Guillbert & Roter, 1997; Zapka *et al*., 2001) have concluded that the quality of abortion care is high, in part because of 'positive correlations between satisfaction ratings and expert-developed indices of technical quality'. The assumption that satisfaction reflects quality has, however, been contested (Sitzia & Wood, 1997). High ratings may better reflect the absence of poor quality care than that services are of high quality.

There is more variation with regard to predictors of satisfaction with abortion services across studies but information is one factor that has consistently been related to satisfaction. Overall, these studies suggest a need for more research into women's satisfaction with abortion care. Though the Picker Institute (1999) found that responses to surveys of satisfaction with abortion care were consistent with ratings from other ambulatory surgery patients, comparison provides little insight into satisfaction because abortion is not simply a medical procedure. It is conflated with psychological and social concerns that are likely to affect women, their expectations and their opinions about care. More information is needed to tease apart these influences and understand what influences women's satisfaction.

Little information on client satisfaction with abortion care in Russia appears in the English language literature. Some reports provide quotes from abortion clients (John Snow, Inc., 1998) but these give little insight into women's satisfaction. Given the particular nature of abortion in Russia, better information is important for

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improving the quality of services. This study explores women's satisfaction in three Russian cities.

Data

The data for this analysis were collected as baseline data for the evaluation of the WIN Project of John Snow, Inc., a pilot project to improve women's health care at selected sites in three cities. It was funded by the US Agency for International Development (USAID). In late February and early March of 2000, baseline data were collected on client experience of and satisfaction with care received.

The pilot project was conducted in three cities where USAID projects were ongoing at the time the WIN interventions began. Perm is a large industrial city with a population of over 1 million; Berezniki, another industrial city, located just 95 miles south of Perm, has a population of 200,000; and Veliky Novgorod (henceforth referred to as V. Novgorod), a modern city located in Eastern Russia between St Petersburg and Moscow, has a population of 240,000.

Because post-abortion family planning counselling is a service for which providers were given training in WIN, abortion clients were surveyed. All abortion clients who came into the pilot sites during a specific 3-week period (N=489) were asked to participate in an interview. After the procedure was complete but prior to discharge each client was asked to participate, assured of the confidentiality of her responses, and informed that she did not have to participate and that she could stop the interview at any time. Permission to continue was then requested. Despite asking interviewers to complete questionnaires for all women approached, no refusals or incomplete interviews were recorded. A comparison of the survey response rates with monthly attendance data from the pilot sites suggests that non-responses were rare. Whether some women chose not to participate or were not interviewed because the interviewer was already busy cannot be determined.

The questionnaires were designed to look at improvements related to the planned interventions. They were based on instruments developed by WHO (WHO, 1996) and the Population Council (Fisher *et al.*, 1992). The questionnaires were translated into Russian, back translated by an independent party, pre-tested and revised prior to use (David, 2001). There were no missing data for any of the questions and internal consistency checks do not point to any problems.

Methods

Four outcomes were analysed: overall satisfaction and ratings of hygiene, comfort and courtesy of health professionals. These different outcomes were only weakly correlated (all correlations were less than 0·5). Overall satisfaction is a common measure of satisfaction with care and was assessed using responses to: 'Overall would you say you were satisfied with your visit to this facility today, or were you dissatisfied with your visit today?' Assessments of specific aspects of care are likely to influence overall satisfaction ratings and there tends to be more variability in responses regarding specific aspects of care (Sitzia & Wood, 1997). Possible client ratings of facility hygiene, comfort and courtesy were good, fair or poor. There was

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little variability in the results (only 2% of clients rated hygiene as fair) and it was decided *a priori* to use the same approach to all ratings so the responses were dichotomized, combining fair and poor. Categories of responses have been collapsed in other client satisfaction studies because of the tendency toward positive ratings (Sitzia & Wood, 1997).

