An Investigation of Depression and Sexual Activities in the Adolescent Population

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Abstract. To identify if a relationship exists between depression risk and sexual activity, early sexual debut, or number of sexual partners in adolescents. Suicide is the fourth leading cause of death of individuals between the ages 10 to 24 years. Research has demonstrated that participation in risky behaviors increase the likelihood of reporting depressed mood. Identifying risk factors for depression will help identify at-risks individuals and provide early intervention to reduce the risk of suicide. Survey data were collected from 200 randomly selected participants, ages 14-17 years, in the Youth Risk Behavior Surveillance Survey (YRBSS). Statistical analysis was performed by using Pearson’s r correlation to identify possible relationships between depression and sexual activity, early sexual debut, or number of sexual partners. Significant values were found for all statistical tests. The analysis of the results demonstrates a strong relationship between depression and sexual activity. Adolescents who were sexually active, less than 15 years of age, or had more than 4 partners were more likely to report symptoms of depression. These results support that screening for suicide should include both depression and sexual activity assessments to assist in identification of at-risk teens.

1. Introduction

Understanding how adolescent’s choices influence their overall health is important in providing education to assist teens in making healthier choices. Sexual health has a great deal of information in regards to STD transmission and long-term physical health. However, less information was available regarding emotional health in relation to sexual activity. Examination of the literature exposed several interesting points for this population group. One such discovery was that suicide posed the four leading cause of death for this age group in 2004 (Hamrin & Magorno, 2010). Another interesting point, according to Hamrin & Magorno, is that depression affects 17% of the adolescent population. Further investigation of literature revealed trends between sexual health and depression. Halfors, et.al. (2005) concluded that sex and drug use were predictors of depression. Lehrer, et.al. (2006) concluded that depressive symptoms were predictive of sexual risk behaviors. Questions posed from these readings, as well as additional readings, assisted in formulating the research questions exploring what relationship may exist between depression, the known predecessor to suicide, and sexual activity in adolescents.

2. Experiment, Results, Discussion, and Significance

The data for this research study were extracted from the Youth Risk Behavior Surveillance Survey. This database was established by the Centers for Disease control to identify priority health risk behaviors in adolescents and young adults (CDC, 2010). Survey data from ninth through twelfth grade students are complied within this database, a sample of 200 students were randomly selected from the database. Answers from ten questions dealing with age, gender, depression risk, and sexual activity were compiled for the data set. The data were entered into SPSS for statistical analysis. The Pearson’s r correlation analysis was run using depression risk compared to answers from questions regarding if the student had ever had sex, age of their first sexual encounter, and number of sexual partners. Data output was used to determine if an association existed between an increased risk for depression and each of the three variables. The sample size of 200 included 103 females and 97 males aged 14 to 17 years. The age breakdown of students: 17 were 14 years, 50 were 15 years, 54 were 16 years, 47 were 17 years, and 32 were 18 years of age. The Pearson’s r correlation analysis revealed a significant correlation for each variable examined. The analysis of depression risk versus sexual activity was significant with a Pearson’s r value of \( r=0.261 \), \( p<0.001 \). This analysis revealed that those students who were sexually active were more likely to report symptoms of depression. Figure 1 illustrates this relationship.
The analysis of depression risk and age of sexual encounter resulted in a Pearson’s r correlation with $r=0.242$, $p=0.014$. Data supported that those sexually active at 14 years or younger were at the greatest risk of reporting symptoms of depression. Figure 2 illustrates this correlation.

The final relationship examined depression risk and number of sexual partners. The findings were significant with a Pearson’s r value of $r=-0.305$, $p<0.001$. Thus, the students who were not sexually active were least likely to report symptoms of depression and the students reporting symptoms increased according to the number of partners with 4 or more partners having the greatest risk. Figure 3 illustrates this association.

3. Conclusions

The data analysis within this study revealed a positive relationship between depression and sexual activity in adolescents. This is significant, useful information which warrants further examination as to why this relationship exists. Using this information, as well as information from future studies, practitioners will be better prepared to interact with adolescents. Understanding that a relationship exists between sexual activity and depression provides practitioners with information for screening at-risk individuals. Intervening early will allow practitioners to help at-risk individuals and perhaps prevent a suicide.

4. References