SOCIO-DEMOGRAPHIC CHARACTERISTICS OF PREGNANT ABORTION-MINDED CLIENTS VERSUS PREGNANT NON-ABORTION-MINDED CLIENTS AT A PREGNANCY CRISIS CENTER

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ABSTRACT

Purpose

The purpose of this study is to compare the socio-demographic characteristics of pregnant abortion-minded women to those of pregnant non-abortion-minded women who had consulted a pregnancy crisis center in Montgomery County, Ohio. The findings will be used to help develop public health prevention programs for unintended pregnancies to decrease the number of abortions.

Methods

A database sample of 581 records collected by a pregnancy crisis center in Montgomery County was used for this study. Criteria for inclusion were women who tested positive for pregnancy and whose pregnancy intentions were assessed as being either abortion-minded or non-abortion-minded. Socio-demographic characteristics such as age, marital status, household income, education, religious preference, race, number of previous pregnancies, number of previous live births, number of previous abortions, number of sexual partners, and age at their first sexual experience were compared to pregnancy intentions.

Results

In this study, women who were more abortion-minded were single (p value = < 0.0001), Black (p value = < 0.020), women with an income level under $10,000 (p value = < 0.0001), younger women (mean age 22.6 years, p value = 0.0008), women who had their first sexual encounter at a younger age (mean age 15.6 years, p value= 0.0009), and women who had a higher number of previous abortions (mean number of abortions =0.3, p value = <0.0001).

Conclusions

The study of socio-demographic characteristics and information about sexual behavior is very valuable in designing public health strategies to prevent unwanted pregnancies in populations with specific vulnerability. More research is needed to determine why the socio-demographic characteristics identified here affect pregnancy intentions in susceptible populations.

KEY WORDS: *Pregnancy, abortion, public health, demography*

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Resumo

Objetivo

Comparar as características sócio-demográficas de mulheres grávidas dispostas a abortar com mulheres grávidas dispostas a não abortar, as quais consultaram em um centro de crise da gravidez no condado de Montgomery, Ohio. Os resultados se utilizarão para estabelecer programas de prevenção na saúde pública para gravidez não desejada, a fim de reduzir a quantidade de abortos.

Métodos

Neste estudo se utilizou uma amostra de 581 registros coletados em uma base de dados de um centro de crise da gravidez no condado de Montgomery. Os critérios de inclusão foram prova positiva de gravidez, cujas intenções foram avaliadas como dispostas a abortar ou não dispostas a abortar. As características sócio-demográficas como idade, estado civil, ingresso familiar, educação, preferências religiosas, raça, número de companheiros sexuais e idade da sua primeira relação sexual foram comparadas com as intenções frente à gravidez.

Resultados

Neste estudo, as mulheres más dispostas a abortar eram solteiras (p = <0.0001), mulheres negras (p = 0.020), mulheres com ingressos menores do US$10 000 (p = 0.0001), mulheres jovens (idade média 22.6 anos, p = 0.0008), mulheres que tiveram sua primeira relação sexual a idade temporã (idade média 15.6 anos, p = 0.0009) e mulheres que tiveram um alto número de gravidezes previas.

Conclusões

O estudo de características sócio-demográficas e a informação sobre comportamento sexual são importantes no desenho de estratégias de políticas públicas para prevenir gravidezes não desejadas nas populações especialmente vulneráveis. É necessário realizar mais pesquisas para determinar por quê as características sócio-demográficas identificadas neste estudo afetam as intenções frente à gravidez nas populações susceptíveis.

Palavras-chave: *gravidez, aborto, saúde pública, demografia.*

Resumen

Propósito

El propósito de este estudio es comparar las características sociodemográficas de mujeres embarazadas con inclinación a abortar con los de mujeres embarazadas sin inclinación a abortar que han consultado un centro de crisis de embarazo en el condado de Montgomery, Ohio. Las conclusiones serán utilizadas para ayudar a desarrollar programas de salud pública para la prevención de embarazos no deseados y así disminuir el número de abortos.