Multivariate modelling was used to consider multiple characteristics simultaneously; logistic regression was used because all outcomes were dichotomous. The characteristics analysed were based on theoretical considerations, prior findings on client satisfaction and available information. Three groups of independent variables were included – client characteristics, information received and characteristics of the abortion visit – in order to look at the effects of each group independently. Client characteristics included city, rural or urban residence, age, education, martial status, use of contraception, prior use of abortion and number of children. Each women was asked if she had been given information about what would happen during the procedure, how to take care of herself at home, and how to avoid another unplanned pregnancy and she was asked whether she had received educational materials or attended a group talk. In terms of the abortion visit, information was provided on the type of abortion, whether she had been awake or asleep during the procedure, the amount paid for the abortion and whether her partner had accompanied her.

All client characteristics found to be associated with the outcome in the univariate analysis at the 0·2 level were added and backward selection was used to determine which remained significant after controlling for other variables. Variables were retained in the model if they were significant at the 0·05 level based on the likelihood ratio test. After assessing potential confounders and adding those to a final model of client characteristics, variables related to information were added using the same procedure. Finally, the visit characteristics were introduced.

Results

In general, the results of this analysis are consistent with previous studies. Satisfaction was high with 94% of all abortion clients reporting that they were satisfied with their visit overall. As expected, there was greater variation in responses to questions about specific aspects of care. Ratings of comfort had the greatest variation with 41% of clients rating comfort as good, 47% as fair and 11% as poor. For both hygiene and courtesy, less than 2% rated their satisfaction as poor while 69% and 85% reported satisfaction as good, respectively.

Table 1 shows the characteristics of the clients interviewed. The majority were between age 20 and 29 and most had more than complete secondary education. Although 70% of clients said that they became pregnant while using a contraceptive method, only 17% were using modern methods. Based on studies in other countries (Henshaw & Kost, 1996), high rates of contraceptive use among abortion clients are expected. In terms of information received by clients during their visits, information about self-care was most common, with 78% of women reporting that they received this information. Fifty-six per cent of women received information about the procedure before it was performed and 41% received information about how to avoid a future unplanned pregnancy. The provision of information through less direct

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Table 1. Abortion clients: characteristics, information received and visit characteristics

	Percentage of women (N=489)
Client characteristics	
Age	
15–19	16
20–29	55
30+	29
City	
V. Novgorod	30
Perm	44
Berezniki	26
Residence	
Rural	8
Urban	92
Education	
Complete secondary or less	42
More than complete secondary	58
Marital status	
Single	29
Married	71
Number of children	
0	44
1	32
2+	24
Abortion history	
Prior abortion (1 or more)	60
No prior abortions	40
Use of contraception prior to this pregnancy	
Barrier methods (condoms or spermicides)	34
Traditional methods	20
Medical contraceptives	17
Not using	29
Information received by the client	
Information about procedure	
Yes	56
No	44
Doctor explained self-care	
Yes	78
No	22
Information about avoiding another unplanned pregnancy	
Yes	41
No	59
Received educational materials	
Yes	25
No	75
Attended a group talk	
Yes	27
No	73

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Table 1. *Continued*

	Percentage of women (N=489)
Abortion visit characteristics	
Type of abortion	
Mini-abortion	29
Regular abortion	68
Late-term abortion	3
Facility type	
Maternity hospitals	86
Women's consultation	14
Amount paid for abortion	
0	15
1–120 R	41
121–199 R	19
200+ R	25
Partner accompanied	
Yes	19
No	81
Awake or half-awake during procedure	
Yes	18
No	82

channels (group talks, print materials) was not common; only 25% of clients were given reading materials to take with them and only 27% attended a group talk. In terms of the abortion procedure, 29% of women had mini-abortions, 68% regular abortions, and 3% late-term abortions. Over 50% of each type of procedure were performed in maternities and this rose to almost 90% of late-term abortions. For mini-abortions, women's consultation centres provided almost all of the procedures outside of maternities while for regular abortions, those not performed in maternities were mainly done in hospital gynaecology units. It appears that there is widespread use of general anaesthesia: 18% of clients reported that they were 'awake or half-awake'. Only 15% of women did not have to pay for their abortions and 40% paid between 1 and 120R (less than US$4·50); one-quarter paid more than 200R (US$7·45). Few abortion clients were accompanied by their partners (19%).

Relationship between characteristics and satisfaction

Overall, the results of the multivariate analyses were consistent with those of the univariate analyses, as shown in Tables 2 and 3. The predictors that remained in the final models tend to have changed little from the univariate models in terms of either the effect estimate or significance.

