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The Effect of Relationships on Decision-Making Processes of Women in Harare, Zimbabwe

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A preliminary study aimed at investigating the potential impact of relationships on decision-making process and autonomy of women was conducted in Harare, Zimbabwe. The majority of women surveyed (87.6%) were prepared to consult their husbands, whereas only 46.6% said they would consult their relatives prior to participation in health research. Only 6.2% and 11.3% were prepared to keep their participation secret from their husbands their relatives, respectively. Overall, 58.6% were rated as autonomous, 22.5% partially autonomous, and 18.9% were rated as not autonomous. Age, educational level, employment status, and marital status of respondents were significantly associated with autonomous decision-making process.

Keywords: informed consent, autonomy, women, relationships, decision making

INTRODUCTION

Voluntary informed consent is a major requirement for ethical research in all international ethical guidelines such as the Nuremberg code, Declaration of Helsinki, Belmont report, and CIOMS. The international guidelines, which emphasize autonomy in informed consent, originate from the developed world (the United States and Europe) where literacy rates, culture, religion, economy, and politics differ from those in developing countries. It is therefore important that researchers and sponsors, who are mainly from the developed world (Tess Tan-Torres, 1999), understand ethics in health research in general and informed consent in particular in the African context. Numerous efforts have been made to sensitize researchers to the different cultural settings in developing countries and a considerable literature has emerged on ethical aspects of health research in developing countries (Emanuel, Wendler, Killen, & Grady, 2004; Tess Tan-Torres, 1999; Upvall &

Hashwani, 2001). However, actual social science data from prospective research participants in developing countries are still relatively scarce.

The Principle of Autonomy

Autonomy is one of the four main ethical principles that can be used to assess the moral value of an action or research proposal (Foster, 2001). The principle of autonomy affirms the right to self-determination and is the main principle underlying the process of obtaining informed consent (Foster, 2001; World Medical Association, 1997). The requirements for an autonomous decision to be made are competence to understand and make a decision, disclosure of information by researchers, understanding of the information by the prospective participant, and a voluntary decision and some form of expressed authorization by the participant (Foster, 2001; World Medical Association, 1997).

The decision whether or not to participate in health research is dependent on the nature of the research and could be made in consultation with others. In a study conducted in a rural area in India, willingness to participate in research depended on the perceived severity of potential risks; more participants indicated that they would be willing to participate in simple studies such as surveys (98.2%) or just giving blood samples for research (86%) than trials to test vaccines (63.2%) or drugs (66.7%) (DeCosta et al., 2004). However, significantly fewer women than men (42.8% vs. 90%) reported that they made decisions themselves whether or not to participate in health research. Husbands and mother-in-laws were cited as the decision makers regarding participation of those women in the study who did not decide for themselves. A participatory decision-making process for women was also observed in Uganda where women would not make decisions regarding their own participation in health research without their partners' approval (Love, Okello, & Kawuna, 1996). Autonomy should thus not be viewed in isolation; it appears to be interdependent on other factors that may affect the individual, the community, or the researchers themselves.

Autonomy, Voluntariness, and Human Rights

Ethical principles and human rights may be considered complementary in ensuring protection of humans in health research or medical treatment. In addition to stipulating the right to dignity of all people, Article 5 of the African Charter points out that there should be recognition of the "legal status" of every individual (African Charter on Human and People's Rights, 1981). Respecting a woman's dignity would mean that her autonomous decision whether or not to participate in health research is respected by her family, community, and researchers. As long as she is not a minor and is competent to process and comprehend information, her "legal status" as an autonomous adult should be respected. Enabling her to follow a decision-making process of her own choice is also part of respecting her as an individual. Thus, although there might be procedural differences because of different cultural practices, the spirit of the principle of autonomy should be the same and women's right to dignity would be expressed differently in different cultural settings.

Expression of autonomy is dependent on a voluntary decision that is free of any influence or coercion (CIOMS, 1993). Aspects of local settings in which the research is conducted can impair voluntariness of decision-making. Local settings are molded to a large extent by the interactions between the community from which the participants are drawn and the community of the researchers (Brodsky et al., 2004). It has been acknowledged that obtaining informed consent in

low-income settings raises questions about voluntariness (Emanuel & Pace, 2005; Joubert, Steinberg, van der Ryst & Chikobvu, 2003; Sumathipala & Siribaddana, 2004) and comprehension (Fitzgerald, Marotte, Verdier, Johnson, & Pape, 2002; Molyneux, Peshu, & Marsh, 2004). It is an obligation of the researchers to ensure that participants prospectively understand the study and to create conditions that enable them to make free and voluntary decisions about participation.

