RESEARCH TITLE:

The prevalence of the known risk factors for teenage pregnancy amongst female teenage learners in Mount Ayliff, Eastern Cape, South Africa

Researcher: Dr. Sylvester Okafor
Supervisor: Prof PJT de Villiers

A thesis submitted in partial fulfilment of the requirements for MFam Med in the division of family medicine and primary health care, Faculty of health sciences, University of Stellenbosch.

October, 2010.
DECLARATION:

I, the undersigned declare that the work contained in this thesis is my work and that I have not previously submitted it to any other university for degree purpose.

SIGNATURE: _________________________

DR. OKAFOR SN

Copyright © 2011 Stellenbosch University
All rights reserved
ABSTRACT:

Background:
Teenage pregnancy is a major health problem in South Africa. In Mount Ayliff hospital, Eastern Cape, teenage pregnancy accounts for about 15-20% of deliveries in maternity every month. Teenage pregnancy leads to disruption of education, unemployment, increased rate of STI/HIV infection, unsafe abortion, obstetrics complications and malnutrition amongst children. This study is aimed to determine the prevalence of the known risk factors for teenage pregnancy.

Methodology:
This is a descriptive study. A sample of teenage learners was randomly selected from grade 10 to 12 learners in Mount Ayliff high school. Anonymous, self administered questionnaires containing relevant questions on contraceptive knowledge/use, family structure, sexual behaviour, alcohol use and sexual abuse were used to collect data.

Result:
A total of 300 questionnaires were distributed but only 219 completed questionnaires qualified for analysis. In total, 47% of the respondents have had sexual intercourse with the opposite sex and the mean age for first sexual intercourse is 16 years. 65.3% of the respondents have knowledge of contraceptives while 33.8% do not. Among those who have had sexual intercourse before, 68.9% did not use any contraceptive in their first intercourse. Of the sexually active respondents, only 16.3% reported using contraceptive consistently during intercourse. Majority of the respondents (45.2%), were raised up by a single mother and 76.3% do not discuss sex with their parents. The source of information about sex is mainly from friends and media. It was also found that most of the respondents live with parent(s) who are unemployed. A very small fraction of the respondents (7.3%) have been sexually abused and another 7.3% reported indulging in alcohol.
**Conclusion:**

Poor knowledge/use of birth control methods, family structure and sexual behaviour are the major risk factors for teenage pregnancy that are prevalent among teenage learners in Mount Ayliff community.
INTRODUCTION, BACKGROUND AND MOTIVATION:

Teenage pregnancy is believed to be a major global health issue. About 16 million adolescent girls aged 15-19 years give birth each year, roughly 11% of all births worldwide.¹ In South Africa, recent research shows that by the age of 18 years, more than 30% of the teenagers have given birth at least once.² According to the South Africa health statistics indicator data, 11.9% of female teenagers aged 15-19 years were pregnant or have been pregnant in 2003, this figure rose to 39% in 2006.³ In Mount Ayliff hospital, Eastern Cape, teenage pregnancy accounts for about 15-20% of deliveries in maternity every month (Data from monthly perinatal meeting). The Department of Education in 2006 disclosed an alarming escalation of teenage pregnancy when more than 72,000 girls aged between 13yrs and 19yrs did not attend school because they were pregnant. Official figures from the provincial departments of education revealed that 5868 learners in Kwazulu-Natal and 1748 in Free State fell pregnant in 2006. About 5000 pregnancies were reported in Limpopo, while Gauteng recorded 2542 pregnancies.⁴ Similar article in Sunday Times revealed a school with 144 pregnant pupils in 2006.⁵

Teenage pregnancy is known to give rise to a number of health problems: Increased rates of STI/HIV infection, malnourished children in the paediatric ward, unsafe abortion and many obstetrics complications during pregnancy and labour. Pregnancy and childbirth are the leading causes of death in teenage girls in developing countries.⁶

Economically, teenage pregnancy is also not healthy to any nation. Teenagers are the future of any country. Early pregnancy leads to increased rate of school drop-out and unemployment amongst women thereby decreasing female economic empowerment and putting the next generation at risk of perpetual poverty.⁷

A lot of research has been done to establish the risk factors responsible for teenage pregnancy.⁷⁻¹⁷, ²⁰⁻²⁴ These factors are:

- Socio-economic factors.
- Family structure.
- Cultural factors
• contraceptive knowledge/use
• sexual behaviour
• Alcohol use
• Sexual abuse

Identifying the prevalence of these risk factors for teenage pregnancy amongst female teenage learners in Mount Ayliff community will form a basis for appropriate intervention strategies.