The modelling process suggests that, with a few exceptions, client characteristics were not significant predictors of client satisfaction. Marital status, which was related to overall satisfaction, is an important exception. Single women were less than half as

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Table 2. Univariate models of client satisfaction

Variable description	Overall satisfaction		Hygiene		Comfort		Courtesy of health professionals	
	OR (95% CI)	*p* value[a]	OR (95% CI)	*p* value	OR (95% CI)	*p* value	OR (95% CI)	*p* value
Client characteristics								
Age								
15–19	1·0		1·0		1·0		1·0	
20–29	2·28 (0·96, 5·45)	0·063	1·33 (0·77, 2·29)	0·307	1·16 (0·69, 1·95)	0·571	1·41 (0·74, 2·67)	0·295
30+	3·07 (1·05, 8·98)	0·041	0·91 (0·51, 1·63)	0·752	0·73 (0·41, 1·30)	0·290	1·98 (0·94, 4·18)	0·075
City								
V. Novgorod	1·0		1·0		1·0		1·0	
Perm	0·35 (0·11, 1·07)	0·064	0·41 (0·24, 0·70)	0·001	0·63 (0·41, 0·96)	0·033	0·75 (0·40, 1·41)	0·369
Berezniki	0·34 (0·10, 1·10)	0·071	0·19 (0·11, 0·33)	0·000	0·09 (0·05, 0·17)	0·000	0·50 (0·26, 0·96)	0·038
Residence (rural=1; urban=0)		0·727	2·37 (1·03, 5·48)	0·043	3·95 (1·96, 7·95)	0·000		0·778
Education (complete secondary or less=1; more than complete secondary=0)	0·40 (0·19, 0·86)	0·020	0·59 (0·40, 0·86)	0·007	0·61 (0·42, 0·88)	0·008		0·500
Martial status (unmarried=1; married=0)	0·33 (0·16, 0·70)	0·004		0·878		0·654	0·57 (0·34, 0·95)	0·031
Number of children				0·993[b]		0·298		0·428[b]
0	1·0							
1	0·51 (0·23, 1·14)	0·099						
2+	1·50 (0·47, 4·83)	0·494						
Prior abortion (≥1 prior abortion=1; no prior abortions=0)		0·974	0·76 (0·51, 1·12)	0·163		0·365		0·681
Using contraception (yes=1; no=0)		0·945		0·571		0·747	0·55 (0·33, 0·91)	0·019

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Table 2. *Continued*

Variable description	Overall satisfaction		Hygiene		Comfort		Courtesy of health professionals	
	OR (95% CI)	*p* value[a]	OR (95% CI)	*p* value	OR (95% CI)	*p* value	OR (95% CI)	*p* value
Information received								
Information about procedure (yes=1; no=0)	2·03 (0·96, 4·31)	0·065	2·15 (1·46, 3·17)	0·000	1·73 (1·19, 2·51)	0·004	2·76 (1·66, 459)	0·000
Self-care explained (yes=1; no=0)	3·31 (1·56, 7·02)	0·002	1·63 (1·05, 2·54)	0·030		0·294	1·89 (1·11, 3·23)	0·020
Information about FP (yes=1; no=0)	1·99 (0·87, 4·58)	0·103	1·51 (1·02, 2·24)	0·042	1·53 (1·06, 2·21)	0·023		0·412
Educational materials received (yes=1; no=0)	5·01 (1·18, 21·35)	0·029	1·68 (1·05, 2·69)	0·030	2·43 (1·60, 3·68)	0·000	1·96 (1·02, 3·77)	0·044
Attended group talk (yes=1; no=0)	2·57 (0·88, 7·50)	0·085	2·08 (1·30, 3·33)	0·002	2·18 (1·45, 3·26)	0·000	1·50 (0·83, 2·71)	0·179
Abortion visit characteristics								
Type of abortion (regular or late-term=1; mini=0)	0·48 (0·18, 1·28)	0·143		0·274	0·61 (0·41, 0·91)	0·015		0·834
Facility type (maternity=1; women's consult.=0)		0·925		0·656		0·251		0·572
Payment		0·737[2]		0·277[b]		0·426		
None							1·0	
0–120 R							1·02 (0·45, 2·31)	0·963
121–200 R							0·53 (0·22, 1·24)	0·142
200+ R							0·61 (0·27, 1·41)	0·247
Partner accompanied (yes=1; no=0)		0·714	1·43 (0·86, 2·38)	0·168	1·52 (0·96, 2·38)	0·071		0·847
Awake (yes=1; no=0)	0·47 (0·20, 1·07)	0·071		0·431		0·629	1·71 (0·82, 3·57)	0·156