Various factors and conditions may, however, compromise the voluntariness of informed consent. For example, differences in perceptions of voluntariness of participation in health research among a sample of Black, Indian, and White South Africans have been reported that could be attributed to a background of violation of human rights during the reign of apartheid (Barsdorf & Wassenaar, 2005). Black respondents scored the lowest on perceived voluntariness, which could be because of the historical violation of such human rights as the right to freedom of choice. It could be argued that in patriarchal societies, violations of women's human rights, especially the right to self-determination, would make it difficult for women to give truly informed and truly voluntary consent (Wassenaar & Barsdorf, 2007). Although provision of information by researchers can enhance the understanding component of consent, the social and cultural environment in which the consent is obtained may negatively affect voluntariness (Abdool Karim, Abdool Karim, Coovadia, & Susser, 1998; Joubert et al., 2003).

Autonomy in Different Cultures

Autonomy is dependent on the perception of selfhood, which is molded mainly by culture. Selfhood is a cultural construction and as such is bound to differ from one culture to another. Although African culture is heterogeneous, the perception of selfhood as "self-in-relation-to-others" transcends culture and physical boundaries (Mwamwenda, 1999). This interdependence of the self and others results in one acting or behaving according to a combination of personal and others' wishes and expectations rather than on the basis of personal wishes alone (Markus & Kitayama, 1990). Consequently, the societal system operates in a way that assimilates the individual into the society, and selfhood is meaningful and complete only when cast in the appropriate social relationship (Mwamwenda, 1999). However, in spite of the interdependence, a person is aware of his or her inner self that may feel or think differently from other people and is allowed to express individual opinions and take actions within limits set by the value system of the society. The limits are dynamic as the society responds to changes and influences from within and without. In contrast, the inner self is the basis of selfhood in the Western world and is not limited; self is perceived as being relatively separate and independent from others (Berry, Poortinga, Segall, & Dasen, 1992). The normative imperative of this Western culture is that individual behavior is based on one's own repertoire of thoughts, feelings, and actions rather than by reference to others.

Another common characteristic of African culture is the different roles played by men and women in the family and in the society. Generally, the traditional roles of women have been in the domestic domain, whereas those of men have been in the public domain. Man has been considered to be the "protector" of his wife and children and therefore responsible for making important decisions on behalf of his family. This patriarchal social system tends to leave no room for the inner self of woman to express herself even on personal matters she ought to be in control of. This could be viewed as a violation of her right to self-determination (Cook, Dickens, & Fathalla, 2003). Women are therefore not treated as ends in themselves but as means for men to be able to play their role of being the "head" of the family. Consequently, this utilitarian practice could be viewed as

oppressing the inner self of women, thus preventing them from making decisions on matters that affect them personally.

Traditionally in Africa, women get married to men, who pay lobola (bride-price) for their wives. The married woman leaves her parents' home to join the family of the husband. Even if she has "joined" the man's family, she is still considered to be an "outsider" who cannot make important decisions outside the domestic domain (Campbell, 1991). There is also a tendency by some men to treat married women as "property" that has been "bought" from the in-laws through payment of lobola. The misconstruction of the purpose of the traditional practice of payment of lobola has contributed to unfair treatment of the girl-child; parents (men) may be reluctant to spend resources educating the girl-child because she will eventually get married and leave her own family to join the husband's family. This perceived economic, social, or religious utility attached to the boy-child leads to a preference for sons and a tendency to consider daughters as an economic liability (Campbell, 1991).

A study in Butajira, a rural area in Ethiopia, showed that women's health was affected by poverty, poor social status and decision-making capacity, traditional practices, poor education, and heavy workload (Berhane, Gossaye, Emmelin, & Hogberg, 2001). The majority (89.3%) of married women who participated indicated that they required permission from their husbands to visit a health facility, no matter how close to their homes. Similarly, Allman, Blumhagen, and Brown (1992) reported that the ability of women in West Africa to seek health care depended on the good will of their husband and extended family.

Rationale of the Current Preliminary Study

As health research is increasingly becoming cross-national and cross-cultural (Edejer, 1999), it is apparent that local cultures, religions, and behavior patterns of the persons at the research site have to be considered if studies are to be conducted ethically (Shapiro & Meslin, 2001; Varmus & Satcher, 1997). Cultural beliefs and behavior patterns impact on the process of obtaining informed consent from women. Recruiting women into health research against their own personal wishes is unethical. What is at stake is the potential conflict between what is expected of a woman by a patriarchal society, what she may want as an individual, and what researchers might regard or assume to be normative autonomy.

At the same time, it is important to include women in health research because the health needs of women are different from those of men, due to biological and social differences. First, women have health needs related to their sexual and reproductive functions, which are collectively called reproductive health needs (Cook et al., 2003). Second, women are subject to many of the diseases that affect men, but their disease patterns and treatment needs are different from those of men because of their genetic makeup, hormonal environment, or gender-based lifestyle behavior (Hamilton & Parry, 1983; Skett, 1988). Third, women are affected by social systems that can potentially impact negatively on their physical or mental health; examples include sexual abuse, female genital mutilation, and domestic violence (Cook et al., 2003). In spite of these different health needs, some African cultural, traditional, or religious practices reduce women to the status of minors who cannot make decisions on their own (Braam & Hessini, 2004; Hogan, Berhanu, & Hailemariam, 1999).