AIM OF THE STUDY:

To determine the prevalence of known risk factors for teenage pregnancy amongst female teenage learners in Mount Ayliff community as a basis for appropriate intervention strategies in this community.

OBJECTIVES OF THE STUDY:

• To determine the frequency of contributing factors for high rate of teenage pregnancy in Mount Ayliff Community amongst female teenage learners.

• To sensitize the district health department on the high rate of teenage pregnancy in the community.

• To make recommendations on the appropriate way to arrest the rising rate of teenage pregnancy in the community.

LITERATURE REVIEW

The risk factors for teenage pregnancy have been well researched and documented both in South Africa and outside South Africa.
Among all the documented risk factors; attitude towards knowledge and use of contraceptives stands top on the list. An explorative study that explored the risk factors for pregnancy among sexually active adolescents revealed that poor knowledge and use of contraceptives is a major factor. In the study, it was gathered that sexual activity among the respondents started at a very early age and was initially unprotected with many girls failing to commence or sustain contraceptive use. In a similar study; social interaction of teenage mothers during and after their pregnancies, 4% of the respondents never used contraception and 25.7% in addition to never used contraception also never thought that they would be pregnant. Apart from the finding that non-use of contraceptives contributes greatly to teenage pregnancy, contraceptive failure due to ineffective use plays another role.

Another important risk factor implicated in teenage pregnancy is family structure. A study in Durban Zulu school girls in South Africa by revealed that family break-up contributes to a high incidence of teenage pregnancy in South Africa. A similar study in Cape Town revealed that pregnant teenagers are more likely to come from large households and less likely to live with their biological parents. In a related study in which community samples of girls were followed prospectively from early in life (5yrs to age 18), it was found that greater exposure to father absence was strongly associated with high risk of sexual activity and adolescent pregnancy. Another study shows that pregnant adolescents were more likely to come from families with low socio-economic status and from single parent families. This was also supported in a study by Miller, adding that parent-child closeness reduces the risk of teenage pregnancy.

Sexual abuse has also been widely documented as a risk factor in teenage pregnancy. A study by Boyer & Fine shows 2/3 of sample 535 young women who become pregnant as adolescents had been sexually abused, 55% had been molested, 42% had been victims of attempted rape and 44% had been raped. Another study showed that women, who were sexually abused, physically abused or who experience any type of abuse had a 48%, 42% and 31% higher risk respectively of adolescent pregnancy than those without any history of abuse. Two similar studies, Jennie et al and Elizabeth et al all supported sexual abuse as a risk factor for teenage pregnancy.
The issue of child support grant has been very controversial with lots of studies done to favour it or not favour it as a risk factor for teenage pregnancy. An article in the Pittsburgh post-Gazette reported that teens get pregnant so as to collect welfare and food stamps. Another study disproves the above article.\textsuperscript{18} The study went on to compare the relationship between child support grant and birth rate in South Africa. It was found that from 1998-2003, child support grant increased from R100 to R160 but the birth rate decrease from 26.43% to 18.8%. This study was also supported by a similar study which revealed that only 3.7% of children receiving child support grant have teenage mothers compared to 8.7% children with teenage mothers not receiving grant.\textsuperscript{19}

Adolescent sexual behaviour such as early onset of sexual activity and indiscriminate sexual activity among teenagers has also been implicated. A study in Transkei where sexual behaviour, knowledge and attitude to sexuality among adolescent school girls were explored. It was found that among 1025 respondents, 74.6% were already sexually active, and 18.7% had initiated coitus before menarche.\textsuperscript{20} A similar study revealed that sex is initiated at an early age. Of a sample of 796 girls, almost 50% had already had first sexual intercourse at a mean age of 16 and almost half had been pregnant.\textsuperscript{21} This was also supported in a study in Mbale District Uganda which revealed that the mean age for first sexual intercourse among girls is 16 years.\textsuperscript{22}

Alcohol consumption by adolescents has also been linked to risky sexual behaviours which often times leads to unwanted pregnancy. A study among college students and youth revealed that drinking was strongly related to the decision to have risky sex such as having multiple or casual sexual partners.\textsuperscript{23}

Cultural values and norms have also been cited as a contributory factor in teenage pregnancy. This is pronounced in African communities. In most African communities, it is an abomination and taboo for a mother to discuss issues related to sex with her teenage daughters. A study on the determinants of teenage pregnancy found that it is culturally a taboo for parents to discuss the issue of sexuality with their adolescent children.\textsuperscript{24} This deprives the adolescent of the vital information and knowledge on sexual relationships.
METHODOLOGY:

A quantitative descriptive study that centred on determining the prevalence of the known risk factors for teenage pregnancy was carried out among the nulligravida female teenage learners, 14-19 years of age, in Mount Ayliff community. The study was carried out during the period of March to June 2010.