[a]All *p* values are based on the Wald test statistic.
[b]The overall likelihood ratio test for this variable was not significant so the individual Wald tests are not shown.

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Table 3. Multivariate models of client satisfaction

Variable description	Overall satisfaction		Hygiene		Comfort		Courtesy of health professionals	
	OR (95% CI)	*p* value	OR (95% CI)	*p* value	OR (95% CI)	*p* value	OR (95% CI)	*p* value
Client characteristics								
Age								
15–19					1·0			
20–29					0·48 (0·25, 0·93)	0·029		
30+					0·37 (0·18, 0·75)	0·005		
City								
V. Novgorod			1·0		1·0		1·0	
Perm			0·34 (0·19, 0·61)	0·000	0·69 (0·42, 1·16)	0·118	0·29 (0·01, 10·91)	0·506
Berezniki			0·13 (0·07, 0·26)	0·000	0·08 (0·04, 0·18)	0·000	0·46 (0·21, 1·02)	0·055
Residence (rural=1; urban=0)					0·19 (0·09, 0·43)	0·000		
Education (complete secondary or less=1; more than complete secondary=0)					0·60 (0·37, 0·97)	0·027		
Martial status (unmarried=1; married=0)	0·29 (0·13, 0·63)	0·002						
Number of children								
Prior abortion (≥1 prior abortion=1; no prior abortions=0)								
Using contraception (yes=1; no=0)							1·80 (1·05, 3·10)	0·034

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Table 3. *Continued*

Variable description	Overall satisfaction		Hygiene		Comfort		Courtesy of health professionals	
	OR (95% CI)	*p* value	OR (95% CI)	*p* value	OR (95% CI)	*p* value	OR (95% CI)	*p* value
Information received								
Information about procedure (yes=1; no=0)			2·66 (1·72, 4·11)	0·000	2·31 (1·44, 3·69)	0·000	3·58 (2·03, 6·34)	0·000
Self-care explained (yes=1; no=0)	3·55 (1·64, 7·69)	0·001						
Information about FP (yes=1; no=0)								
Educational materials received (yes=1; no=0)			0·55 (0·30, 0·99)	0·048				
Attended group talk (yes=1; no=0)								
Abortion visit characteristics								
Type of abortion (regular or late-term=1; mini=0)								
Facility type (maternity=1; women's consult.=0)								
Payment								
None							1·0	
0–120 R							1·41 (0·50, 3·95)	0·515
121–200 R							0·52 (0·17, 1·80)	0·253
200+ R							0·34 (0·10 1·17)	0·087
Partner accompanied (yes=1; no=0)								
Awake (yes=1; no=0)	0·37 (0·16, 0·89)	0·026					1·66 (0·67, 4·11)	0·276

likely to report overall satisfaction (OR = 0·29; 95% CI = 0·13, 0·63). The city in which the woman had the abortion (generally the city in which she lived) had a significant effect on satisfaction with hygiene, comfort and courtesy with women in V. Novgorod reporting greater satisfaction (Table 3).

Information received by the client about self-care had a significant effect on overall satisfaction (OR = 3·55, CI = 1·64, 7·69). In addition, information about the procedure itself was significant in each of the multivariate models of hygiene, comfort and courtesy and it was stronger in the multivariate than in the univariate models. For example, women who received information about the procedure were 2·76 times more likely to be satisfied with courtesy than those who had not in the univariate model compared with 3·58 times more likely in the multivariate model.

Abortion visit characteristics were generally not significant predictors but were retained in the multivariate model of courtesy because they were confounders. How much the client paid for the abortion did not affect satisfaction with any aspects of care. However, in the model for overall satisfaction, whether or not the client was awake was significantly related to satisfaction. Clients who were 'awake or half-awake' were one-third as likely to be satisfied with services as those who were asleep (OR = 0·37; 95% CI = 0·16, 0·89), after controlling for marital status and information about self-care.