Método

Para este estudio se utilizó una muestra de 581 registros recogidos en una base de datos de un centro de crisis de embarazo en el condado de Montgomery. Los criterios de inclusión fueron prueba positiva de embarazo y cuyas intenciones se evaluaron como con inclinación al aborto ó sin inclinación aborto. Características socio-demográficas, como edad, estado civil, ingresos familiares, educación, preferencia religiosa, raza, número de embarazos anteriores, número de nacimientos vivos anteriores, número de abortos anteriores, número de parejas sexuales y la edad de su primera experiencia sexual fueron comparadas con sus intenciones frente al embarazo.

Resultados

En este estudio, las mujeres que estaban más inclinadas hacia el aborto eran solteras (valor p = 0,0001), de raza negra (valor p = 0.020), con un ingreso inferior a U$ 10,000 (valor p = 0,0001), de menos edad (promedio de edad 22,6 años, valor p = 0.0008),

que tuvieron su primer encuentro sexual a una edad más temprana (promedio de edad 15,6 años, valor p = 0.0009) y las mujeres que tenían el mayor número de abortos anteriores (número promedio de abortos = 0,3, valor p = 0,0001).

Conclusiones

El estudio de las características sociodemográficas y la información sobre el comportamiento sexual son elementos muy valiosos en el diseño de estrategias de salud pública para prevenir los embarazos no deseados en poblaciones con vulnerabilidad específica. Se requiere de mayor investigación para determinar por qué las características sociodemográficas identificadas aquí influencian las intenciones de embarazo en las poblaciones susceptibles.

PALABRAS CLAVE: embarazo, aborto, salud pública, demografía.

INTRODUCTION

Pregnancy is a unique event in the reproductive life of a woman. Unfortunately, all pregnancies are not welcomed, and the circumstances surrounding a pregnancy can be overwhelming. The United States has a high rate of unintended pregnancies compared to other developed countries (1). According to the National Survey of Family Growth, half of all pregnancies in the United States are unintended. Unintended pregnancies that ended in live births are related to negative health outcomes for the mother and the child. In addition, unintended pregnancies are also related to abortion (2).

Abortion has been legal in the United States since 1973, and more than forty million abortions have been performed across the country. In the name of individual freedom, protected by law, and sadly with the assistance of the health care system, the crime of abortion is justified in this country. The number of total abortions reported to the Centers for Disease Control and Prevention by 49 reporting areas in the United States in the year 2002 was 854,122, and the rate of abortion per 1000 live births was 246 (3). According to the Ohio Department of Health, there were 32,280 abortions performed in the State of Ohio in the year 2003, and 1709 abortions were reported in Montgomery County (4).

Although the Centers for Disease Control and Prevention in the United States reported that abortion rates have decreased over the last 15 years, several studies have addressed the issue that the decline in the abortion rate has been not the same in certain subgroups of women. Current research is looking for any connection between unintended pregnancies, poor outcomes, and the influence of socioeconomic factors.

In order to identify risk factors in women with unintended pregnancies, this study will compare the socio-demographic characteristics of pregnant women who tested positive for pregnancy at a pregnancy crisis center in Montgomery County, Ohio. The results of this study will identify the demographics of women who are at risk of unintended pregnancy. This will help policy makers to develop public health prevention programs for unintended pregnancies, as well as programs to protect the value of every human life, even in the mist of socio-economic difficulties and challenges.

METHODS AND PROCEDURES
OVERVIEW OF THE PREGNANCY
CENTER AND DATA COLLECTION

The present study was done at Elizabeth's New Life Center (ENLC) in Dayton, Ohio. ENLC offers free and

confidential pregnancy tests, information for pregnancy decisions, limited ultrasounds, referral for prenatal care, life skills classes, material assistance, men's ministry, and post abortion recovery. Most of the clients who receive services at ENLC are of low socio-economic status.

