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Observational Study

Addressing Barriers to Reproductive Autonomy among Sexually Active Female University Students in the United States

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ABSTRACT

Objective: The current study aims to explore the presence and impact of different types of barriers, such as, controlling behaviors in a relationship and how they are associated with a woman's achievement of reproductive autonomy. Reproductive autonomy is the ability to make decisions on contraceptive use, pregnancy, and childbearing, and is necessary for a person's overall well-being. One's partner, and the health of that relationship, may have a significant impact on achieving reproductive autonomy.
Materials/Methods: Researchers utilized a cross-sectional design by administering surveys comprised of the Revised Controlling Behaviors Scale and the Reproductive Autonomy Scale to university students who reported being in an intimate relationship.
Results: Multivariate analysis identified predictors from each of the models on a woman's ability to attain reproductive autonomy. Three hundred and four sexually active female participants reported experiencing reproductive autonomy on all three subscales as well as controlling behavior victimization. Significant predictors of barriers to reproductive autonomy were experiencing intimidation, experiencing isolation, receiving threats, and currently wanting to conceive a child when their partner did not.
Conclusion: The author(s) conclude that practitioners should include screening tools targeting these barriers to reproductive autonomy, such as the presence of intimidation, isolation, and threats. Sex education programs should strengthen conflict resolution skill building and awareness to break down these barriers within an intimate relationship in order to increase reproductive autonomy.

KEY WORDS: Reproductive autonomy; Intimate partner violence; Reproductive rights; Coercive behaviors.

ABBREVIATIONS: IPV: Intimate Partner Violence; CBS-R: Revised Controlling Behaviors Scale; DAIP: Domestic Abuse Intervention Project.

INTRODUCTION

Reproductive autonomy is the right possessed by an individual or a woman to control matters regarding contraceptive use, pregnancy, and childbearing.[1] Furthermore, it is connected to a woman's well-being, because pregnancy takes place in a woman's body and she is expected to take primary responsibility for the pregnancy outcome, regardless of it being aborted or carried to term.[2,3] A woman's ability to achieve her reproductive intentions is influenced by the relationship she has with her sexual partner. For example, a male partner may pressurize his female partner to refrain from using contraceptives or insist on a pregnancy when the woman wants it the least.[4] For this reason, a focus on the presence or lack of reproductive autonomy may help explain further poor contraceptive use and unintended pregnancy.

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Intimate partner violence (IPV) has strong repercussions for both sexual and reproductive health, which are defined as a state of well-being.[5] Existence of IPV in a relationship has been correlated with reproductive coercion; birth control sabotage by a male partner in order to control reproduction. Reproductive coercion impacts the overall reproductive autonomy by limiting the extent to which an individual can negotiate birth control and condom use as well as independent decisions about reproductive health.[6] Reproductive coercion and subsequent decreased reproductive autonomy can lead to limited contraceptive use, lack of control over an individual's own sexuality, higher risk sexual behaviors such as unprotected sex, increased risk of sexually transmitted infections, higher rates of unintended and repeat pregnancies, repeat abortions, and chronic pelvic pain.[6-11] Additionally, research indicates that there are different barriers other than IPV that women encounter while trying to receive reproductive health services. These barriers may include the hours they must travel to a provider, the experience of depression, cost of services, and social disapproval.[12-14]

Research indicates that controlling behaviors (known as non-physical aggressive behavior) are strong indicators of IPV perpetration.[15-18] Controlling structures within a society imposing rigid sex-role expectations can lead to emotional abuse and set the stage for violence in relationships.[19,20] Partners who use controlling tactics such as prohibiting their partner from going to work or school are eight times more common in abusive relationships than non-abusive relationships.[21] Additionally, a study conducted in Massachusetts found that among men arrested for IPV, 38.1% prevented their partners from freely commuting during their daily routine, 58.5% restricted their partners' access to money, and almost one half reported restricting their partners in three or more additional ways.[22] Further, a study revealed that abusers with highly controlling behaviors increase their victim's risk of fatality nine-times.[22,23] These findings correlating IPV and controlling behaviors reveal a link between them. Although research indicates links between IPV and reproductive health concerns for women, there is limited research that has connected controlling behaviors with women's reproductive health. The present study attempts to understand this issue.

