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PRINT: ISSN 0970-9274 ONLINE: ISSN 2456-6608

J Hum Ecol, 79(1-3): 42-47 (2022)
DOI: 10.31901/24566608.2022/79.1-3.3347

Factors Effecting Depression amongst Adolescent Mothers in South Africa*

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KEYWORDS Depression. Mental Health. Single Mothers. Social Support. Young Mothers

ABSTRACT Adolescent motherhood is a major challenge throughout the world as they have to deal with, amongst other things, lack of social support and challenges to their mental health. Young mothers can experience poor mother-child-interactions and these young women are at increased risk of future psychopathology. The aim of this study was to investigate the influence age, marital status and social support have on depression amongst adolescent mothers. A cross-sectional survey design was employed. The experimental group consisted of 100 adolescent mothers and the control group of 100 adolescent females who were not mothers, between 15 and 19 years of age. Lack of social support was a significant factor negatively affecting adolescent mothers with them being likely to become depressed ($r = -0.609$, $p < 0.01$). T-test analysis indicated that these mothers experienced depression irrespective of marital status ($t = 1.091$, $df = 98$; $p > 0.05$). Professional counselling should be provided to all adolescent mothers before they return to the school system after giving birth.

INTRODUCTION

Adolescent motherhood is a complex problem globally, these pregnancies have increased every decade (Kirchengast 2016). South African studies indicate that up to 30 percent of female adolescents become pregnant and up to 71 percent of these pregnancies are unplanned and mothering is inevitably left to the teenage girl (Odimegwu et al. 2018). In developing countries around 12 million teenage girls aged 15 – 19 years and around 700 000 girls under 15 years of age give birth every year. Young mothers are often unprepared for the tasks of parenting leading them to doubt their abilities and competence in nurturing an infant. In the United States of America, up to 34 percent of adolescent mothers marry (Manning and Cohen 2015), however, in Limpopo Province 94 percent of these young mothers are unmarried (Statistics South Africa 2016). However, Mushwana et al. (2015) state that that young mothers in Limpopo Province are often forced into marriage. As a result, mental health problems in these young women often occur. They often drop-out of school and lose peer friendships (Mangeli et al. 2018). The authors note that all of the aforementioned challenges can result in depression particularly if they do not get any social support. Age, marital status, and social support were thus deemed as important areas in terms of any role they may play in depression among adolescent mothers in a peri-urban environment (Mankweng) Limpopo Province, South Africa.

In South Africa adolescent girls often become pregnant so that they can receive a child support grant and, as a result, are often forced into marriage (Patel 2011). This could lead to depression. Vafia et al. (2020) found that depressive episodes were likely to occur in adolescent girls when they were pregnant. In Nigeria Ayamolowo et al. (2019) found a negative correlation

*The present paper is prepared from the dissertation entitled "The Effect of Demographic Factors and Social Support on Depression among High School Teenage Mothers in the Mankweng Area" By Patrick Maredi Mothapo, submitted a Mini-Dissertation in Partial Fulfilment of the Requirements of Master of Arts Degree In Clinical Psychology in the Department Of Psychology School of Social Sciences Faculty of Humanities University of Limpopo 2011, under the supervision of Dr IM Ramokgopa

between levels of social support and adolescent mothers' likelihood of depression. Furthermore, they recommended more interventions for this age group in terms of social support in order to improve the wellbeing of these young mothers. This is supported by the World Health Organisation (2014) who found that maternal depression was higher in mothers who lived in poverty, were single, and had poor prenatal support. Govender et al. (2020) report supportive attitudes are needed from different sectors for adolescent mothers to achieve better health and psychological outcomes in South Africa. Kalil and Kunz (2002) reported that adolescent mothers who were unmarried had higher levels of depression than young adults who were married. Furthermore, VanDenBerg (2012) found that living with a partner was a protective factor against depression for adolescent mothers. However, Sezgin and Punamaki (2019) found that girls who became mothers between the age of 13 – 19 years were more likely to experience anxiety, somatisation, and depressive symptoms than those who were 25 years of age and older. Social support is generally associated with positive outcomes for adolescent mothers, However, living with a boyfriend or husband is also closely correlated with dropping out of school (Erfina et al. 2019). Literature also posits that girls who give birth do not complete their education (Erfina et al. 2019; Mashala et al. 2012), which in itself may give rise to depression and low self-esteem (Malahlela 2015).

Peter et al. (2017) reported that anxiety disorders were more prevalent in adolescents who were pregnant and who had less social support than those who reported adequate social support. They postulated that social support seemed to be a protective factor against anxiety in pregnant adolescents. In developed countries such as the United States of America (USA), although overall birth rates are declining, adolescent pregnancies particularly amongst disadvantaged groups and adolescents of colour, are excessively high as a result of social inequality (SmithBattle et al. 2019). This is mirrored in South Africa where pregnancy rates amongst disadvantaged adolescent groups are disproportionately high, most of these are amongst black Africans (Panday et al. 2009).