Mount Ayliff is a small rural community in the Eastern Cape Province of South Africa with a human population of about 150,000. It has one main high school, Mount Ayliff high school, which has up to 1000 female learners in grade 10, 11 and 12.

A well structured, close ended and self administered anonymous questionnaire (annexure 2) was used in this study and was designed to cover demographic, contraceptive knowledge and use, family structure, alcohol use and sexual behaviour. The questionnaire was written in simple English.

A pilot survey was done using ten nulligravida female teenage learners, 14-19 years, who visited Mount Ayliff health facility in the month of March 2010. Their feedback showed that the questionnaire was simple and that the language used was easily comprehended.

A statistician was consulted and a sample size of 262 was arrived at by using a 95% confidence interval to be within 6% of true proportion.

Three hundred questionnaires were distributed among the grade 10, 11 and 12 learners in Mount Ayliff high school using a simple random sampling method. A waiver of informed consent from the parents or guardians were granted by the Research Ethics and Publication Committee, however information leaflets were provided and verbally explained to the participants.

The study protocol was approved by the Research Ethics Human Committee of Stellenbosch University (Ethic reference No: No9/11/335) and permission was obtained from the principal of Mount Ayliff high school to use her premises for a research study.
Microsoft Office Excel 2007 version was used to capture the data. Each parameter was separately analysed and results were organised in either figures or tables.

**QUESTIONNAIRES FOR ANALYSIS:**

All the 300 questionnaires distributed were returned but only 219 qualified for analysis. The remaining 81 questionnaires were disqualified based on the following reasons.

(1): 38 had been pregnant before

(2): 22 were above 19 years of age

(3): 21 questionnaires were incorrectly completed. Out of these, 11 did not specify their ages, 7 did not say whether they had been pregnant before or not and the remaining 4 questionnaires were returned almost blank.

**RESULTS:**

**Age distribution.**

The mean age of the respondents was 17.5 years.

*FIGURE 1: AGE DISTRIBUTION (N=219)*
Previous intercourse with opposite sex

Almost half of the respondents, 103 (47%), have had previous intercourse with the opposite sex while 116 (53%) have not (FIGURE 2).

FIGURE 2: PREVIOUS INTERCOURSE WITH THE OPPOSITE SEX (N=219)
Age of first sexual intercourse

Of all the 103 respondents who have had previous intercourse with the opposite sex, the mean age at first intercourse was 16 years (FIGURE 3).

![Figure 3: Age of first sexual intercourse (N=103).]

Current sexual activity.

Majority of the respondents who have had previous sexual intercourse with the opposite sex reported being sexually active at the time of this research (TABLE 1).

TABLE 1: Current sexual activity (N=103).

<table>
<thead>
<tr>
<th>Currently Sexually Active</th>
<th>Number of Respondents</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>98</td>
<td>95.1</td>
</tr>
<tr>
<td>NO</td>
<td>5</td>
<td>4.9</td>
</tr>
</tbody>
</table>
Frequency of intercourse.

Out of the 98 respondents who are currently sexually active, 36 (36.7%) reported having intercourse once a month, 26 (26.5%) once in two months, 24 (24.5%) once per week, 5 (5.1%) more than once per week, 4 (4.1%) once in two weeks and 3 (3.1%) did not give any answer (FIGURE 4).

Sexual partners.

Again, 88 (89.8%) out of the 98 respondents who are currently sexually active have one male sexual partner, 5 (5.1%) have two male sexual partners while the remaining 5 (5.1%) have three male sexual partners in the last six months before this research (FIGURE 5).
FIGURE 5: NUMBER OF SEXUAL PARTNERS IN THE PAST SIX MONTHS (N=98).

Age of sexual partner.

FIGURE 6: AGE OF SEXUAL PARTNER (N=98)
Knowledge of birth control methods.

One hundred and forty-three (65.3%) of all the respondents knew about birth control methods, 74 (33.8%) reported no knowledge of any birth control method and the remaining 2 (0.9%) did not give any answer (FIGURE 7).

**FIGURE 7: KNOWLEDGE OF BIRTH CONTROL METHODS (N=219).**

Type of birth control methods known.

Condom is the birth control method known by most respondents (60%), followed by injectable (25%), then oral pills (9%) and finally calendar (6%) (TABLE 2).

**TABLE 2: BIRTH CONTROL METHODS KNOWN.**

<table>
<thead>
<tr>
<th>CONTRACEPTIVE METHOD</th>
<th>NUMBER OF RESPONDENTS</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONDOM</td>
<td>130</td>
<td>60</td>
</tr>
<tr>
<td>ORAL PILL</td>
<td>19</td>
<td>9</td>
</tr>
</tbody>
</table>
Use of birth control methods during first sexual intercourse.