Information obtained at ENLC from client information sheets was used. For the purpose of this study, all the client information sheets used had been completed between September 2004 and July 2006. The client information sheet is an instrument used by ENLC to register socio-demographic information on clients when they come to the center for a free pregnancy test or material assistance. For example, when a client visits a woman's center to obtain a free pregnancy test, she is provided with a client information sheet. The client fills in personal information such as name, address, telephone number, age, date of birth, and number of children in the household. Also, clients are asked for socio-demographic information such as marital status, household income, education, insurance, religious preference, ethnicity, and referral source. Other sets of questions included on the client information sheet are: intention for current pregnancy, medical information, and reproductive health history. The data for this study were abstracted from the database containing the client information data.

The study began after approval by the Internal Review Board in September of 2006 and ended in November 2006. The target population included females who tested positive for pregnancy at a pregnancy crisis center (ENLC) in Montgomery County, Ohio between September 2004 and July 2006.

THE STUDY BEGAN AFTER APPROVAL BY THE INTERNAL REVIEW BOARD IN SEPTEMBER OF 2006 AND ENDED IN NOVEMBER 2006. THE TARGET POPULATION INCLUDED FEMALES WHO TESTED POSITIVE FOR PREGNANCY AT A PREGNANCY CRISIS CENTER (ENLC) IN MONTGOMERY COUNTY, OHIO BETWEEN SEPTEMBER 2004 AND JULY 2006.

The criteria for inclusion in the study were women who:
Visited Elizabeth's New Life Center between September 2004 and July 2006.
Had tested positive for pregnancy at the time the data was collected.
Completed the client information sheet.
Were assessed as either intending to have an abortion (abortion-minded) or intending to carry to term (non-abortion-minded).

The criteria for exclusion from the study were:
Incomplete client information sheet
Negative pregnancy test
Women who were assessed as being neither abortion-minded nor non-abortion-minded, but were abortion-vulnerable (not certain to carry to term, but not certain to have an abortion either).

The following data were extracted from the database: intention for the pregnancy, center location, age,

marital status, household income, education, religious preference, race, number of previous pregnancies, number of previous live births, number of previous abortions, number of sexual partners, and age at their first sexual experience. No names, addresses, telephone numbers, or personal identifiers were taken from the database.

The number of subjects calculated to achieve power in the statistical analysis was 600. After repeated records were eliminated, the total number of subjects was reduced to 581.

ANALYSIS

Categorical variables were analyzed using the statistical program SPSS.

The percentage of clients grouped by pregnancy intentions (dependent variable) and socio-demographic characteristics (independent variables) was determined to address the first research question: What socio-demographic characteristics are associated with abortion-minded clients and non-abortion-minded clients at ENLC?

Chi-square analysis was performed to address the research questions regarding the relationship between categorical independent variables (center, marital status, race, income, educational level, and religion) and the dependent binary variable (abortion-minded clients vs. non- abortion-minded clients).

As to marital status, the client information sheet used at ENLC to collect data has seven categories: single, engaged, separated, divorced, married, widowed, and living together. For this study, only five categories were considered. Single and engaged women were grouped

into one category. Also, divorced and separated women were grouped into one category. The five categories used for the statistical analysis were single, married, divorced, widowed and living together. For the statistical analysis, a chi-square test was done first to compare single vs. married clients' abortion vulnerability. In order to increase the power of the analysis, the abortion vulnerability of single women was compared to that of women in all the other marital categories.

The independent variable of race was grouped into five categories: biracial, Black, Hispanic, White, and other (Native American, Asian, others). To increase the power of the analysis for race, comparisons between Blacks and other races were performed. Abortion vulnerability also was compared between White clients and other races.

To determine differences between abortion-minded clients and non-abortion-minded clients by income, two analyses were performed. First, the eight house hold- income categories used on the client information sheet at ENLC were grouped into five categories. Three categories; namely, living with parents, $0 income, and between jobs, were grouped into one category: $0 income. Clients who reported welfare or SSI were included in the 0-10,000 income category. Income from $1 to $10,000, income from $10,000 to $20,000, income from $20,000 to $40,000, and income over $40,000 were the other categories included in the statistical analysis.

The second analysis according to household income levels was performed by grouping all clients into two categories: clients who reported income under $10,000 and clients who reported income over $10,000.

Two analyses were performed for educational level.

First, eight categories were taken into account: in junior high, in high school, dropped out of school, HS/GED graduate, in college, some college in the past, college graduate, and other.