In the USA, Shah et al. (2021) showed that white adolescent mothers received more social support in the form of counselling and other interventions than Hispanic coloured mothers. This is supported by Jewkes et al. (2009) who state that demographics such as race and economic status impact on adolescent pregnancy. This was endorsed by Willan (2013) who reports that adolescent pregnancies are higher in poorer rural areas in South Africa such as Limpopo, the Northern Cape, the Eastern Cape, and Mpumalanga. Furthermore, it was also found that high levels of poverty and sexually permissive attitudes amongst adolescents' impact on higher pregnancy rates in South Africa (Mchunu et al. 2012).

Objective of the Study

The evidence shows that there are many factors that influence depression among adolescent mothers both globally and in South Africa. This aim of this study is to explore the influence of age, marital status and social support on depression among adolescent mothers living in Limpopo, South Africa (Mothapo 2011)

METHODOLOGY

Research Design

A quantitative approach utilising a cross-sectional survey design was used.

Population

The population included all adolescent girls from three schools in Mankweng District, Limpopo Province, South Africa, who had become mothers.

Sampling

Probability sampling was used in the study. Six schools in Mankweng were randomly chosen. The researchers approached the school principals who helped the researcher identify adolescents who had given birth. Participants from each group, that is the experimental and control groups, were then randomly selected using a random number table. The two groups

were matched. A total of 100 participants were identified in each group, thus the final sample was 200. Thirty-three learners were selected from each school; with the exception of the sixth school in which thirty-five learners were selected.

Survey Questionnaires

The first part of the protocol collected demographic information such as age, number of children, marital status, place of residence. Other questionnaires used were:

The Duke -UNC Functional Social Support Questionnaire (FSSQ) – This questionnaire measures an individual's perception of the amount and type of personal social support. Test-retest reliability was evaluated over a 2-week time period, and a correlation coefficient of .66 was found. Item-remainder correlations were used to assess internal consistency and ranged from .50 for useful advice, to .85 for help around the house (Broadhead et al. 1988). Internal consistency, as measured by Cronbach's Alpha was .81 -.92 across racial groups and study and data points.

The Becks Depression Inventory Scale - 11 (BDI-11) - This inventory for depression consists of 21 item self-report rating inventory measuring characteristic attitudes and symptoms of depression (Beck et al. 1961). In regard to construct validity, the convergent validity of the BDI-II was assessed giving a correlation of .93 ($p<.001$) and a mean of 18.92 (SD = 11.32) and 21.888 (SD = 24 12.69). Cronbach alpha for the overall BDI-11 was 0.89. The inventory has been widely used on different race groups for instance, Whisman et al. (2013) found that confirmatory factor analysis adequately represented the BDI-II variables amongst a racially diverse group. The Cronbach's alpha for the total BDI-II score was 0.89.

Data Collection

After ethical approval was gained, researchers approached the selected schools in which adolescent mothers and non-mothers had been identified, with the assistance of the school principal. Participants were randomly sampled by choosing an equal number of names from the list of adolescent mothers and non-mothers provided by the principals of the schools. Participants were given the questionnaires to fill in and were collected when they were completed. The questionnaires were in English to accommodate all participants. Collection of data was completed in two weeks and thereafter analysed.

Hypotheses

The hypotheses were developed out of a reading of literature related to adolescent pregnancy.

- Adolescent mothers who lack social support will experience depression.
- Adolescent mothers under the age of eighteen will experience more depression than those over eighteen years.
- Married adolescent mothers are less likely to experience depression than those who are not married.

Data Analysis

The data were analysed by using descriptive analysis for the demographic data, correlation analysis (Pearson Product Moment correlation coefficient = r) to look at relationships between variables and the student t-test, used to test the hypotheses in a relatively small sample find out if any of the survey results are significant. In this study, the dependent variable is adolescent motherhood while the independent variables are social support, depression, and marital status. A p value less than or equal to 0.05 was considered significant.

Ethical Considerations

Ethical approval was granted by the Department of Education and the Turfloop Research and Ethics Committee (TREC) of the University of Limpopo. The topic, aim and, names of selected schools and time frame were stipulated.

Permission from the participants their parent, parents and/or guardians was also obtained before any research took place. Participants completed consent forms informing them about the research and indicating that any information would be treated in the strictest confidence and

that their details would not be disclosed. They, and their parents, guardians and/or caregivers were informed of their right to withdraw without any consequence.

RESULTS

Demographic Information

The study indicates that 22 percent (n = 44) of the participants were between the ages of 15 – 16 years, while 78 percent (n = 156) were 17 - 19 years old. Only 4 (2%) of the adolescent mothers were married and 196 (98%) of the participants, both adolescent mothers and non-mothers were not. Most of the participants (92 %, n = 184) were in grades 11 and 12. The majority of the adolescent girls were African and Sepedi speaking (88.5 %, n = 177). Fifty percent (50%) (n = 100) had no children, 49 percent (n = 98) had one child and 1 percent (n = 2) had two children. The majority of the sample lived in townships in Mankweng (60.5 %, n = 121) while others lived in the town of Polokwane (39.5% = 79).