Discussion and Conclusions

The analysis of the WIN baseline survey data suggests that information provision is important to client satisfaction with abortion care. Contrary to the original hypothesis that client characteristics drive the care that women receive and their satisfaction with it, these were not main factors affecting satisfaction. Characteristics of the abortion visit also did not tend to influence satisfaction. This suggests that improvements in information provision in the three study cities may be the most effective means of improving client perceptions of the quality of abortion care. As described below, this is only one factor that should be considered with regard to quality of care.

Although client characteristics do not have a consistent effect on satisfaction, some characteristics did have a significant effect in single models. That unmarried women were significantly less likely to express overall satisfaction may mean that they had a different experience of abortion services. The lack of an effect with regard to ratings of hygiene, comfort or courtesy, however, seems to indicate that marital status did not affect the way women were treated. Women's expectations of care, which were not captured in this study, may be responsible for this difference. Unmarried women may have different emotional needs at the time of abortion, as shown by their use of unsanctioned facilities in the past (Popov & David, 1999), and their needs and preferences may not have been met at study sites.

The use of anaesthesia warrants further discussion. Reports of abortion care in Russia suggest that use of anaesthesia was limited (Bowers *et al.*, 1995; Stetson, 1996) and that this was both because it was unavailable and as a way to punish women for having abortions (Popov & David, 1999). In contrast, in this study more than 80% of abortion clients reported being asleep and those women who were awake were less

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likely to be satisfied with care overall. If women equate general anaesthesia with quality care because it was not available in the past, and if they expected to receive it, the lower satisfaction of those who did not may be a result of unmet expectations. This does not suggest that all abortion clients should receive general anaesthesia, which is inappropriate for abortions in the first 12 weeks; clients' desires need to be weighed against clinical evidence. What may be needed is increased information about the available options for pain relief, including their benefits and risks.

The lack of a relationship between satisfaction and payment, despite some women paying over 12% of the average monthly salary for an abortion procedure while others paid nothing, is also notable. This may occur either because payment does not affect the quality of care or because women who pay more have higher expectations but are equally satisfied because those expectations are met.

The current technical focus of quality improvement efforts is supported by the limited effect of characteristics of the abortion visit on women's satisfaction and highlights that client satisfaction data can only supplement evidence-based care. Although women were satisfied with care despite inappropriate techniques, such data must be balanced with other information in determining the best course of action. Like other medical patients, abortion clients are consumers and rarely have all the information required to determine how care should be provided. Client satisfaction data can highlight areas that are most important to clients and in which improvements can be made, but they cannot be the sole measure of quality. The limited variability in satisfaction ratings suggests that standard approaches to its measurement are not sufficient and additional research is needed to determine how best to measure satisfaction.

In terms of information, it appears that at the time of the procedure, women are focused on the here and now, and want information about the procedure and its effects. This does not mean that other types of information should not be provided but women might not be aware of its importance to them. Most important in this regard is information on post-abortion family planning. Though it was not a significant predictor of any outcomes in this analysis, it is a key component of abortion care because of its role in the prevention of subsequent abortions (WHO, 1997). Russian women may be less sensitive to whether family planning information is provided because of the once limited availability of effective contraception (Center for Reproductive Law and Policy, 2000).

Because women were interviewed on the same day as the procedure, this analysis does not speak to long-term satisfaction. For example, women may give greater value to information provided after the procedure, like family planning information or educational materials, after some time has passed and they are over the initial relief at having obtained the termination. Quality improvement efforts should address both short- and long-term satisfaction.

One finding that may be more difficult to address is the higher satisfaction among women in V. Novgorod. This city is in a different region, closer to Moscow and St Petersburg than the other two cities. Moscow is 'predictive of developments that came five to ten years later in the … provinces' (Popov *et al.*, 1993, p. 228). Its proximity to Moscow may mean that changes in the attitudes of clients and providers and changes in provider practices occur sooner in V. Novgorod. But the difference in

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satisfaction may also result from real differences in the care received, differences in client expectations, or different levels of willingness to express dissatisfaction. Although the data did not allow for a more nuanced analysis of this finding, further exploration is needed.