Educational level also was compared by grouping clients into two categories: clients with some college and clients with no college.

SPSS was used to perform independent sample T tests. This test was done to address the research question regarding differences between the continuous variables (age at the time of service, age at the first sexual encounter, number of sexual partners, total number of previous pregnancies, number of live births, and number of previous abortions) and the dependent binary variable (abortion-minded versus non-abortion-minded).

A separate multivariate logistic regression model was run on SAS statistical software. The variables selected for inclusion were those statistically significant in the bivariate analysis. Logistic regression was performed to determine which independent variables that had two or more categories were associated with the dependent binary variable abortion-minded clients vs. non-abortion-minded clients.

RESULTS

A total of 581 client information sheets registered in ENLC's data base were used for the various analyses in this study. Of these 581 information sheets, more than half of the clients were non- abortion-minded clients (66.3% vs. 33.7%).

The descriptive analysis, with distribution and results, is presented below. Table 1 summarizes the results of the chi square analysis for each of the independent categorical variables: center, marital status, race, household income, religion, and educational level.

Center

Two centers were used to gather data: one in Kettering, Ohio and the other in Dayton, Ohio. The Kettering center accounted for 63.5% of the total number of clients, while the Dayton center had 36.5% of the total number of clients. In the analysis of center by localization (Dayton vs. Kettering), there were significant differences (P value <0.0001) between abortion-minded and non- abortion-minded clients. The Dayton location has about twice as many abortion-minded clients compared to Kettering's center. (Table 1).

Marital Status

More than half (66%) of the total number of clients in this study were single, 26% were married, 4.5% were divorced or separated, 0.5% were widowed, and 2.9% were living together.

There was a significant difference between single vs. married clients when comparing pregnancy intentions (P value < 0.0001). The percentage of abortion-minded clients who were single was significantly higher than that of abortion-minded clients who were married. (Table 1)

In comparing abortion vulnerability between single women and all the other categories of marital status, a significant difference was obtained (P value <0.0001). A higher percent of the abortion-minded clients were single, compared to all the other categories of marital status.

Table 1. Effect of Independent Variables on Pregnancy Intentions

Independent Variables	Pregnancy Intentions	P Value	
	Abortion-minded Expected% (Observed)	Non-abortion- minded Expected% (Observed)	
Center Dayton Kettering	43.9% (93.0) 27.9% (103)	56.1% (119) 72.1% (266)	<0.0001
Marital Status Single Married Divorced Widowed Living together	45.1% (173) 4.6% (7) 42.3% (11) 33.3% (1) 23.5% (4)	54.9% (211) 95.4% (144) 57.7% (15) 66.7% (2) 76.5% (13)	<0.0001
Independent Variables	Pregnancy Intentions	P Value	
	Abortion-minded Expected% (Observed)	Non-abortion- minded Expected% (Observed)	
Marital Status Single All other marital status categories	45.1% (173) 11.7% (23)	54.9% (211) 88.3% (174)	<0.0001
Race Biracial Black Hispanics White Other	40% (8) 52% (117) 7.1%(1) 20.9% (62) 30.8% (8)	60% (12) 48% (108) 92.9% (13) 79.1% (234) 69.2% (18)	0.020
Race Black White	52% (117) 20.9% (62)	48% (108) 79.1% (234)	<0.0001
Race Black All other races	52% (117) 22.2% (79)	48% (108) 77.8% (277)	<0.0001

Independent Variables	Pregnancy Intentions	P Value	
	Abortion-minded Expected% (Observed)	Non-abortion- minded Expected% (Observed)	
Household Income $0 $1-$10,000 $10,0000- $20,000 $20,0000-$40,000 > $40,000 Unknown	43.3% (120) 34.2% (40) 17.7%(17) 17.6% (12) 0% (0) 50% (7)	56.7% (157) 65.8% (77) 82.3% (79) 82.4% (56) 100% (11) 50% (7)	<0.0001
Household Income <$10,000 >$10,000	40.6% (160) 19.3% (36)	59.4% (234) 80.7% (151)	<0.0001
Religion Catholic Protestant None Other Unknown	20% (12) 37.5% (100) 34.9% (44) 31.7% (39) 20% (1)	80% (48) 62.5% (167) 65.1% (82) 68.3% (84) 80% (4)	0.9593
Education College No college	31.8% (84) 35.3% (112)	68.2% (180) 64.7% (205)	0.255
Chi square analysis			