The principle of distributive justice requires that burdens and benefits of participation in health research be fairly and equally shared (Kass, 1998). Women constitute more than 50% of the

world's population, yet this is not reflected in the proportion of female participants in health research (Council on Ethical and Judicial Affairs, 1991). For example, HIV epidemic statistics show that 58% of HIV infected adults in sub-Saharan Africa are women (Wassenaar & Barsdorf, 2007) yet HIV vaccine trials in Africa, to date, have had minimal female participation (Kapoor, 2004; Mills et al., 2006). The major concern is that findings from studies with gender disparities are generalized to all patients, regardless of their sex. Thus women who utilize medical care more than men (Shalev, Chodick, Heymann, & Kokia, 2005) are at risk of exposure to medical treatments that are based on a male model without sufficient treatment and side effect data specific to women (Jackson, Anderson, & Peacock, 1996; Kass, 1998). Nevertheless, this need for involvement of women in health research is not a justification for a violation of their right to self-determination. Historically, women have been victims of unethical health research. The classical example of Dr. Sim's experiments with female slaves without their consent (Axelsen, 2001) illustrates the paternalistic, utilitarian treatment of women, which is compounded by the general perception of women in most developing countries as inferior to men.

For women in Africa in general and in Zimbabwe in particular, autonomous decision making may be affected by cultural, traditional, and/or religious practices of their families and communities (Chavhunduka, 2001). In a study conducted in the Midlands province of Zimbabwe, permission for women to participate in research had to be sought from their husbands and some men insisted on being present in the interviews (Jewkes, Watts, Abrahams, Penn-Kekana, & Garcia-Moreno, 2000). This was in spite of the fact that the study was referred to as a "Women's Health Survey" so that no one except the participants knew that it was on domestic violence. Although there is one level of approval for access to prospective participants in research dealing with men (that of the community leader), there are additional levels of approval before getting access to women; husbands and in-laws have to be consulted.

Expectations of men and the extended family can potentially exert pressure on women not to exercise their right to self-determination. In Ghana, a study on the impact of relationships on family planning revealed that women feared not only physical and emotional abuse from their husbands but also the influence of the extended family on the husband (Bawah, Akweongo, Simmons, & Phillips, 1999). There is thus a risk that any study that involves women can potentially lead to social problems if such power relationships in the family and community are not well understood and taken into consideration. Empirical studies therefore need to be conducted in order to understand factors that impact on the process of obtaining voluntary and autonomous informed consent from female participants of health research.

The current preliminary study therefore investigates the level of autonomy and the impact of relationships on the decision-making process of Zimbabwean women in the context of hypothetical participation in health research.

METHODOLOGY

Data Collection

A questionnaire was developed and administered to women in Harare, the capital city of Zimbabwe in 2004. The questionnaire contained three sections, the first contained demographic questions, the second section contained questions on (i) whether or not respondents would consult

their husbands if asked to participate in health research, (ii) whether or not respondents were prepared to act independently of the views of their husbands if such views were against what the respondents wanted as individuals, (iii) the main reason for their position in (ii), (iv) possible consequences of acting independently of the views of husbands, and (v) whether or not respondents would prefer to keep their participation in health research secret from their husbands. The third section contained the same questions as those in section two but referred to relatives instead of husbands. There was also an open-ended question on what respondents thought researchers should do in order to create an environment conducive to free and voluntary participation of women in health research.

The questionnaire was translated into Shona, the vernacular language in the study areas. Cognitive pretesting was performed with the English and Shona versions of the questionnaire in order to ensure that the questions were not ambiguous. The development of the English version of the questionnaire was done with the assistance of three independent academics; two in the field of social science and one in public health. The English questionnaire was then tested using the University of Zimbabwe community (academic staff, support staff, and students) to ensure that there were no ambiguous questions. A total of 26 people participated in the pretesting exercise at the university.

The final English questionnaire was then translated into Shona by a first language, Shona-speaking social scientist. The Shona version of the questionnaire was tested at a shopping mall in the vicinity of four low-density suburbs and at a large market place in Harare, catering mainly for the informal sector of the economy. A total of 37 respondents participated in the pretesting of the Shona questionnaire, 12 at the mall and 25 at the marketplace.