More than half of the respondents who have had sexual intercourse with the opposite sex did not use any birth control method during their very first sexual intercourse. Out of the 103 respondents, 71 (68.9%) did not use any method while the remaining 32 (31.1%) reported using birth control method during their first intercourse (FIGURE 8).

![Figure 8: Used Birth Control Methods during First Sexual Intercourse (N=103).](image)

Type of birth control methods used during first sexual intercourse.

Out of the 32 respondents who used birth control method in their first sexual intercourse with the opposite sex, 28 (87.5%) used
condom, 3 (9.4%) used injectable while the remaining 1 (3.1%) used oral pills (TABLE 3).

**TABLE 3: BIRTH CONTROL METHOD USED DURING FIRST SEXUAL INTERCOURSE (N=32).**

<table>
<thead>
<tr>
<th>CONTRACEPTIVE METHOD</th>
<th>NUMBER OF RESPONDENTS</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONDOM</td>
<td>28</td>
<td>87.5</td>
</tr>
<tr>
<td>ORAL PILLS</td>
<td>1</td>
<td>3.1</td>
</tr>
<tr>
<td>INJECTABLES</td>
<td>3</td>
<td>9.4</td>
</tr>
<tr>
<td>CALENDAR</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ANY OTHER</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Frequency of use of birth control methods during sexual intercourse.

Among the 98 currently sexually active respondents, 12 (12.2%) never used any birth control method during sexual intercourse with the opposite sex, 70 (71.5%) reported using contraceptives sometimes while only 16 (16.3%) use birth control method every time they have sexual intercourse (FIGURE 9).
Parent(s)/Guardian during childhood.

The study further revealed that 99 (45.2%) of the respondents were raised by a single mother, 92 (42%) by both mother and father, 16 (7.3%) by relative while the remaining 12 (5.5%) were raised by their father (TABLE 4).

<table>
<thead>
<tr>
<th>PARENT(S)/GUARDIAN</th>
<th>NUMBER OF RESPONDENTS</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SINGLE MOTHER</td>
<td>99</td>
<td>45.2</td>
</tr>
<tr>
<td>SINGLE FATHER</td>
<td>12</td>
<td>5.5</td>
</tr>
<tr>
<td>FATHER AND MOTHER</td>
<td>92</td>
<td>42</td>
</tr>
<tr>
<td>RELATIVE</td>
<td>16</td>
<td>7.3</td>
</tr>
</tbody>
</table>

Parent`s occupation.
102 (46.6%) of the participants have parent(s) who are unemployed, 54 (24.6%) have parent(s) who are self employed, 42(19.2%) have parent(s) who are civil servants while the remaining 21(9.6%) did not indicate their parent(s) occupation. (FIGURE 10)

FIGURE 10: PARENT(S) OCCUPATION (N=219).

Person living with the respondents at the time of the study.

Again, 177 (80.8%) of the respondents are currently living with their parents, either with father, mother or both. 31(14.2%) live with relatives, 9 (4.1%) are staying with friends while 2 (0.9%) are staying alone. (FIGURE 11).
Smoking habit and alcohol use.

Regarding the question on smoking, 213 (97.3%) of the respondents reported that they do not smoke while only a handful of 6 (2.7%) reported that they smoke (TABLE 5).

Similar result was established in the issue of alcohol intake where 203 (92.7%) of the respondents reported that they do not drink alcohol at all while only 16 (7.3%) reported that they drink alcohol (TABLE 6).

**TABLE 5: SMOKING HABIT (N=219)**

<table>
<thead>
<tr>
<th>SMOKING</th>
<th>NUMBER OF RESPONDENTS</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>6</td>
<td>2.7</td>
</tr>
<tr>
<td>NO</td>
<td>213</td>
<td>97.3</td>
</tr>
</tbody>
</table>

**TABLE 6: ALCOHOL INTAKE (N=219)**
Past history of sexual abuse.

The data on sexual abuse revealed that 203 (92.7%) of the respondents have never been victims of sexual abuse while 16 (7.3%) reported that they have been sexually abused (FIGURE 12).

**FIGURE 12: PAST HISTORY OF SEXUAL ABUSE (N=219).**

Discussion of sex related issues with parents.

167 (76.3%) of the respondents revealed that they do not discuss sex with their parents while 52 (23.7%) reported that they discuss sex with their parents (TABLE 7).