Correlation analysis was used to determine the extent to which changes in the values of social support are associated with changes in the report of depression. There was a negative relationship between depression and social support ($r = -0.609$, $p < 0.01$). T-test analysis was conducted, and it was found that adolescent mothers experience depression irrespective of age ($t = 1.409$, $df = 98$; $p > 0.05$). Therefore, adolescent mothers are affected by depression across all age groups in the sample. t-test analysis was also conducted to find out if there is a significant difference between married and unmarried adolescent mothers who gave birth. The sample was statistically corrected as the number of married adolescent mothers was small. It was found that there was no significance difference between married adolescent mothers and those who were unmarried in terms of experiencing depression after giving birth ($t = 1.091$, $df = 98$; $p > 0.05$). This suggests that adolescent teenage mothers experience depression irrespective of their marital status.

DISCUSSION

The first hypothesis states that adolescent mothers who lack social support will experience depression. The study findings support this hypothesis as it was found that adolescent mothers who lack social support experience depression ($r = -0.609$, $p < 0.01$). Lack of social support increases the likelihood of depression. Social support appears to be a protectivefactor (VanDenBerg 2012) with higher levels of social support associated with lower depressive symptoms amongst adolescent mothers. These findings confirm past studies which indicate that positive social support correlates with psychological well-being and happiness in motherhood (Erfina et al. 2019). Supportive social relationships play an important role in cushioning stressors experienced by adolescent mothers (Govender et al. 2020). Social support from the infant's father also enhances adjustment to parenting and the quality of the adolescent mother-infant interaction (Mallette et al. 2015). The present study results support these findings. Non-mothers reported experiencing social support in their own group ($p = 0.064$ however, there was a significant difference between the non-mothers and mothers in terms of social support ($p = 0.002$).

The second hypothesis namely, adolescent mothers under the age of eighteen will experience more depression than those over eighteen years. In this research no difference was found between adolescent mothers over the age of 18 years and those under this age, in terms of experiencing depression. The findings indicate that the adolescent mothers experience depression no matter what their age ($t = 1.409$, $df = 98$; $p > 0.05$). The WHO (2021) reports that there are medical indicators with regard to physical maturity for instance, adolescent mother between the ages of 10 – 19 years are more likely to suffer pre-eclampsia, but no evidence could be found that age maturity of adolescents is more likely to lead to depressive symptomology. It was also found that the control group of non-mothers did not experience any significant levels of depression ($p=0.06$) amongst their own group or as compared to the experimental group of adolescent mothers ($p = 0.056$).

The third hypothesis notes that married adolescent mothers are less likely to experience depression than those who are not married. However, the study indicates that adolescent teenage mothers appear to suffer from depression as much as unmarried teenage mothers. Even though their partners might provide social sup-

port, getting married comes with its own responsibilities that might be too much for the adolescent mother. Social support is generally associated with positive outcomes for adolescent mothers however, living with a boyfriend or husband is also closely correlated with dropping out of school thus the adolescent girls lose their education (Erfina et al. 2019). The results also suggest that adolescent girls are no longer forced into marriage (Patel 2011) as only 4 of the adolescents who had given birth reported to having spouses.

CONCLUSION

Most of the adolescent girl participants were between the ages of 17-19 and were not married. The results further indicated, that at the time the research was conducted, the majority of the adolescent female sample were in Grades 11 and 12, and the majority of them were black African and Sepedi speaking, who lived in townships in a peri-urban area. Correlation analysis results indicated that the adolescent mothers lacked social support and experienced depression. Furthermore, adolescent mothers experienced depression irrespective of age more so than their non-mother peers. There was also no significant difference between adolescent mothers that were married and those that were not, albeit the married sample was small. Moreover, adolescent non-mothers were significantly less likely to experience depression and social support than adolescent mothers.

RECOMMENDATIONS

Based on the findings of the study the following recommendations are made:

1) It was recommended that social welfare should regularly visit schools and their families to provide the necessary assistance to adolescent mothers and their family members.
2) Professional counselling should be provided to adolescent mothers before (if) they return to school.
3) Local government, non-governmental organisations (NGOs) and central government should discuss providing parenting classes for adolescents in the province.

Recommendations for Future Research

The study was randomised thus results are likely to be similar in other areas of Limpopo Province however, larger studies using a mixed methods approach should be conducted throughout Limpopo Province in for instance, urban and more rural environments and in different provinces in the country.

Study Strengths

- The sample was randomised thus findings could be generalised.
- The study design was consistent with those used to explore depression and adolescent motherhood.
- Surveys used in the research were standardised thus reliable and valid.

Study Limitations

- Male adolescent fathers were not surveyed.
- The Feelings and experiences of adolescent mothers were not surveyed as the research used a quantitative approach.
- Factors such as monthly income in the family and race which could also cause depressive symptomology were not explored.

ACKNOWLEDGEMENTS

The authors would like to acknowledge the cooperation of the DOE in Limpopo Province and the schools that took part in the research.

Competing interests

No competing interests were identified.

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Paper received for publication in April, 2022
Paper accepted for publication in August 2022