Sample

Women, at least 18 years of age, who reside in the high-density (HD) and low-density (LD) suburbs of Harare were the target population. In total, 14 HD and 17 LD suburbs were covered in this study. Convenience sampling was used. Participants were recruited at shopping centers and market places in low and high-density residential areas of Harare. At marketplaces the majority of the vendors and shoppers were women. After explanations about informed consent and the purpose of the study, female interviewers interviewed those willing to take part in the study and completed the questionnaire. No names were recorded on the questionnaires to ensure anonymity and confidentiality. Questionnaires in English were available for participants who preferred to be interviewed in English. Females under the age of 18, women who had participated in health research before, and visitors to Zimbabwe were excluded.

In total, 314 participants were interviewed by three female interviewers over a period of 16 days. The average number of questionnaires completed per interviewer per day was 6.5. Seven participants withdrew from the study either because they were not comfortable answering certain questions or because they were in a hurry and could not answer all the questions. These incomplete questionnaires were excluded from the analysis.

Data Coding and Analysis

STATA version 8.1 was used for the statistical analyses. Descriptive statistics and Pearson's chi-square test were used to analyse the data. Respondents' level of autonomy was determined by their preparedness to act independently of the views of their husbands and/or relatives in the context of making a hy-

pothetical decision whether or not to participate in health research. Respondents who were prepared to act independently of the views of both their husbands and relatives if the views were against what the respondents wanted as individuals were rated as being “autonomous,” whereas those who were prepared to act independently of the views of either their husbands or their relatives were rated as being “partially autonomous.” Respondents who were not prepared to do as they wished because of the views of both their husbands and relatives were rated as being “not autonomous.”

The reliability of the questionnaire as a scale for independent, autonomous decision-making process of the respondents in the context of hypothetical participation in health research was calculated using STATA. The cluster of six questions dealing with decision-making process had a Cronbach’s alpha coefficient of 0.7669, which is reasonably acceptable internal reliability. The validity of the instrument was not evaluated.

Ethical Considerations

The purpose of the study, the nature of the questions to be answered, and the meaning of informed consent were explained to prospective participants orally and in writing (as information leaflets). Female interviewers were trained on the informed consent process before they started the study. The informed consent process involved explanations of the purpose of the study and the nature of questions that were in the questionnaire. Potential risks such as the potential of the interview to cause psychological distress were highlighted to prospective participants. The interviewers also explained that potential benefits were in the form of generalizable knowledge that could help researchers to create an environment that is conducive to free and voluntary participation or refusal to participate in health research projects.

Freedom to decline to participate or to withdraw from the study at any point during the interview was emphasized. The prospective participants were given time to ask any questions, and they were given the information leaflet. If they wanted to be given time to go and consult spouses or relatives, they were free to do so. However, no participants went to consult their spouses or relatives, most probably because it was a simple one-off interview that had minimal potential risks.

Female interviewers recruited participants and conducted the interviews so as to create an environment as conducive for the participation of women as possible. Confidentiality was ensured by not recording participants’ names on the questionnaires; only the interviewer’s identification code and place of recruitment were recorded. Verbal consent was considered sufficient for the low-risk quantitative study, hence participants were not asked to sign informed consent forms, since that could deter some potential participants. Noninclusion of such participants who may not feel “free” to participate could be systematic exclusion of the very participants who have the information that the study sought find out. Ethical approval to conduct the study was received from the University of Pretoria Research Ethics Committee and from the Medical Research Council of Zimbabwe. The Ethics Committees waived the requirement for written informed consent on the basis of the justification given and the minimal potential risks of the study.

RESULTS

The majority of respondents were between the ages of 18 and 30 years (35.8%). Most respondents had completed secondary education (34.2%) and many had also received some vocational training

(28.1%). Many respondents (47.6%) were formally employed, 24.8% were self-employed, and 27.7% reported having no employment. The majority of respondents (90.6%) were Black and 47.9% were married.

Potential Impact of Relationships on Decision-Making Process of Women in the Context of Hypothetical Participation in Health Research

The impact of respondent's relationships on their decision-making process in the context of hypothetical participation in health research was examined in terms of both their husbands' and relatives' potential influence. Only 6.2% (19/307) and 11.3% (36/307) of the whole sample said that they would be prepared to keep their participation secret from their husbands and relatives, respectively. Respondents' preparedness to keep their participation secret from their husbands increased with age: 37.5% of respondents older than 60 said they would keep their participation secret from their husbands, whereas 10.6%, 11.5%, 2.2%, and 2.7% of respondents in their 50s, 40s, 30s, and 20s, respectively, said they would keep their participation secret from their husbands. Respondents with higher levels of education were less likely to keep their participation secret from their husbands; no respondents with vocational or university training were prepared to keep their participation secret from their husbands, whereas 16.7% and 17.5% of women with no education and primary education, respectively, said they would. Similarly, preparedness to keep participation secret from relatives decreased with level of education. Only 2.4% of women with university education said they would keep participation secret from their relatives compared to 41.7% of women with no education.