Race

As to race, half of the population (50.9%) was White, 38.7% were Black, 2.4% were Hispanic, 3.4% were bi-racial and 4.5% were of other races (including Asians and Native Americans). Within races, the percentage of abortion-minded clients was higher for Blacks, follo-wed by biracial women, other races, Whites, and His-panics. These differences were significant. (Table 1) A comparison between the percentage of Black and White abortion-minded clients, the percentage of Black abortion-minded clients was almost twice the percentage of White abortion-minded clients. These differences between the Black and White populations were significant (P value< 0.0001).

There were significant differences when comparing abortion vulnerability between Blacks and all the other races (P value < 0.0001). Significantly, more Black clients were abortion-minded vs. all other races. (Table 1).

Significant differences were seen when comparing abortion vulnerability between White clients and

other races (P value < 0.0001). The percentage of White abortion-minded clients was lower than the percentage for all other races. (Table 1).

Household Income

According to income, 41% of the clients had $0 income, 29% had income from $ 1 to $10,000, 16% had income from $10,000 to $20,000, 12% had income from $20,000 to $40,000, and only 2 % had income over $40,000.

There were significant differences in the analysis of pregnancy intentions and the different groups of clients by household income (p value =<0.0001). The percentage of abortion-minded clients with $0 income and income from $0-$10,000 was greater compared to abortion-minded clients with income over $10,000. (Table 1).

When comparing the income levels of abortion-minded vs. non-abortion-minded clients, two client categories were identified: clients who reported income under $10,000 and clients who reported incomes over $10.000.There was a highly significant difference between these two groups (P value= <0.0001).

Religion

In the analysis by religion, the majority of the subjects were found to be Protestant (46%); followed by no religion (22%), other religion (21.2%), and Catholics (10.3 %). In the analysis by religious affiliation, Protestants represented a higher percentage of abortion-minded clients, compared to abortion-minded Catholics, no religion, and other religion. Although there were numerical differences between religion and pregnancy

intentions, religious affiliation did not have an impact on abortion vulnerability (P value = 0.95).

Educational Level

The analysis by educational level showed 30% of the subjects had a high school education, 38% had attended some college or had graduated from college, and 13% were still in high school.

The clients in high school represented a higher percentage of abortion-minded clients compared to the other educational levels, but no significant differences were found in the analysis of the eight categories (p value= 0.08). In the analysis of the variable educational level grouping clients in two categories, college level did not have an effect on pregnancy intentions (P value = 0.255).

The descriptive analysis of the continuous variables and the results of the independent samples T test are presented in Table 2.

The mean age at the time of service for all clients was 23.7 years, with a standard deviation of 5.3 years. The mean age at the first sexual experience was 15.9 years, with a standard deviation of 2.44 years. The mean number of sexual partners was 5.03, with a standard deviation of 4.5. The mean number of live births was 0.9, with a standard deviation of 1.2. The mean number of previous abortions was 0.2, with a standard deviation of 0.5.

The independent samples T test, demonstrated significant differences between the two groups: abortion-minded clients and non- abortion-minded clients. The

results of the independent samples T test for the continuous variables are presented in Table 2.

Age at the Time of Service

Abortion-minded clients were significantly younger compared to non-abortion-minded clients (p value= 0.0008). (Table 2).

Age at First Sexual Encounter

In the analysis according to age at first sexual encounter, 26 cases were excluded due to missing values. The age at first sexual encounter was significantly different for abortion-minded clients vs. non- abortion-minded clients (p value= 0.0009). Abortion-minded clients had their first sexual encounter sooner compared to non-

abortion-minded clients, who had their first sexual encounter later. (Table 2).