Recently, researchers have explored reproductive coercion and its significant effects on sexual and reproductive health. Reproductive coercion is defined as a partner committing an act such as destroying birth control pills, pressuring a partner not to use contraceptives, or promoting pregnancy when one's partner wants to avoid it.[4] A study conducted in the United States revealed that 19% of young women reported experiencing reproductive coercion and that this type of coercion was associated with almost double the risk of unintended pregnancy.[4] Furthermore, another study explored discussing reproductive coercion with women at a family planning clinic. Based on the information from this study, the women had 60% greater odds of ending their unhealthy or unsafe relationships within six months, compared to a control group.[24]

The current study investigates these issues further by examining how different factors are associated with reproductive autonomy (freedom from coercion, decision-making, and communication) among university age students. The two research questions in this present study were: a) Is there a significant relationship between experiencing the five types of controlling behaviors (economic, threats, isolation, intimidation, and emotional)? and b) Is there an association between the five types of controlling behaviors (economic, threats, isolation, intimidation, and emotional), birth control, travel time to your health provider, and how many sexual partners you have with three types of reproductive autonomy (freedom from coercion, decision-making, and communication) among female adults in a relationship?

METHODS

Participants and Procedure

The present study investigates reproductive autonomy among young adult females. The sample consists of 311 female university students with 88.7% white and 11.3% minority from the Southeast United States, who were all currently in a relationship (Table 1). Approximately, 81% of the sample reported using some form of contraception. The sample has a mean age of 19.95 years (SD=3.16). Approximately, 19.9% use no birth control, 11.4% use condoms, 23.5% use oral birth control, 19.6% use a combination of condoms and oral birth control, and 4.2% use an IUD. Approximately 71.7% identified as Christian and 28.3% identified as non-Christian. Approximately, 47.9% currently do not want to conceive a child and 48.9% want to conceive a child in the future.

Researchers administered surveys to students at a university in the Southeastern part of the United States. The questionnaire consisted of the Reproductive Autonomy Scale, the Revised Controlling Behaviors Scale, and demographic questions. Informed consent was sought from participants prior to data collection. Institutional Review Board (IRB) approval was obtained for all study procedures with human subjects.

Measures

Reproductive autonomy scale: Developed by Upadhyay[1] to assess women's ability to achieve their reproductive intentions, (also referred to as "reproductive autonomy") this scale consisted of 14 items to assess freedom from coercion, communication, and decision-making.[1] The alpha coefficient for the full scale was 0.77; freedom from coercion was 0.82; communication was 0.73; and decision-making was 0.65.

Revised controlling behaviors scale: Controlling behaviors were measured using the Revised Controlling Behaviors Scale (CBS-R),[25] which is a 48-item behavioral scale based on the Domestic Abuse Intervention Project and the Duluth Model (DAIP).[26,27] The DAIP literature describes the controlling behaviors used by violent men against their partners, which are reported by both victims and perpetrators. The CBS-R consists of five subscale behavioral categories that involve five types of control tactic:

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Table 1: Characteristics of Respondents.

Variable	N	%
Total N		
Age of Participants (M=19.95; SD=3.16)	311	
Participant's Gender		
Female	311	100%
Participant's Ethnicity		
Minority	35	11.3%
Nonminority	276	88.7%
Christian & Non-Christian		
Christian	223	71.7%
Non-Cristian	87	28.3%
Birth Control		
None	62	19.9%
Condoms	34	11.4%
Oral BC	74	23.5%
Condoms & Oral BC	62	19.6%
IUD	12	4.2%
Reproductive Autonomy		
Freedom-from-Coercion	65	21%
Decision Making	118	38%
Communication	264	85%
Experiencing Controlling Behaviors		
Economic Abuse	83	27%
Threats	49	16%
Intimidation	83	27%
Emotional Abuse	96	31%
Isolation	96	31%

using economic abuse, using coercion and threats, using intimidation, using emotional abuse, and using isolation.

Using a 2-point scale (0-1), respondents are asked to indicate how often during the past year they had used any of the 24 behaviors listed to influence their partners. Additionally, the respondents were asked if their partners had tried to influence them using any of the 24 behaviors listed (for a total of 48 items). The anchor scores for both the overall controlling behaviors and the subscales ranged between 0 (never) to 1 (occurred). For the total control scale score, all items are added and divided by 24 (24 for perpetration and 24 for victimization), creating the mean score for the entire perpetration (or victimization) scale.

Similarly, adding the appropriate items for the subscale and dividing by the respective number of items creates the mean score for each subscale. Therefore, all respondents had mean scores for total control, economic control, emotional control, threat control, intimidation control, and isolation control that ranged between 0 and 1 (both perpetration and victimization for each subscale). The CBS-R scale has shown discriminant ability[25] and the internal consistency revealed the following Cronbach's alphas for partner (P) and self (S) reports: economic, P: α=0.58; S: α=0.45; coercion and threats, P: α=0.72; S: α=0.70; intimidation, P: α=0.74; S: α=0.62; emotional abuse, P: α=0.81; S: α=0.75; isolation, P: α=0.88; S: α=0.84. The reliability alpha coefficient for the entire instrument in the present study was α=0.94.