Potential influence of husbands on decision-making process. The majority of respondents (87.6%), regardless of age, marital status, employment, and education, said they would consult their husbands prior to participation in health research. Respondents' preparedness to act against their husbands appeared to decrease with age: 93.6% of respondents in their twenties said they would act against their husbands, whereas only 70%, 51.9%, and 21.3% of women in their 30s, 40s, and 50s, respectively, said they would and none of the women older than 60 were prepared to act against their husbands. Whereas 82% of women younger than 40 responded that they would be prepared to act against the views of their husbands if the views hindered them from doing what they wanted as individuals, only 34.6% of participants age 41 and older said they would be prepared to do so; 65.4% said they would always do what their husbands wanted them to do regardless of their personal wishes.

Over 85% of respondents who had never been married or were divorced said that they would act against their husbands, whereas only 54.6% and 46.3% of widows and married women, respectively, said that they would do so. Preparedness to act against one's husband increased with education, ranging from only 25% of women who did not receive any education to 97.6% of women who attended university being prepared to act against their husbands. A higher percentage of women formally employed (76%) than those unemployed (42.9%) said they would act against the opinions of their husbands.

When asked the reason for their decision to consult or act against their husbands or not, most respondents who were younger than 50, unmarried, employed, or had at least a secondary-level education primarily cited their right to self-determination as the reason for their decision. Most

women who were older than 50, married, unemployed, or less educated (primary level education or none) cited cultural/traditional practices as the main reason for their decision.

In terms of possible consequences of their decision to go against their husbands' opinion, majority of women ages 30 to 50 cited emotional punishment as the most likely consequence, whereas women older than 50 said it would most likely be economic punishment such as the withdrawal of financial support. The majority of respondents in the 18- to 30-year-old age group who were not yet married did not know what possible consequences of acting against their future spouses would be since the reaction of the spouse would depend on the man's character and how cordial the relationship is. Majority of women with no education and primary education cited economic punishment as a possible consequence of their action. Although women with a secondary-level education and higher cited emotional punishment as a possible consequence of their action.

Potential influence of relatives on decision-making process. Less than half the respondents (46.6%) said they would consult their relatives prior to participation in health research. A larger percentage of women older than 50 (68.1% of women < 50 years; 75% of women < 60 years) said that they would consult their relatives with regard to their participation in health research. The majority of single and widowed women (60%) said that they would consult their relatives prior to participation in health research, whereas only 40.8% of married women and 28.6% of divorcees said they would. Preparedness to consult relatives decreased with level of education, ranging from 75% among women with no education to 14.6% among women with varsity-level education.

Overall, 226 out of 307 respondents (73.6%) said they were prepared to act against their relatives if their relatives opinion whether or not to participate differed from their own. Younger women appeared more likely to act against their relatives: 78.2%, 86.7%, and 76.9% of women in their 20s, 30s, and 40s, respectively, were prepared to act against their relatives, whereas only 42.6% of women in their 50s and 25% of women older 60 were prepared to do the same. Respondents' preparedness to act against views of relatives increased with education (ranging from 33.3% among women with no education to 92.7% among women with varsity-level education). A higher percentage of women formally employed (85.6%) than those unemployed (37.3%) said they would be prepared to act against the opinions of their relatives. Similarly, the majority of self-employed women (85.5%) responded that they were prepared to act against their relatives if they perceived the relatives' views not to be in their best interest.

Regarding the main reason for deciding whether to consult or act against their relatives, the majority of women who were younger than 50, employed, or had at least a primary-level education cited their right to self-determination as the main reason for their decision. Most women who were older than 50, unemployed, or had no education were cited cultural/traditional practices as the major reason for their decision to either consult or act against their relatives or not. The majority of respondents regardless of age, marital status, employment, and education cited emotional punishment as the most likely consequence of going against their relatives' opinion.

Levels of Autonomy of Women in the Context of Hypothetical Participation in Health Research

Respondents' levels of autonomy in the context of hypothetical participation in health research were also examined. Figure 1 shows the ranking of respondents in various sociodemographic cate-

