Preferences for decision-making about contraception and general health care among reproductive age women at an abortion clinic

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1. Introduction

Over the past several decades the medical community has increasingly recognized the importance of moving away from a paternalistic model of care, in which doctors make the decisions without the contribution of the patient, to incorporate other models of engagement with patients that take into account patient values and preferences in medical decision making and clinical communication [1]. This recognition of the central role of the patient in the medical encounter is referred to as patient-centered care.

One aspect of patient-centered care that has received much attention is that of shared decision-making (SDM) [2]. While the exact definition of SDM is debated, a core feature of this concept is that the health care provider and the patient come to a mutually agreed upon decision that reflects the preferences of the patient as well as the medical evidence [3]. While SDM has evolved as a predominant model of decision making due to its agreement with core ethical concepts including respect for patient autonomy [4], it has also been recognized that, using the principles of patient-centered care, is important to acknowledge that not all patients may in fact prefer this type of decision making [5]. Alternative models of decision making include the informed choice, or autonomous, approach, in which the medical practitioner provides information but does not participate in the decision, and the health care provider-led approach, in which the provider may provide information but ultimately makes the decision for the patient [6]. Patient-centered care encompasses understanding and respecting patient's desire for information and for participation in health care decisions, whether this be for shared decision making or one of the alternative models.

In order to gain insight into the most effective means of facilitating appropriate patient involvement in decisions, many studies in industrialized countries have attempted to assess patient preferences for medical decision making. In general, these studies have found that while most patients prefer a shared decision making style, some patients desire an autonomous role, while others prefer a passive role [6,7]. Older, less educated, lower income, and African American patients have been found to be more likely to prefer to less involvement in decision making [6–13] and familiarity with the relevant clinical condition increases desire for shared decision making [13].
In general, studies have not assessed whether decision-making preferences differ by the specific decision being made. One study found there was no difference between decision making about breast cancer treatment and for general health care [14]. Another study using five video vignettes of different cases found that patients were more likely to desire a provider-directed approach in the case of a leg injury as opposed to cases of rheumatoid arthritis, molar pregnancy, depression, and smoking cessation [12]. The authors interpreted this finding as indicating that physical problems, as opposed to lifestyle or mental health issues, are more likely to be associated with the desire for a directive approach. It has also been proposed that preferences for decision making may depend on the degree of medical certainty around the specific decision [15]. In “preference-sensitive decisions” – prevention and treatment choices with multiple valid options – patients’ decision preferences may be different than those for decisions in which there is a higher level of certainty about the medical decision.

Contraceptive care is arguably among the most preference-sensitive areas of medical decision-making, and is a public health priority. In the United States, approximately 50% of pregnancies are unintended [16], and the low use of contraception in general, and of highly effective contraceptive methods in particular, is a major contributor to the dismal state of this public health indicator [17]. As women must consult with their health care providers to receive all non-barrier methods of contraception, the ability of those providing contraceptive care to facilitate an acceptable and appropriate decision about choice of a contraceptive method has the potential to improve these statistics. Contraceptive decision making is poorly understood, however, and the degree to which research on general health care decision making is relevant to this culturally unique decision – one which necessitates consideration of such factors as sexuality and fertility – is unknown.

This paper assesses preferences about contraceptive decision making among women at high risk of unintended pregnancy – those undergoing abortion – and compares these preferences to those regarding general health decision making. The objective of this study is to provide insight into women’s experiences and preferences regarding contraceptive counseling, including whether demographic characteristics are associated with decision-making style. In addition, the study of preferences for decision making around this complex, preference-sensitive decision, with attention to similarities and differences with other types of decision making, will provide insight into the degree of intra-patient variation in preferences.