Number of Sexual Partners

In the analysis by number of sexual partners, 78 cases were excluded due to missing values. Abortion-minded clients had more sexual partners than non-abortion-minded clients, but the difference was not significant (p value = 0.18). (Table 2).

Total Number of Pregnancies

Although abortion-minded clients had a greater number of previous pregnancies compared to non- abortion-minded clients, the difference was not significant (p value= 0.54). (Table 2).

Table 2. Effect of Continuous Variables on Pregnancy Intentions

Continuous Variable	Abortion Vulnerability	Number	Mean	SD	SEM	P Value
Age at the time of service	Abortion-minded clients	196	22.6	5.1	0.36	0.0008
	Non- abortion-minded clients	385	24.2	5.3	0.27	
Age at first sexual encounter	Abortion-minded clients	191	15.44	1.86	0.13	0.0009
	Non- abortion-minded clients	364	16.16	2.66	0.13	
Number of sexual partners	Abortion-minded clients	166	5.41	4.36	0.33	0.18
	Non- abortion-minded clients	337	4.84	4.59	0.25	
Total number of pregnancies	Abortion-minded clients	196	1.53	1.58	0.11	0.54
	Non- abortion-minded clients	385	1.44	1.64	0.08	
Number of live births	Abortion-minded clients	196	1.01	1.18	0.08	0.60
	Non- abortion-minded clients	385	0.95	1.27	0.06	
Number of previous abortions	Abortion-minded clients	196	0.33	0.56	0.04	<0.0001
	Non- abortion-minded clients	385	0.15	0.47	0.02	
Independent Samples T Test						

Table 3. Association of Independent Variables to Pregnancy Intentions

Effect	Point Estimate	95% Wald Confidence Limits
Age at the time of service	1.026	0.959 to 1.098
Age of first sexual experience	0.949	0.843 to 1.069
Number of sexual partners	0.953	0.902 to 1.006
Number of previous pregnancies	1.337	0.892 to 2.004
Number of previous live births	0.655	0.411 to 1.044
Number of previous abortions	0.426	0.229 to 0.794
Center (Kettering vs. Dayton)	1.700	0.995 to 2.904
Marital status (Married vs. Single)	10.693	4.258 to 26.855
Race (White vs. Black)	2.383	1.362 to 4.169
Odds Ratio Estimates		

Number of Live Births

Abortion-minded clients had a greater number of live births compared to non-abortion-minded clients, but the difference was not significant (p value= 0.60). (Table 2).

Number of Previous Abortions

The difference between the number of previous abortions in abortion-minded clients and that of non-abortion-minded clients was highly significant (p value= <0.0001). Abortion-minded clients had more previous abortions compared to non-abortion-minded clients. (Table 2).

MULTIVARIATE ANALYSIS

Logistic regression was performed to determine which independent variables that had two or more categories are associated with the dependent binary variable: abortion-minded clients vs. non-abortion-minded clients. The odds ratios for independent variables are summarized for each variable in Table 3.

The odds ratio for marital status (married versus single) was 10.6. This means that the odds of being abortion-minded are about 10 times higher for single clients.

The odds ratio for race, comparing Black clients to White clients, was 2.3. This means that Black clients are 2.3 times more likely to be abortion-minded than White clients.

The odds ratio for center location was 1.7. This means that clients at the Dayton center are 1.7 times more abortion-minded than the clients at the Kettering center.

The odds ratio for the number of previous abortions was 0.4. This means that clients with more previous abortions are 0.4 times more abortion-minded than the clients with fewer previous abortions.

Discussion

The analysis of the data collected at a pregnancy crisis center helped determine what socio-demographic

characteristics were associated with pregnancy intentions in abortion-minded clients and non-abortion-minded clients. ENLC collects detailed information on socio-demographic characteristics, reproductive health history, and woman's intentions with respect to their pregnancies. This information has some advantages over information collected in national surveys. One advantage is that the NSFG (National Survey of Family Growth) and the PRAMS (Pregnancy Risk Assessment Monitoring System) surveys collect data on women two or more months postpartum. This allows for greater recall bias than the ENLC survey, which collects information at the time of pregnancy (3). Another advantage is that pregnancy intentions are determined at ENLC through an assessment done by qualified clinical personal once the woman has had the pregnancy test. This makes it possible to determine pregnancy intentions more accurately than surveys mailed or conducted over the telephone.