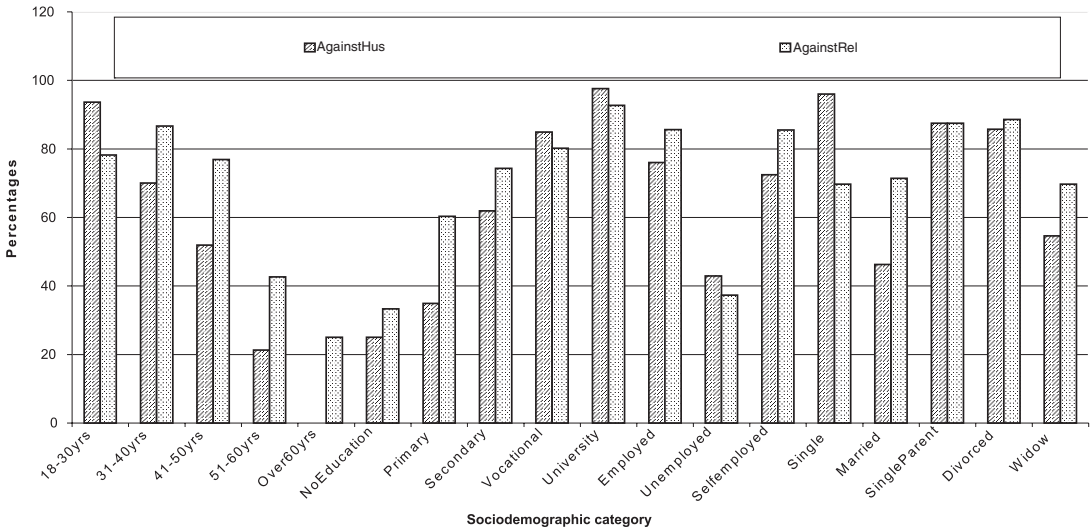


FIGURE 1 Preparedness to act against husband and relatives as a measure of autonomy in the context of health research only.

gories. Respondents' level of autonomy was determined by their preparedness to act independently of the views of their husbands and/or relatives, if their husbands/relatives' opinion regarding the respondents participation in health research differed from their own. Overall, 58.6% of respondents (180/307) were prepared to act independently of the views of both their husbands and relatives if the views were against what the respondents wanted as individuals and were therefore rated as autonomous. Sixty-nine respondents (22.5%) were prepared to act independently of the views of either their husbands or their relatives and were rated as partially autonomous. There were 18.9% rated as "not autonomous" because they were not prepared to act against the views of both their husbands and relatives, even if abiding by the views prevented them from doing what they wanted as individuals.

A chi-square analysis reveals a significant association between self-determination and autonomy ($p = .016$) and partial autonomy ($p = .021$). The majority of women who were either autonomous or partially autonomous were prepared to act against either their husbands or relatives or both, and the basis for that position was their belief in self-determination. Ninety-five and a half percent of respondents who were classified as 'autonomous' cited their right to self-determination as the reason they were prepared to act against both their husbands and their relatives, whereas only a minority of these autonomous women cited religious practices and traditional/cultural practices (2.8% and 1.7%, respectively).

Seventy percent of women who were classified as partially autonomous cited their right to self-determination as the reason they were prepared to act against either their husbands or their relatives, whereas 8.7% of these women cited religious practices as the reason for their decision and 21.3% cited traditional/cultural practices. In contrast, only 15.5% of women who were classified as not autonomous cited their right to self-determination as the reason they were not prepared to act against either their husbands or their relatives, whereas 36.2% of them cited religious practices as the reason for their decision, 44.8% cited traditional/cultural practices, and 3.5% cited

other reasons. Therefore the more respondents were likely to make their decision based on their right to self-determination, the more likely they were to be autonomous, and this trend is shown in Figure 2.

The data show that respondents rated as autonomous cited emotional punishment (43.9%) as a possible consequence at a more or less similar rate as partially autonomous women (40.6%) and women who were rated as not autonomous (39.7%). As level of autonomy decreased the likelihood of economical and physical punishment increased, as depicted in Figure 3. Of the autonomous, partially autonomous, and not autonomous women, 11.7%, 24.6%, and 31%, respectively, cited economic punishment as a possible consequence. Physical punishment was cited as a possible consequence by 15%, 23.2%, and 20.7% of autonomous, partially autonomous, and not autonomous women, respectively. Furthermore, 20% of autonomous women said that there would be no punishment at all, whereas none of the women rated as semiautonomous or not autonomous responded similarly.

Recommendations from Participants

To find out what respondents thought researchers should do in order to create an environment conducive to free and voluntary participation of women in health research, an open-ended question invited respondents to make recommendations about how researchers should conduct future research. The four main recommendations that were given by participants were as follows:

1. Researchers should sensitise the target community (including men) by giving information about their studies in advance, so that women are not given the task of breaking the news to their spouses and relatives; this would help to reduce the risk of domestic violence in the case of research on sensitive topics.

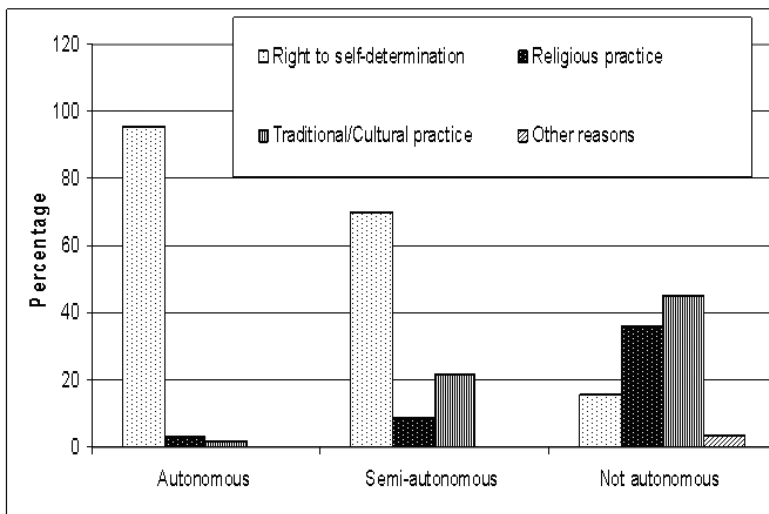


FIGURE 2 Autonomy and reasons for choice.