2. Methods

2.1. Study design and sample

This cross-sectional survey study was conducted between March 2008 and September 2009 in a large urban abortion clinic in the United States as a part of a prospective cohort study of post-abortion contraceptive use. As part of the criteria for this larger study, only women choosing a progestin-only or barrier contraceptive after surgical abortion were eligible for participation; for this analysis we included only women who completed the survey in English. Women completed a survey after contraceptive counseling and while waiting for their abortion. Counselors who participated in a patient’s care also completed surveys about their interaction with the patient immediately following the counseling session. Surveys were administered and abstracted using SurveyCrafterPro 4.0 (SurveyCrafter, Anton, MA).

2.2. Measures

The participant survey included questions about their demographic characteristics, their experience in the clinic, and their experiences with and opinions about contraceptive use. In addition, the survey included two question sets about their preferences for decision making which were adapted from the Problem-Solving Decision-Making Scale [13]. These questions have been extensively studied and validated across a range of populations. One question set assessed their general preferences for decision making around health care, and the second assessed their preferences specific to decision making about contraception. Participants who did not complete the question sets were excluded. These questions are shown in Table 1. The response options for these questions were on a 5-point Likert scale, with responses from 1 to 5 indicating “The doctor alone”, “Mostly the doctor”, “Both equally”, “Mostly me”, and “Me alone”. As previously described for the Problem-Solving Decision-Making Scale, we averaged the answers to these two questions, with a score less than 3.0 indicating a preference for doctor-led decision making, a score of 3.0–3.99 as a preference for shared decision making, and scores above 4 as preferring autonomous decision making.

Race/ethnicity was self-identified. A recent history of mood disorder was assessed using the question “Over the last 2 weeks, how often have you been bothered by feeling down, depressed or hopeless”, with all answers other than “Not at all” coded as positive responses. Satisfaction with the contraceptive method received was assessed using a 7-point Likert scale, with “Very satisfied” considered a positive response and all other responses considered negative. Whether a health care provider had influenced the choice of a contraceptive method was determined by asking whether a counselor or doctor had assisted with the choice, with answers of “Helped a lot” or “Helped a little” for either type of provider coded as positive. For questions regarding the perceived importance of method characteristics, women were asked to indicate whether the safety, the ease of use, the efficacy, and the side effects of a method was “Very important”, “A little important” “Not important” or “Don’t know”, with the first two answers being coded as positive. Whether the patient had a medical condition was abstracted from the patient’s chart.

The counselor survey included questions about the counselor’s perception of the patient and their experience of the counseling session. Questions regarding satisfaction were recorded on a 5-point Likert scale, with “Very satisfied” considered positive. The question regarding whether the patient would continue to use the method in six months provided response options of “Very likely”, “Somewhat likely”, “Neither”, “Somewhat unlikely” and “Very unlikely”, with “Very likely” considered a positive response.

2.3. Statistical analysis

Responses to the questions about contraceptive and general health decision making were compared using an extension of McNemar’s test for marginal homogeneity. The relationships between contraceptive decision-making preferences and demographic characteristics were determined using chi-squared and

Table 1

<table>
<thead>
<tr>
<th>General health:</th>
<th>Contraception:</th>
</tr>
</thead>
<tbody>
<tr>
<td>When you are sick, who should decide how acceptable the risks and benefits of possible treatments are for you?</td>
<td>Given the risks and benefits of the different types of birth control, who should decide how acceptable the risks and benefits are to you?</td>
</tr>
<tr>
<td>Given all the information about risks and benefits of the possible treatments, who should decide what treatment option should be selected?</td>
<td>Given all the information about risks and benefits, who should decide what birth control method you use?</td>
</tr>
</tbody>
</table>


t-tests as appropriate. For the purpose of these analyses, decision-making preferences were dichotomized as either a preference for doctor-led decision making or shared decision making, as compared with autonomous decision making. We also performed analyses using a cut point for decision-making preferences between doctor-led decision making and shared decision making in order to characterize those desiring doctor-led decision making further. Multivariate analyses were performed using backwards selection, with the retention of all variables with a p value <0.20. Analyses of the associations between decision-making preferences and contraceptive and counseling experiences and counselor perceptions were performed in a similar manner. Due to logistical issues with data collection, we only had counselor data from 196 of the 257 women included in our sample. Data were analyzed using Stata 9.0 (Stata Corp, College Station, TX).