The findings from this analysis are generally comparable to those of previous studies of client satisfaction with abortion care (Guilbert & Roter 1997; Picker Institute, 1999; Zapka *et al.*, 2001), which also found that information influenced satisfaction. Some indicators of satisfaction in other studies, such as pain experienced, were not included in this analysis because they are related to the woman's experience of care rather than her characteristics or characteristics of the visit. Others, like whether or not the woman's partner accompanied her, did not have the significance they had in prior studies. These differences may relate to the context in which the services were provided or to cultural differences. Future studies could work to incorporate consistent sets of predictors so that results are comparable across settings.

One finding with potential broader applicability is that women were satisfied despite inappropriate treatment, excessive charges and lack of information. This should not be taken as a sign that improvements are not needed: 'a positive response in a satisfaction survey should not be interpreted as indicating that care was "good" but simply that nothing "extremely bad" occurred' (Sitzia & Wood, 1997). Instead, the high satisfaction of abortion clients probably speaks to their vulnerability and the ease with which they may be manipulated because they are focused on the desire to end the pregnancy. It is, therefore, of the utmost importance to continue to ensure quality for these clients, in all settings and all countries.

More information is also needed on the generalizability of studies beyond the clinics and countries in which they are conducted. This is a particular problem when a limited number of clinics are included, especially given that satisfaction differs across facilities (Picker Institute, 1999; Zapka *et al.*, 2001). This may result from variation in protocols between sites with some protocols being more acceptable to women (Picker Institute, 1999; Zapka *et al.*, 2001). It could also result from differences in the types of providers, provider skills, provider attitudes, the facilities themselves or women's expectations of care.

Whether satisfaction ratings are truly comparable across cultures is unclear. Some authors have suggested that expectations are tied to culture and, therefore, different cultural backgrounds may lead to different satisfaction ratings of the same services (Fitzpatrick, 1984). A study of utilization and satisfaction with prenatal care in Russia (Ivanov, 2000), found that most of the dimensions of care related to the satisfaction of US women were not relevant to Russian women. The author suggests that models of satisfaction do not apply across settings because of differences in health care systems (Ivanov, 2000). This is particularly relevant to Russia where historical patterns like the medicalization of care and exclusion of clients from decision-making (Shea, 1991; Bowers *et al.*, 1995) and more recent changes like declines in the quality of health services (Rozenfeld, 1996; Wines & Zuger, 2000) may influence expectations. Consistent findings in studies done in different locations may, however, identify the components of care related to satisfaction that are the same across cultures. Given the lack of consensus, the results of this analysis should be seen only as identifying issues for abortion providers in the study cities.

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The approach used in this study is a standard approach to studying client perceptions but it leaves unanswered a number of questions that could be answered by future work. Perhaps most important is that there are limited data available on what it means when clients say that they are satisfied (Hall & Dornan, 1988). For example, when a woman is asked to rate the comfort of the facility, is she responding only about the physical environment or is she also considering her emotional comfort? In addition, client satisfaction is probably based on a balance between the care that is received and the client's expectations going in (Sitzia & Wood, 1997), yet expectations are rarely addressed in studies of satisfaction. Some studies of medical abortion have asked women about the extent to which their abortion experience matched their expectations (Winikoff *et al*., 1997). Though details are not provided on what women expected, evaluations have focused on expectations about efficacy, pain and complications. Efforts could be made to find out more about expectations in a population generally (e.g. what do Russia women expect when they visit a health care provider?) and about the specific expectations of the clients whose satisfaction is reported. It is also important to determine if satisfaction with abortion care is really comparable to satisfaction with other types of medical procedures.

As these results suggest, particularly the finding that women who were asleep were more satisfied, satisfaction must always be considered as one component of quality services. It must be balanced against evidence-based care when these standards do not meet client expectations. Mismatches between client desires and best practices should be addressed through client education.

Client satisfaction is a complex concept. While satisfaction is often viewed as an outcome on its own, overall satisfaction is still poorly understood. A more complete understanding of how satisfaction is determined by clients could allow providers to better respond to client needs and increase the effectiveness of services.

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