RESULTS

Statistical Analysis

The statistical software Statistical Package for the Social Sciences (SPSS) 21.0 was used for all statistical analysis.

Descriptive Statistics

Rates of reproductive autonomy among participants were 21% for freedom from coercion, 38% for reproductive decision-making, and 85% for communication around reproductive autonomy. Prevalence rates of male-to-female controlling behaviors were 27% economic abuse, 16% threat control, 27% intimidation control, 31% emotional control, and 31% isolation control (Table 1).

Correlations

Correlations were conducted to address the first research ques-

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tion: Is there a significant relationship between experiencing five types of controlling behaviors (economic, threats, isolation, intimidation, and emotional)? It was found that all correlations were statistically significant, revealing moderate positive relationships (Table 2). The strongest relationships were between experiencing emotional control and experiencing isolation control (r=0.498), experiencing emotional control and experiencing intimidation control (r=0.402), experiencing intimidation control and experiencing threat control (r=0.378), experiencing isolation control and experiencing threat control (r=0.370), experiencing emotional control and experiencing threat control (r=0.366), experiencing isolation control and experiencing economic control (r=0.349), and between experiencing emotional control and experiencing emotional control (r=0.338). Additionally, there were significant relationships between experiencing isolation control and experiencing intimidation control (r=0.305), experiencing economic control and experiencing intimidation control (r=0.260), and experiencing economic control and experiencing threat control (r=0.206).

Multiple Regressions

Three standard multiple regressions were conducted to address the second research question: Is there an association between the five types of controlling behaviors (economic, threats, intimidation, emotional, and isolation), birth control, travel time to your health provider, and how many sexual partners you have with three types of reproductive autonomy (freedom from coercion, decision-making, and communication) among female adults in a relationship? All standard multiple regressions for the correlates of reproductive autonomy (freedom from coercion, decision-making, & communication) were found to be significant (Table 3).

The first multiple regression analysis revealed that the eight-variable model significantly contributed to the variance of IPV physical victimization, F (8, 271)=10.054, $p<0.001$ and accounted for 21% of the variance. Individually, three of the eight variables significantly predicted reproductive autonomy. Participants were more likely to report freedom from coercion if they had less travel time to their health care provider ($t=-1.906$, $p<0.05$), if they were a victim of intimidation ($t=7.323$, $p<0.001$), and if they were not a victim of isolation ($t=-1.715$, $p<0.05$). Birth control, sexual partners, economic controlling behaviors, threats and emotional controlling behaviors were not significantly related to freedom from coercion in reproductive

Table 2: Correlations: Between 5 Types of Controlling Behavior Victimization among Adult Female Victims.

Variable	Economic	Threats	Intimidation	Emotional	Isolation
Economic	1	0.206**	0.260**	0.338***	0.349***
Threats		1	0.378***	0.366***	0.370***
Intimidation			1	0.402***	0.305**
Emotional				1	0.498***
Isolation					1

**p*<.05; ***p*<.01; ****p*<.001

Table 3: Multiple Regressions: Effect of Controlling Behaviors on Reproductive Autonomy (freedom from coercion, decision making, and communication) among female university students.

Variable	FFC[1]	DM[2]	COMM[3]
	B	B	B
Sexual Partners	-0.061	-0.095	0.131*
Birth Control	0.025	-0.197**	0.089
Travel Time HC	-0.104*	-0.069	-0.013
Economic CBv	0.085	0.067	-0.032
Threats CBv	0.030	0.121	-0.111
Intimidation CBv	0.451***	-0.045	-0.199**
Emotional CBv	-0.012	-0.060	-0.128*
Isolation CBv	-0.111*	-0.088	0.086

**p*<.05; ***p*<.01; ****p*<.001
FFC: Freedom from Coercion Reproductive Autonomy; DM: Decision Making Reproductive Autonomy; COMM= Communication Reproductive Autonomy
[1](F (8, 271) = 10.054, p <.001; Adjusted R2=.21)
[2](F (8, 273) = 2.745, p <.01; Adjusted R2=.8)
[3](F (8, 269) = 5.756, p <.001; Adjusted R2=.12)

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autonomy, after controlling for all variables in the model.