2.4. Human subjects approval

The Committee of Human Research at the University of California, San Francisco approved this study.

3. Results

A total of 266 participants completed the English language survey. We excluded nine women from our analysis as these individuals did not complete questions regarding their decision-making preferences. The demographics of the 257 subjects are shown in Table 2, and indicate that our sample population was a diverse, low-income group. Only 20% reported having a significant medical condition, while over 50% had significant mood symptoms.

Responses to the questions regarding decision-making preferences for contraception and for their general health care are shown in Fig. 1. Answers to the two sets of questions were significantly different (p <0.001), with women being more likely to desire autonomous decision making about contraception (50%) compared with general health (19%), and with the opposite trend being true for doctor-led decision making (18% vs. 48%). With respect to shared decision making, the percentage of subjects who preferred this model was equal for general health and contraception (32% vs. 33%).

3.1. Association of demographic characteristics with preferences for decision making

Table 3 presents the distribution of demographic characteristics within each of the three preferences for decision making for contraception. Using these three categories, none of the participant characteristics were associated with preferences. When we dichotomized preferences between doctor-led and shared decision making vs. autonomous decision making, we continued to find no significant associations, including no association of decision-making preferences for contraception with race/ethnicity (p = 0.45). These results were consistent in multivariate analyses. With respect to decision making about general health, the only significant association in bivariate and multivariate analyses was that those who had Medicaid insurance, as opposed to private insurance or self-payment, were less likely to desire autonomous decision making (17% vs. 33%, p = .02).

Only one demographic variable was significantly associated with discordance in decision-making preferences between contraception and general health. Those with Medicaid insurance were more likely to have discordance than those with other types of payment (37% vs. 12%, p = .005) in both bivariate and multivariate analyses. This finding is driven by a large difference in the percentage of Medicaid insured women desiring autonomous decision making for contraception as compared to general health (51% vs. 17%, p <.001), whereas the difference for those without Medicaid insurance was much smaller (45% vs. 32%, p = .05).

We performed similar analyses using an alternative cut point for the dichotomous variable for decision preferences between doctor-led decision making and shared decision making or autonomous decision making in order to determine if those desiring doctor-led decision making were different than those with different decision-making preferences. In these analyses, the only demographic characteristic which was significantly associated with preferences for contraceptive decision making in bivariate and multivariate analysis was insurance status, with those on Medicaid being less likely to prefer having the health care provider make the decision (16% vs. 30%, p = 0.05). With respect to decision making about their general health, the only significant association in bivariate analyses was that those who had experienced sadness or hopelessness during the past two weeks were less likely to desire doctor-led decision making than those who had not had these symptoms (42% vs. 57%, p = 0.03). Having Medicaid insurance was again significantly associated with discordance in decision-making preferences between contraception and general health in both bivariate and multivariate analyses (41% vs. 18%, p = .01).

Table 2

Demographics of participants (n=257).

<table>
<thead>
<tr>
<th>Participant characteristics</th>
<th>% of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (mean/SD)</td>
<td>25 (6)</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>17</td>
</tr>
<tr>
<td>Black</td>
<td>38</td>
</tr>
<tr>
<td>Latina</td>
<td>23</td>
</tr>
<tr>
<td>Asian/API</td>
<td>13</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
</tr>
<tr>
<td>Family income &lt;$25,000</td>
<td>73</td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
</tr>
<tr>
<td>Medicaid</td>
<td>82</td>
</tr>
<tr>
<td>Private/self-pay</td>
<td>12</td>
</tr>
<tr>
<td>No response</td>
<td>4</td>
</tr>
<tr>
<td>Parity (mean/SD)</td>
<td>1.3 (1.3)</td>
</tr>
<tr>
<td>Number of previous abortions (mean/SD)</td>
<td>1.3 (1.6)</td>
</tr>
<tr>
<td>Number of previous contraceptive methods (mean/SD)</td>
<td>1.6 (1.1)</td>
</tr>
<tr>
<td>Significant medical condition</td>
<td>20</td>
</tr>
<tr>
<td>Felt sad or hopeless at some point during past two weeks</td>
<td>59</td>
</tr>
<tr>
<td>Birth control method chosen</td>
<td></td>
</tr>
<tr>
<td>Levonorgestrel IUC</td>
<td>37</td>
</tr>
<tr>
<td>Contraceptive implant</td>
<td>18</td>
</tr>
<tr>
<td>Contraceptive injection</td>
<td>30</td>
</tr>
<tr>
<td>Condoms</td>
<td>16</td>
</tr>
</tbody>
</table>