**TABLE 7: DISCUSSING SEX WITH PARENTS (N=219).**

<table>
<thead>
<tr>
<th>DISCUSS SEX WITH PARENTS</th>
<th>NUMBER OF RESPONDENTS</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>16</td>
<td>7.3</td>
</tr>
<tr>
<td>NO</td>
<td>203</td>
<td>92.7</td>
</tr>
</tbody>
</table>
Source of information about sex.

Among those that do not discuss sex with their parents, 51% receive information about sex from the television, 20.4% from friends, 16.3% from their teachers, 4.9% from radio, 4.7% from posters, 1.2% from relatives, another 1.2% from magazines and a very small percentage of 0.3% receive information from cell phones (TABLE 8).

TABLE 8: SOURCE OF INFORMATION ABOUT SEX (N=167).

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>NUMBER OF RESPONDENTS</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRIENDS</td>
<td>70</td>
<td>20.4</td>
</tr>
<tr>
<td>TEACHERS</td>
<td>56</td>
<td>16.3</td>
</tr>
<tr>
<td>TELEVISION</td>
<td>175</td>
<td>51.0</td>
</tr>
<tr>
<td>RADIO</td>
<td>17</td>
<td>4.9</td>
</tr>
<tr>
<td>POSTERS</td>
<td>16</td>
<td>4.7</td>
</tr>
<tr>
<td>CELLPHONE</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>MAGAZINE</td>
<td>4</td>
<td>1.2</td>
</tr>
<tr>
<td>RELATIVE</td>
<td>4</td>
<td>1.2</td>
</tr>
</tbody>
</table>

DISCUSSION:

The aim of this study was to determine how prevalent the known risk factors for teenage pregnancy are among teenage learners in Mount Ayliff community.

The study reveals that poor knowledge/use of birth control methods; family structure and sexual behaviour are the major risk factors for teenage pregnancy that are quite prevalent among female teen learners in Mount Ayliff community.

A good number of respondents do not have knowledge of birth control methods. Among the sexually active respondents who have
knowledge of birth control methods, only very few reported consistency in its use during sexual intercourse with the opposite sex. Majority of the respondents who have had sexual intercourse with the opposite sex had their first sexual intercourse at a very tender age of 16 years. This is consistent with the finding in a study by Vundule et al.\(^8\) The average frequency of sexual intercourse by the respondents is once in a month but an appreciable number of respondents admitted having sexual intercourse once in a week. This increases the risk of becoming pregnant especially in those teenagers who do not use birth control method regularly. Multiple sexual partners and having sexual partners who are much older are also implicated in the risk for teenage pregnancy. In this study, ninety percent of the respondents who are sexually active admitted having only one male sexual partner. The ages of the male sexual partners ranges from 18-24 years. Only two respondents admitted having male sexual partners who are 30 years of age. Therefore this study indicates that multiple sexual partners and having older sexual partners are not quite prevalent among female teenage learners in Mount Ayliff community.

Family structure has been recognised as a factor in teenage pregnancy. In a study of Durban school girls, family break-up and single parent families are very common in South Africa, especially among the black population.\(^10\) In the present study, 45% of the respondents were raised up by a single mother. The absence of father in a family is strongly associated with high risk of sexual activity and adolescent pregnancy.\(^11\) Therefore this study reveals that many teenagers are at a greater risk of becoming pregnant. Again, majority of the respondents live with unemployed parent(s), probably illiterates too. The source of information about sex is mainly from media and friends. That parents are poor source of
information about sex in this study could point to a lack of knowledge on the part of the parents themselves or it could be as a result of some cultural beliefs that it is a taboo for a parent to discuss issues related to sex with her teenage daughter or it could be that there is a wide gap in the relationship that exists between parents and their daughters. The overall finding in this study is that single parent family structure and poor communication on issues related to sex between parents and their daughters are very much prevalent in Mount Ayliff community.

Alcohol consumption is another risk taking behaviours that result in teenage pregnancy. This observation is not found in this study as more than ninety percent of the respondents neither smoke nor drink alcohol.

Similarly, childhood sexual abuse was not found to be prevalent among the teenage learners in Mount Ayliff community. Only 7% of the respondents reported having past history of sexual abuse.

**CONCLUSION / RECOMMENDATIONS:**

The study shows that poor knowledge and use of contraceptives, family structure and sexual behaviour are the major risk factors for teenage pregnancy that are prevalent among female teenage learners in Mount Ayliff community. Therefore to curb this rising rate of teenage pregnancy in Mount Ayliff, effort should be directed towards addressing these factors.