Although more than half of the clients in this study visited ENLC in Kettering, women visiting ENLC in Dayton were more abortion-minded. This finding could be influenced by the fact that clients classified as abortion-vulnerable were excluded from the study, and by differences in population characteristics between the two centers. The Dayton center attracts more Black clients than Kettering, because of the geographical localization.

Marital status is a socio-demographic factor related to pregnancy intentions. In the United States, married women had the lowest rates of abortion (5, 6). In this study, significant differences between abortion-minded clients and non- abortion-minded clients were determined. Single clients represented a significantly higher percentage of abortion-minded clients. The odds ra-

THE ANALYSIS OF THE DATA COLLECTED AT A PREGNANCY CRISIS CENTER HELPED DETERMINE WHAT SOCIO-DEMOGRAPHIC CHARACTERISTICS WERE ASSOCIATED WITH PREGNANCY INTENTIONS IN ABORTION-MINDED CLIENTS AND NON-ABORTION-MINDED CLIENTS.

tio calculated by marital status indicated the odds of a single woman being abortion-minded were 10 times higher compared to married women. These findings suggest that a life-long committed relationship could influence intentions for carrying a pregnancy to term or terminating a pregnancy through abortion.

Using data collected through the NSFG, Henshaw (1998) found that unintended pregnancy was highest among Black and Hispanic women (7). Similar to the previous finding, in this study, Black clients were more likely to be abortion-minded clients than White clients, and also compared to clients of other races, including Hispanics. Black clients were 2.3 times more likely to be abortion-minded in the odds ratio analyses. One limitation with this analysis is that the Hispanic population represented a small percentage (2.4 %) of the population in this study. Hispanic clients are not familiar with the services available at ENLC, and conclusions about the association between socio-demographic characteristics and pregnancy intentions in the Hispanic population cannot be drawn with the small population sample in this study.

Disparities in income level have been related to pregnancy intentions. Poor women have five times more unintended births than women with higher incomes (8).

In this study, the proportion of abortion-minded clients with household incomes under $10,000 was higher than those with an income over $10,000. Various limitations need to be taken into account with this finding. First, the majority of the population that uses the services at ENLC is in a low-income bracket. Another limitation with this finding was the lack of information about the number of members in the women's households. The poverty-level category could not be estimated for this reason. Additionally, the information gathered by ENLC included categories such as: lives with parents, welfare/SSI, and between jobs. In order to perform the statistical analysis, it was assumed that clients living with parents and clients between jobs could be classified as $0 income, and clients on welfare/SSI could be classified as under $1-$10,000 household income.

Although the percentage of abortion-minded clients was higher for Protestants compared to Catholics and other religions, no significant differences were found between abortion-minded clients and non-abortion-minded clients with regards to religious preference. One limitation in comparing religious preferences and pregnancy intentions in this study was the fact that Protestants represent a higher percentage of the general population compared to other religions in the area. In addition, conflicting results have been obtained in previous research when looking at the association between religious affiliation and pregnancy intentions. For example, a study completed in the United States showed the abortion rate was lower among Protestants compared to Catholics, but studies in other countries revealed higher abortion rates among Muslims and women of other religious affiliations (1).

The educational level attained by a woman has been found to influence pregnancy intentions. Jones (8) found

ONE LIMITATION IN COMPARING RELIGIOUS PREFERENCES AND PREGNANCY INTENTIONS IN THIS STUDY WAS THE FACT THAT PROTESTANTS REPRESENT A HIGHER PERCENTAGE OF THE GENERAL POPULATION COMPARED TO OTHER RELIGIONS IN THE AREA. IN ADDITION, CONFLICTING RESULTS HAVE BEEN OBTAINED IN PREVIOUS RESEARCH WHEN LOOKING AT THE ASSOCIATION BETWEEN RELIGIOUS AFFILIATION AND PREGNANCY INTENTIONS.

that women in high school had a rate of unintended pregnancies four times higher than college graduates. In this study, there were numerical differences between abortion-minded clients in high school compared to other educational levels. Although clients with a high school education represented a higher percentage of abortion-minded clients, no significant statistical differences in educational level were found between abortion-minded clients vs. non-abortion-minded clients. With respect to this study, it is important to consider that the number of clients with college-level education were few compared to the other educational categories.