Fig. 1. Decision-making preferences for general health versus contraception.
3.2. Association of preferences for contraceptive decision making with contraceptive experiences

In bivariate analyses, women who preferred autonomous decision making were significantly more likely to report being satisfied with the method they chose to start (84% vs. 71%, \(p = .02\)) and were less likely to feel that a health care provider had influenced their birth control decision (78% vs. 89%, \(p = .03\)). In addition, there was a trend towards these women being more likely to receive the birth control method they had desired at the beginning of the visit (48% vs. 36%, \(p = .07\)). In multivariate analysis, both findings in bivariate analysis remained significant, whereas the trend regarding having received the originally desired method disappeared.

There were no associations between whether women considered method efficacy, method side effects, or ease of use important in their choice of a birth control method.

Using the alternative dichotomous variable, women who preferred the health care provider to make the decision about contraception were less likely in multivariate and bivariate analyses to feel they had adequate time to ask questions (83% vs. 92%, \(p = .04\)) and were less likely to report that what they felt about birth control had influenced their decision substantially (57% vs. 76%, \(p = .006\)).

3.3. Association of decision-making preferences and counselors' perceptions of patients

Counselors providing abortion and family planning care to patients did not report any differences in their perceptions of patients by patient decision-making preferences. Perceptions which were assessed were whether the counselor perceived the patient to have come to the clinic desiring a certain method, how satisfied the counselor perceived the patient to be with her chosen method, how satisfied the counselor was with the method, and whether the counselor believed the patient would continue to use the method for six months.

4. Discussion and conclusion

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The results of this study indicate that decision making about contraception is viewed differently than decision making about general health, with a stronger preference towards autonomous decision making with respect to birth control. Demographic characteristics did not strongly correlate with decision-making preferences. Women's experiences receiving contraceptive counseling were associated with preferences, with those preferring autonomous decision making reporting higher levels of satisfaction with their contraceptive method and less influence from health care providers over their decision.

Overall, these findings support the evidence in the literature that not all patients prefer shared decision making, with almost half of women reporting that they preferred doctor-led decisions about general health. In addition, this study indicates that individuals can have substantial variation in their preferences for the type of decision making depending on the decision being made. It is perhaps not surprising, given its social and cultural context and highly preference-sensitive nature, that contraceptive decision making elicits more desire for autonomy than general health care. However, these data suggest that variation in decision-making preferences between different medical decisions should be expected.

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which have suggested that age, race, income and education are associated with individuals' opinions about decision making. This difference might arise from the different population being studied. Not only was our population relatively homogenous with respect to age and income, but we were also unable to assess the effect of education due to the fact that a large proportion of our sample was not yet of an age where they could be considered to have completed their schooling. The use of other more reliable socioeconomic indicators such as level of parental education [18] may have uncovered associations which we were not able to identify. In addition, the fact that our sample was relatively healthy, with a small percentage having a significant medical condition, may affect these associations, as individuals with less exposure to the health care system may have different perceptions of their decision-making preferences than those with chronic medical conditions and extensive interaction with the health care system. Finally, the young age of our sample differs from most previous studies of decision making preferences, and therefore the lack of associations, and specifically the lack of association with race/ethnicity, may represent a cohort effect.