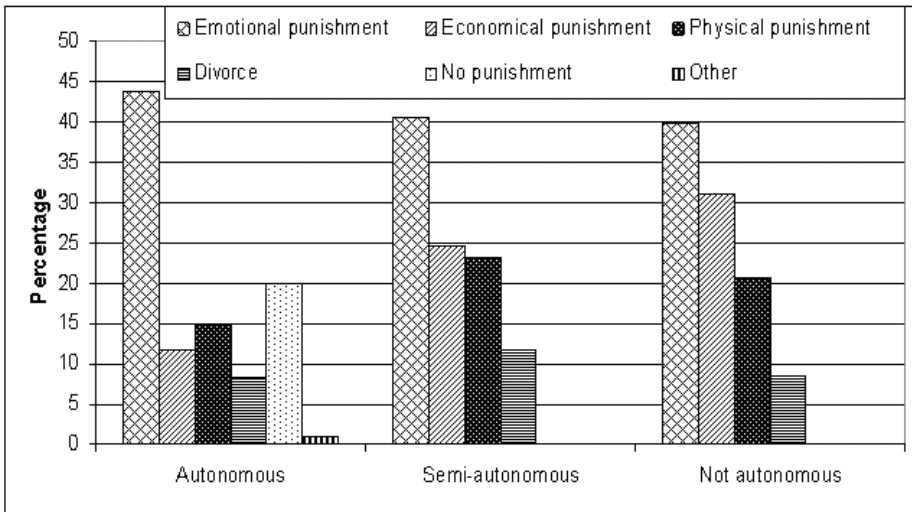


FIGURE 3 Level of autonomy and possible consequences.

2. Researchers should allow time for consultations and discussions in the process of obtaining informed consent.
3. Female researchers should be involved wherever and whenever possible, so as to create an environment that enables women to be comfortable, especially when dealing with sensitive topics that focus on women's health.
4. Researchers should ensure that participants and the community at large benefit in some way from the studies; they should not just collect data and disappear.

DISCUSSION

This preliminary study sought to investigate the impact of relationships on the decision-making process and the level of autonomy of Zimbabwean women in the context of hypothetical participation in health research. The study arose from the realization of the fact that poverty, low social status of women, gender inequalities, gender-based violence, and socioeconomic dependence on men are prevailing in most societies, especially in the developing world. However, there is paucity of empirical data on the impact of such socioeconomic factors on the informed consent process and decision-making process of women in health research. This preliminary study forms a basis for future empirical studies aimed at further elucidating factors affecting women's autonomy in the context of health research.

Process of Decision Making

The process of decision making was shown to involve consultations with husbands and relatives, regardless of age, marital status, educational status, or economic status. In addition, very few re-

spondents were prepared to keep their participation secret from either their husbands or their relatives. Consultations on health matters within families are considered to be critical in decision-making processes of most African people (Chavhunduka, 2001). This participatory nature of the decision-making process has been described in other studies in India (DeCosta et al., 2004) and Uganda (Love et al., 1996). However, after these consultations, participants differed in the way they would use the advice. Results showed that age, level of education, and employment status impact on women's ability to decide independently whether or not to participate in health research. Participants' responses indicated that preparedness to act independently of their husbands and relatives opinion was inversely related to age and increased as education level increased. Furthermore, women who were employed were more likely to act independently of their husbands' and relatives' opinions than those who were unemployed. This reveals that improving women's level of autonomy may need to involve the empowerment of women through education and employment.

Autonomy of Women

Overall, 81.1% of participants were rated as at least partially autonomous and autonomy was significantly associated with self-determination. The majority of women who were rated autonomous or partially autonomous, in terms of preparedness to act independently of their husbands and/or relatives, were prepared to do so because of their belief in self-determination. These were primarily women younger than 50, women with some education, and women who were employed. The majority of the 18.9% of respondents who were rated as not autonomous chose to not act independently of their husband and/or relatives because of cultural and traditional reasons. These were primarily women older than 50, women with little or no education, and unemployed women. It is this subgroup who would appear to be most at risk of nonautonomous participation in health research if they are advised to do so by their spouses and relatives. This is a challenge to researchers, who should ensure that the right to self-determination of all competent prospective research participants is respected.