Sex education should be incorporated in the curriculum of junior school learners. This will focus on pregnancy (rather than HIV only) by addressing knowledge and beliefs about contraception, conception and pregnancy and focusing on the responsibilities of
parenthood, knowledge and skills required for successful parenthood. A comprehensive approach that addresses both abstinence and safe sex practice should be incorporated. Collaboration between the department of health and the department of education is needed to achieve this. For example, trained health counsellors from the department of health should be assigned to all the secondary schools such that they visit the schools at least once a week to give talks on sex education. School-based health clinics should be established in all the schools which will ensure that contraceptives are available and easily accessible by the learners.

Parents are the primary socialising agents of children. They are the trusted source of information about sexuality for the young people. Yet this represents a missed opportunity in Mount Ayliff Community as majority of the teenage learners do not discuss sex with their parents. These adolescents get information about sex mainly from friends and media. It is therefore very imperative that a programme is set in place in the community where these parents are empowered and equipped with the knowledge and skills on adolescent sexuality. This empowerment will promote open communication between parents and children about sensitive subjects. A programme should be put in place for single mothers in the community. This will focus on educating them on how to set and enforce rules in order to make up for the absence of the father. This community-based programme will require collaboration between the departments of health and social development. The establishment of various women forum or organisations in the community is the key to the success of this intervention. In this forum, trained personnel from the departments of health and social development will have an opportunity to get
closer to the women in the community and educate them on adolescent sexuality.

**LIMITATION OF THE STUDY:**

Mount Ayliff high school is the main high school in Mount Ayliff community but there are other high schools which are located at the border of Mount Ayliff and other neighbouring towns like Kokstad, Mount frère, Bizana and Ntabankulu, where some teenage learners from Mount Ayliff equally attend. Therefore, this study did not involve them as part of the population under study. Again, many junior secondary schools in Mount Ayliff have learners whose ages are between 14-19 years. These learners were not given a chance to participate in the study.

In the issue of substance abuse as a factor in teenage pregnancy, only alcohol use was explored. The use of other substances like dagga, cocaine, glue and others which also contribute to teenage pregnancy was not explored. Again, in socio-economic factor, respondents` living conditions and availability of television and radio at home were not explored.

**IMPLICATION FOR FUTURE RESEARCH AND LOCAL POLICY MAKERS:**

The research concentrated on female factors for teenage pregnancy only. For a pregnancy to be achieved there must be a union of both female and male. Therefore, future research should attempt to uncover the prevalence of the male factors for teenage pregnancy as well.
Policy makers should device means of reducing unemployment as well as implementing specific interventions that address teenagers’ risky behaviours.

ACKNOWLEDGEMENTS:

My unalloyed gratitude goes to the almighty God for giving me the opportunity and strength to complete this study.

I wish also to thank the following persons for their invaluable support, assistance and encouragement throughout this study.

- My lovely wife, Mrs Helen Okafor for being by my side throughout this study
- My supervisor, Prof. PJT de Villiers, for his guidance from the onset of this study.
- The coordinator of the FAM-MED programme, Prof. Bob Mash, for his tutelage and encouragement throughout this programme.
- The university librarian, for the many literature sources you helped me to find.
- The principal and staff of Mount Ayliff High school, for allowing me to use their school premise for a research study.
- All the learners in Mount Ayliff High School for their wonderful cooperation during the period of data collection.
References

MPS notes 2008; 1(1).

(2): Growing up global: The changing transition to adulthood in developing countries.
National Research Council And Institute of Medicine of the National Academies
NRC-IOM 2005.

(3): Health Statistics Indicator Data- Health System Trust, South Africa.


(6): Mayor S. Pregnancy and childbirth are the leading causes of death in teenage girls in
Developing countries. BMJ 2004 May; 328(7449): 1152.

(7): Peter S. Teen Pregnancy and Its Effects. Published 22 Feb, 2008


(9): De Villiers, Kekesi J. Social interaction of teenage mothers during and after their

(10): Craig AP, Richter-strydom LM. Unplanned pregnancies among urban Zulu school girls.

Does father absence place daughters at special risk for early sexual activity and teenage
Pregnancy. Child devpt 2003;74(3);801-25.

(12): Ruey-Hsia Wang, Hsiu-Hung Wang, Min-Tao Hsu. Factors associated with adolescent
Pregnancy-A sample of Taiwanese female Adolescents. Public Health Nurs


(14): Boyer D, Fine D. Sexual abuse as a factor in adolescent pregnancy and child


ANNEXURE 1:

LETTER TO THE SCHOOL PRINCIPAL OF EACH OF THE 3 HIGH SCHOOL

The principal,
Mount Ayliff High School,
Mount Ayliff.

Sir/Madam

REQUEST TO USE YOUR SCHOOL PREMISE FOR A RESEARCH STUDY.

My name is Dr. Okafor S.N. I work in Mount Ayliff hospital as a medical practitioner.