The second multiple regression analysis revealed that the eight-variable model significantly contributed to the variance of reproductive autonomy decision-making, $F(8, 273)=2.745$, $p<0.01$ and accounted for 8% of the variance. Individually, one of the eight variables significantly predicted decision-making in reproductive autonomy. Participants were significantly more likely to report decision-making if they used a form of birth control ($t=2.904$, $p<0.01$). Sexual partners, travel time to their health care provider, economic controlling behaviors, threatening controlling behaviors, intimidation controlling behaviors, emotional controlling behaviors, and isolation controlling behaviors were not significantly related to decision-making in reproductive autonomy, after controlling all variables in the model.

The third multiple regression analysis revealed that the eight-variable model significantly contributed to the variance of communication in reproductive autonomy, $F(8, 269)=5.756$, $p<0.001$ and accounted for 12% of the variance. Individually, three of the seven variables significantly predicted healthy communication in reproductive autonomy. Participants were significantly more likely to report healthy communication around reproductive autonomy if they had more than one sexual partner ($t=2.249$, $p<0.05$), if they were not a victim of the controlling behavior intimidation ($t=-3.011$, $p<0.01$), and if they were not a victim of emotional controlling behaviors ($t=-1.861$, $p<0.05$), birth control, travel time to their health care provider, economic controlling behaviors, threatening controlling behaviors, and isolation controlling behaviors were not significantly related to healthy communication in reproductive autonomy, after controlling all variables in the model.

DISCUSSION

These findings suggest that there are numerous barriers that may impede a woman's ability to achieve reproductive autonomy. The findings also suggest that there might be a predictive factor from experiencing controlling behaviors to failing in the achievement of reproductive autonomy. As with previous research,[17] the study found that experiencing different forms of controlling behaviors were all moderately related to each other. This information helps answer the first research question: is there a significant relationship between experiencing five types of controlling behaviors (economic, threats, isolation, intimidation, and emotional)? These findings suggest that females who experience one type of controlling behavior are also susceptible from suffering other types of controlling behaviors.

Multivariate analysis revealed that experiencing controlling behavior (isolation, emotional, and intimidation) in an intimate relationship and not using a form of birth control contributed significantly to decreased reproductive autonomy. However, women who had multiple sexual partners and spent less travel time to their health care provider significantly led to achieving reproductive autonomy. This information helps answer the second research question: is there an association between five types of controlling behaviors (economic, threats, intimidation, emotional, and isolation), birth control, travel time to your health provider, and how many sexual partners you have with three types of reproductive autonomy (freedom from coercion, decision-making, & communication) among female adults in a relationship? Females who suffered from controlling behaviors in their relationships were significantly related to not achieving reproductive autonomy. Notably, women experiencing isolation control were more likely to not be free from coercion and women suffering emotional control and intimidation control were significantly more likely to not have good communication around reproductive rights. The link between suffering isolation control, emotional control, and intimidation control has not clearly been established in the literature. Furthermore, women experiencing intimidation control from their male partner were more likely to not be free from coercion. This finding may point to the powerful nature of intimidation control and a women's ability to achieve reproductive autonomy. Finally, women with more than one sexual partner and who used a form of contraception were more likely to have healthy communication around reproductive issues.

CONCLUSION

This study has implications that are useful for practitioners working with females who are experiencing controlling behaviors in their relationships. Practitioners should be aware, that in certain dating relationships, controlling behaviors (isolation, intimidation, and emotional abuse) could impede a woman's ability to achieve reproductive autonomy. Screening tools should target barriers to reproductive autonomy that can assess different types of controlling behaviors. Furthermore, comprehensive sex education programs should focus on strengthening conflict resolution, skill building and awareness to break down these barriers within an intimate relationship in order to increase reproductive autonomy and decrease the perpetration of coercive tactics. Programs should also address adolescents' understanding of controlling behaviors and reproductive choice. These prevention programs should be available for all rather than targeting females.

Findings from the current study should be taken with caution. A limitation to the study is that the participants are university students who were fairly homogeneous in age, education, and race. Results would, at best, be limited to generalizations to other university samples. Additionally, the study uses a cross-sectional design and therefore cannot determine cause and effect. Future research should continue to explore controlling behaviors and additional barriers to a woman's ability to achieve reproductive autonomy. Qualitative studies should explore the nature and context of controlling behaviors and reproductive autonomy. Studies of this nature could provide a deeper understanding of females' experiences in relationship to achieving reproductive autonomy.

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PARTICIPANT CONSENT STATEMENT

Informed consent was received from participants prior to data collection. IRB approval was obtained for all study procedures with human subjects and surveys were collected anonymously.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

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