Differences between the ages of abortion-minded clients and non-abortion-minded clients were significant in this study. According to the literature, the pregnancy rate in 2001 was higher among women between 20 and 24 years of age (8). In addition, Jones found that women between the ages of 20 and 24 had a higher abortion

THE RESULTS OF THIS STUDY CAN HELP PUBLIC HEALTH ADVOCATES TO IDENTIFY WOMEN WHO ARE VULNERABLE TO OPTING FOR AN ABORTION. THIS WILL HELP HEALTH CARE PROFESSIONALS TO FULFILL THEIR RESPONSIBILITY TO PROTECT, DEFEND AND PROMOTE EVERY HUMAN BEING'S RIGHT TO LIFE FROM THE VERY BEGINNING.

rate. In this study, the mean age at the time of service was 23.7 years and the proportion of abortion-minded clients was highest among younger women (22.6 years) compared to non-abortion-minded clients (24.5 years) According to these results, among the population attending ENLC in the Dayton area (Ohio), unintended pregnancies occur more frequently among women approximately 20 to 24 years of age.

Although previous studies have looked at the relationship between reproductive health history, the number of previous pregnancies and pregnancy intentions, few studies have examined the association between previous abortions and pregnancy intentions. Adelson, and Frommer, (1995) analyzed a survey in New South Wales of women aged 25-39 seeking an abortion. More than half of the target population in that survey had had previous abortions (9). In this study, abortion-minded clients had a significantly higher number of previous abortions compared to the non-abortion-minded clients at ENLC. Clients with more previous abortions were 0.4 times more abortion-minded than the clients with fewer previous abortions in the odds ratio calculation.

D' Angelo (2001), in her study analyzing data from PRAMS, found that women with three or more children were over four times more likely to report an unwanted pregnancy(6). Although this study found that abortion-minded clients had more previous pregnancies compared to non-abortion-minded clients, the results were not significant.

Although socio-demographic characteristics and their relationship to pregnancy intentions are collected on a regular basis in the United States, associations between sexual behavior such as number of sexual partners, age at the first sexual encounter, number of previous abortions, and pregnancy intentions have not been reported. Sexual behavior has been related to the likelihood of a woman obtaining an abortion. Barrett (1998) found that, if a woman became sexually active at a young age, she would have more sexual partners and be more likely to choose abortion when becoming pregnant (5). Although, in this study, non significant associations were found between the number of sexual partners and pregnancy intentions, there was a numerical difference, with abortion-minded clients having higher number of sexual partners (5.4 partners) than non- abortion-minded clients (4.8 partners), Additionally, abortion-minded clients were significantly younger than non- abortion-minded clients at the age of their first sexual encounter. These findings suggest

the need to implement public health interventions based on chastity education and sexual integrity among youth to prevent unwanted pregnancies and abortion.

In summary, this study of the population that consults a pregnancy crisis center in Montgomery County, Ohio demonstrated that socio-demographic factors determined in past research, such as marital status, income, educational level, race and age, strongly influence pregnancy intentions. In this study, younger, single, Black, poor women with a low educational level were more abortion-minded. These results are similar to those of studies using data collected through national surveys such as PRAMS and NSFG to evaluate women with unintended pregnancies.

Considering the fact that unwanted pregnancies occur in women from many backgrounds, the study of socio- demographic factors and information about sexual behavior is very valuable to designing public health strategies to prevent unwanted pregnancies among populations with specific characteristics. The results of this study can help public health advocates to identify women who are vulnerable to opting for an abortion. This will help health care professionals to fulfill their responsibility to protect, defend and promote every human being's right to life from the very beginning.

More research is needed to determine the influence of socio-demographic characteristics on pregnancy intentions in the populations underrepresented in this study.

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