Recently, there has been an increased rate of teenage pregnancy in Mount Ayliff Community. This poses a great health, social and economic problem to the teenagers and the nation as a whole.

As part of the project for my post graduate degree (Masters in family Medicine), I have decided to embark on a research study to find the prevalence of the known causes of teenage pregnancy amongst FEMALE TEENAGE LEARNERS in Mount Ayliff Community as a basis for appropriate intervention strategy in future.

I have selected your school as one of the schools where this study will be done. The study involves the use of structured anonymous questionnaires. The participants are expected to fill in the questionnaires individually.

In order to ensure utmost confidentiality, the following will be put in place.

(1): The questionnaires will be anonymous, therefore, there would be no
provision for the participant to put down her name.

(2): The questionnaires will be handed out in group and collected back in group to make sure that no particular questionnaire is linked to any particular participant.

(3): The study was approved by the Health Research Ethic Committee of the University of Stellenbosch, which also granted a waiver to obtain written Informed consent from parents due to the nature of the topic. However, the participants will be given adequate information in writing and verbally about the study and contact details will be provided to the participants in case of any doubt when completing the questionnaire.

I therefore request your permission.

Thanks.

Signature.

DR. OKAFOR S.N

Phone: 08361841

ANNEXURE 2:

SURVEY QUESTIONNAIRE

THIS IS A RESEARCH PROJECT FOR DEGREE PURPOSES APPROVED BY THE PRINCIPAL OF THE SCHOOL AND ETHICS COMMITTEE. ALL THE CONTENTS OF THIS QUESTIONNAIRE WILL BE TREATED WITH UTMOST CONFIDENTIALITY. YOU ARE FREE NOT TO PARTICIPATE

AIM OF THE STUDY: To determine the prevalence of known risk factors for teenage pregnancy AMONGST FEMALE TEENAGE LEARNERS in Mount Ayliff community as a basis for appropriate intervention strategies.

OBJECTIVES OF THE STUDY:
(1): To determine the frequency of contributory factors for high rate of teenage pregnancy in Mount Ayliff community amongst FEMALE TEENAGE LEARNERS
(2): To sensitize the district health department on the rate of teenage pregnancy in the community.
(3): To make recommendations on the appropriate way to arrest the rising rate of teenage pregnancy in the community.

**PLEASE TICK (✓) IN THE APPROPRIATE BOX**

(1): HOW OLD ARE YOU?, SPECIFY: [ ] (YEARS)

(2): WHAT IS YOUR CURRENT YEAR OF STUDY:

- GRADE 10 [ ]
- GRADE 11 [ ]
- GRADE 12 [ ]

(3): HAVE YOU BEEN PREGNANT BEFORE: YES [ ], NO [ ]

(4): HAVE YOU HAD PREVIOUS SEXUAL INTERCOURSE WITH A PERSON OF THE OPPOSITE SEX: YES [ ], NO [ ]

(5): IF YES IN Q4 ABOVE, AT WHAT AGE WAS YOUR FIRST SEXUAL INTERCOURSE?, SPECIFY: [ ] (YEARS)

(6): DO YOU CURRENTLY HAVE SEX WITH PERSON OF THE OPPOSITE SEX: YES [ ], NO [ ]

(7): IF YES IN Q6 ABOVE, HOW MANY TIMES DO YOU HAVE SEX:

- MORE THAN ONCE PER WEEK [ ]
- ONCE PER WEEK [ ]
- ONCE IN 2 WEEKS [ ], ONCE PER MONTH [ ]
- ONCE IN 2 MONTHS [ ], ONCE IN 6 MONTHS [ ]

(8): HOW MANY SEXUAL PARTNERS DID YOU HAVE IN THE LAST SIX MONTHS:

- NONE [ ]
- ONE [ ]
- TWO [ ]
- THREE [ ]
- >THREE [ ]

(9): HOW OLD ARE YOUR SEXUAL PARTNERS?, SPECIFY:

(10): DO YOU KNOW ABOUT BIRTH CONTROL METHODS: YES [ ], NO [ ]

(11): IF YES IN Q10 ABOVE, WHICH ONE(S) DO YOU KNOW:

- CONDOM [ ]
- ORAL PILLS [ ]
- INJECTABLE [ ]
- CALENDAR [ ]
- ANY OTHER?, SPECIFY:

(12): DID YOU USE BIRTH CONTROL METHOD DURING YOUR FIRST SEXUAL INTERCOURSE: YES [ ], NO [ ]

(13): IF YES ABOVE, WHICH ONE DID YOU USE:

- CONDOM [ ]
- ORAL PILLS [ ]
- INJECTABLE [ ]
- CALENDAR [ ]
- ANY OTHER?, SPECIFY:
(14): HOW OFTEN DO YOU USE BIRTH CONTROL METHOD:

- NEVER
- SOMETIMES
- EVERYTIME

(15): WHO RAISED YOU UP AS A CHILD:

- SINGLE MOTHER
- ONLY FATHER
- BOTH MOTHER AND FATHER
- RELATIVE

(16): IF YOU HAVE PARENTS, WHAT TYPE OF JOB DO THEY DO.