One finding which was unexpected was the complicated relationship between insurance status and decision-making preferences. Those with publicly funded insurance were less likely than those without such insurance to desire doctor-led decision making for contraception, while they were less likely to desire autonomous decision making about general health. This pattern suggests that those with publicly funded insurance place a higher value on autonomy around family planning than around general health care compared to those without such coverage.

With respect to contraception specifically, our findings suggest the importance of attention to decision-making preferences, as well as the difficulty of predicting preferences based on patient characteristics. A majority of women preferred autonomous decision making, which is in agreement with the philosophy of providing unbiased and non-directive information endorsed by many in the family planning field [19–21]. However, it is essential to know that a substantial proportion of women desired shared decision making, and some, albeit a minority, preferred a doctor-led model. Neglecting the preferences of these individuals has the potential to decrease their satisfaction with the contraceptive counseling encounter [6,22–24]. Our data suggest either that women who desire doctor-led decision-making may in fact receive lower quality counseling, perhaps because they may be less active in the encounter. Alternatively, women with this decision-making preference for contraception may be more likely to perceive counseling to be inadequate, even if it is the equivalent of the counseling that others receive. Regardless of the etiology of the difference, these women may benefit from having a different approach to counseling, such as having counselors proactively elicit questions.

The fact that contraceptive decision-making preferences were not associated with demographic characteristics and that counselor's perceptions of patients did not vary across patient decision making preferences suggests that it is necessary for providers of contraceptive counseling to determine patients' preferences through direct questions. Of particular importance is the finding that the number of methods a woman has used in the past was not associated with decision-making preferences for contraception, indicating that familiarity with birth control does not predict a desire for autonomous decision making. In addition, the lack of association between preferences for contraceptive decision making and race/ethnicity is of interest given the complicated history of interconnections between family planning programs and attempts to control the fertility of poor and minority women [25,26]. Previous studies have suggested that this history affects minority women's experience with family planning, with a substantial proportion of African American women reporting that they believe the government promotes contraception among African Americans as a form of genocide [27], and Black and Latina women being more likely to report that they have felt pressured to start a contraceptive method than Whites [28]. Our results suggest that this complicated cultural context does not affect the preferences of minority women around decision making about contraception.

Limitations of our study include the use of a population of women presenting for abortion care, and specifically a subset who were choosing to use either long term methods of birth control or barrier methods. Both of these selection criteria may limit the external generalizability of our findings. Specifically, by excluding patients who chose short acting, user-controlled methods such as the contraceptive pill, patch or ring, we may have selected a sample with greater acceptance of doctor involvement in decision making. We also did not have objective information about the content of the contraceptive counseling experience. This information would allow us to draw more conclusions about the relationship between decision preferences and communication with providers. An additional consideration is the asymmetry between the two decisions we asked patients to consider. In the case of contraception, women completing the survey had recently been engaged in making this decision. The questions regarding health were inherently more general and theoretical. This asymmetry could be hypothesized to affect decision-making preferences, although we consider it unlikely that this would explain the magnitude of the difference we identified between the two decisions.

4.2. Conclusions

The provision of patient-centered care requires attention to the preferences of individuals around decision making. These preferences vary by the type of decision being made, and cannot be easily predicted by patient demographics. Further studies to assess the relationship between decision preferences, provider-patient communication, and health outcomes in the area of contraception would be of use in determining how to best promote optimal contraceptive use.

4.3. Practice implications

Awareness of the fact that decision-making preferences may vary across decisions and cannot be predicted by patient characteristics should prompt health care providers in general, and family planning providers specifically, to proactively seek to determine patient preferences in order to provide the most appropriate counseling. In the family planning context, it is particularly important not to assume that all patients desire only the objective provision of information, but also to recognize that many patients prefer some level of provider involvement in decision making.

Conflict of interest statement

None declared.

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References