Possible Consequences Reported by Respondents

Women who felt that they could not act against the wishes of their husbands feared such punishments as emotional, physical, or financial harm. Given the high rates of gender violence in Southern Africa (Dunkle et al., 2004), the safety and even lives of female participants in violent relationships may be put at risk by mere differences in opinions over participation in health research. Although the World Health Organization (1997) has developed specific guidelines for research on domestic violence, there are no guidelines for health research in general that could lead to domestic violence, even though it may place women at substantial risk of being punished emotionally, economically, or physically.

Most women reported that they risked emotional punishment if they made autonomous decisions that were deemed to be against the wishes of their spouses and relatives. They would be looked down upon as disobedient women with loose morals. Depending on the severity of the "wrong" done, punishment could be as severe as physical beatings or divorce. In the case of unemployed women, withdrawal of economic support seemed to be the most dreaded possible consequence. In this study, women with lower levels of autonomy reported economical and physical

punishment as a possible consequence more often than those with higher levels of autonomy. Although relatives were not reported to be responsible for punishing a married woman, in-laws were reported to influence men so that they punish their wives. The in-laws seemed to act as “watchdogs” who would report anything unusual to the husband. It was only a minority of the autonomous women who said that there would not be any punishment at all. Researchers need to be aware of these risks so that they can take measures to minimize potential harms.

Limitations of the Study

There are some limitations of the study that need to be noted. First, it is possible for sampling bias to exist as a randomized sampling technique was not used. Another limitation is that in this study the focus was on hypothetical participation in health research in general. Women's decisions about actual study participation would also depend on the perceived severity of potential risks of the study (DeCosta et al., 2004). This is evident as 87.6% and 46.6% of all participants in this study said they would consult their husband and relatives, respectively, prior to participation in health research, yet all these women participated in this survey study without consulting either their husbands or relatives. As such, Emanuel and Pace (2005) argued that such studies are best done with real research participants. In our view, however, studies of the general public do yield valuable information about potential participants prior to recruitment, which may be of use to recruitment efforts in future. In addition, this study serves as a preliminary investigation on the basis of which more studies could be developed.

Recommendations

Future studies on decision-making process of women. In future studies of this kind, questions should offer a range of hypothetical studies to be considered, as the decisions of prospective female participants also depends on the perceived risks involved in different types of studies (DeCosta et al., 2004). It is also important for future research on this topic to elicit information about the range of relatives consulted and whose advice is considered to be the most important. Similarly, identifying those specific parties that participants feel should not know about their participation would be useful, especially in the case of research on sensitive topics such as STIs and HIV/AIDS.

A comparative study that includes African and Western samples could provide more information about decision-making processes in different cultural settings, since the decision-making process of women in African societies is prone to the effects of poverty, low levels of education, and unemployment (DeCosta et al., 2004; Fitzgerald et al., 2002; Molyneux, Wassenaar, Peshu, & Marsh, 2004), whereas in developed countries these socioeconomic factors are less likely to play a relatively big role.

Health research with women in Africa. To make the environment more conducive to free and autonomous decision making regarding participation in health research, especially if a study has severe potential risks, it may be useful to conduct a pilot study aimed at understanding social constructs of the target population or community in order to be sensitive to the cultural and traditional practices of the prospective participants right from the design stage of the study.

The recommendations made by participants (i.e., sensitizing the target community; allowing sufficient time for consultations and discussions in the process of obtaining informed consent; using female research staff; and ensuring community benefits) echo the recommendations made widely in the literature and are often used in health research. Community preparedness efforts are particularly important so that women do not have to explain the research to their husbands and relatives themselves. A cautionary approach is always important when dealing with vulnerable women who may not be able to make choices of their own with regards to participation in health research.

CONCLUSION

This preliminary study provides insight into the potential for unequal, gender-based power relationships, shaped by patriarchy, to limit women's reported autonomy about participation in health research. Out of a sample of 307 urban women, 58 (18.9%) were rated as being "not autonomous" in the context of hypothetical participation in health research. This is the subgroup that would appear to be most at risk from nonautonomous participation in health research, and as such requires researchers to make extra effort to detect and protect them. Age, educational level, and employment status emerged as socioeconomic and demographic factors associated with the autonomy of women. Improving women's level of autonomy therefore may need to involve the empowerment of women through education and employment. Although this may be beyond the control of researchers, researchers need to be aware of gender-based power differentials of the target population.

Thorough community preparedness for intended studies may enable amicable participatory decision-making processes that include men and other relatives. Sensitising the community may also minimize chances of straining relationships of participants at individual, family, or community levels. In addition, it is imperative that researchers allow ample time for prospective participants to consult with their spouses and/or relatives as part of the informed consent process. It is also imperative that social factors that affect decision making of women be understood if social harms in research are to be minimized.

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