PLEASE SPECIFY:

(17): WHO ARE YOU CURRENTLY LIVING WITH:

- WITH PARENT
- WITH FRIEND
- WITH RELATIVE
- STAYING ALONE
- IN SCHOOL HOSTEL

(18): DO YOU SMOKE CIGARETTES: YES NO

(19): DO YOU DRINK ALCOHOL: YES NO

(20): IF YES IN Q19 ABOVE, HOW OFTEN: EVERYDAY

- ONCE PER WEEK
- ONCE IN 2WEEKS
- ONCE IN A MONTH

(21): HAVE YOU BEEN FORCED TO HAVE SEXUAL INTERCOURSE BEFORE: YES NO

(22): IF YES IN Q21 ABOVE, BY WHO:

- FATHER
- STEP FATHER
- NEIGHBOUR
- TEACHER
- UNKNOWN PERSON

(23): DO YOU FEEL CONFORTABLE TO DISCUSS SEX WITH YOUR PARENT(S): YES NO

(24): IF NO IN Q23 ABOVE, WHAT IS YOUR SOURCE OF INFORMATION ABOUT SEX:

- FRIENDS
- TEACHERS
- TELEVISION
- RADIO
- POSTERS
- ANY OTHER?, SPECIFY:
ANNEXURE 3:

PARTICIPANT INFORMATION LEAFLET

TITLE OF THE RESEARCH PROJECT:

The prevalence of the known risk factors for teenage pregnancy amongst female teenage learners in Mount Ayliff, Eastern Cape, South Africa.

PRINCIPAL INVESTIGATOR: DR. OKAFOR SN.

ADDRESS: Mount Ayliff hospital, Mount Ayliff. 4735.

CONTACT NUMBER: 0836184133

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please feel free to ask the study investigator about any part of this project that you do not fully understand. It is important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also your participation is entirely voluntary and you are free to decline to participate. You are also free to withdraw from the study at any point even if you initially agree to take part.

The study has been approved by the Committee for Human Research at Stellenbosch University and will be conducted according to the ethical guidelines and principles of the international declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC), Ethical Guidelines for Research.

WHAT IS THIS RESEARCH ALL ABOUT:

- There is a high rate of teenage pregnancy in Mount Ayliff. This is evidenced by the available statistics in Mount Ayliff hospital and the feeder clinics where deliveries are conducted. This research is aimed at determining the prevalence of the risk factors for teenage pregnancy amongst female teenage learners in Mount Ayliff community.
• The study will take place in Mount Ayliff high school. Female teenagers, 14-19yrs are eligible to participate. An *anonymous questionnaire* will be handed out to the eligible participant who is expected to complete it and return to the investigator.

• The investigator will gather all the completed questionnaires and analyse them for publication.

**WHY HAVE YOU BEEN INVITED TO PARTICIPATE?**

In order to make the results of this study as valid as possible, we need as many female teenage learners as possible to participate. Seeing that you fit the criteria to participate in the study, I would greatly appreciate your participation.

**WHAT WILL YOUR RESPONSIBILITIES BE?**

Your responsibility is to complete the anonymous questionnaire independently and truthfully too and hand back the completed questionnaire to the investigator.

**WILL YOU BENEFIT FROM TAKING PART IN THIS RESEARCH?**

Teenage pregnancy is a major health issue. It poses a lot of problem to the health and economic growth of the nation. Determining the prevalence of the risk factors for teenage pregnancy will help the department of health to come up with good strategies to arrest the rising rate.

**ARE THERE ANY RISK INVOLVED IN TAKING PART IN THIS RESEARCH?**

There is absolutely no risk associated with the study. The study is completely harmless to the participants.

**HOW WOULD THE ISSUE OF CONFIDENTIALITY BE MAINTAINED?**

• The questionnaire is anonymous, therefore there is no provision for the participant to put down her name

• The questionnaires will be handed out to participants in group and collected back in group to make sure that no particular questionnaire is linked to any particular participant.
IS THERE ANY OTHER INFORMATION YOU SHOULD KNOW?

You can contact the Committee for Human Research at 021-9389207 if you have any concerns or complaints that have not been adequately addressed.