

Case study

CAUSES OF UNPLANNED PREGNANCIES IN SECONDARY SCHOOL AND ITS IMPACT ON THE SCHOOL PERFORMANCE

ABSTRACT

The main objective of this study is to analyze causes of unplanned pregnancies in the secondary school and its impact on the school performance.

The researcher distributed questionnaires to students and teachers. Deputy Head teacher of Studies was interviewed the school Dean of the Studies. The direct observation was conducted and reading other existing documents related to the causes of unplanned pregnancies in secondary school and its impact on the school performance. The sample population of 84 people was used in this study, and data analyzed were for years 2016, 2017 and 2018.

From research findings, unplanned pregnancies have serious impact on school performance where the female adolescents drop out, fail lessons and to irregularly attend classes due to many responsibilities.

The research outcomes will help students, teachers, parents, and educational stakeholders to overcome causes of unplanned pregnancies for the purpose of getting good performance. The research addresses some recommendations to the Government, whereby the Ministry of Education (MINEDUC) should determine and overcome the factors that associated with the unplanned pregnancies, especially for the female adolescents and their impact on the school performance. The research further suggested that training of teachers and other educational stakeholders are helpful when they effectively provided to overcome such issues. Teachers were recommended collaboration with parents on the students' behaviors and success. Teachers should lastly know and report the number of pregnant girls and encourage them returning back to school after childbirth.

Key words: unplanned pregnancy, academic performance, failure, dropout

1. INTRODUCTION

An unplanned pregnancy is identified by the womanly as either unwanted or mistimed at the time of conception. Unplanned pregnancy is described as both frequent and widespread which occurs in all segments of society, not just among teens, unmarried women, poor women and minorities (Healthy Minnesotans, 2004:1).

Unplanned pregnancy among adolescent students notably in schools is a global health problem that affects girls, their families, and the society as whole. It can result from among others unprotected sex, contraceptive failure or from sexual violence (Georges Z. Nalenga, 2012).

The study analyzed the issue in Ordinary Level of G.S Gisozi located in Gisozi Sector, Gasabo District, Kigali City. The focus was put on the case of a Rwandan secondary school populated by adolescent youth because, as in other African countries, unplanned adolescent pregnancy is a health challenge.

It must be noted that the world is populated by a higher number of teenagers aged 10-19 years, which comprises about one fifth of the world's population, equivalent to 1.2 billion (UNFPA 2003). WHO report that in 2019, adolescents aged 15–19 years in low- and middle-income countries (LMICs) had an estimated 21 million pregnancies each year, of which approximately 50% were unintended (WHO .

Most of them are students in secondary schools. Nevertheless, a great number of girls who suffer from unplanned pregnancies keep increasing, which makes young girls to drop out schools. They thus become burdensome to the State or the society since they are not able to finish all necessary studies they would end.

Since early in time, in Rwandan culture, it was a scandal for a girl to have birth without a husband traditionally married with and recognized by the family. This was known as “*gutwara inda y'indaro*” meaning an illegal pregnancy and a child delivered was called “*ikinyendaro*” meaning a bastard. Then because it was outlawed, a young girl who became pregnant out of recognized marriage was sentenced to a punishment known as “*kohera*”. The girl should be chased away from the family and go to survive in bushes as cursed. Actually, it

is questionable why the girl was the only one subjected to punishment while the boy who impregnated her remained free. Obviously, it was alike with the article 354 of the Decree Law n° 21/77 of 18/08/1977 instituting the penal code of Rwanda which provided for a higher punishment against a woman than a husband if both were convicted of the crime of adultery.

As the society evolves, the gravity of the said punishment was reduced and education in schools was introduced by the arrival of Belgian colonizers in 1932s. However, only boys were prioritized in schools, yet it was believed that female gender was submissive. Hence, girls would be occupied with domestic chores, whilst boys would go to school (Ministry of Education, 2014).

Until 1960s, boys and girls were not equally treated within the Rwandan society. It was in 1994, when few girls went to school comparing to a huge number of boys who attended it. From 1994, after the genocide against Tutsi, the education system changed; all boys and girls have been granted equal rights to education. The Government of Rwanda put in place a policy of positive discrimination from 2009s to promote girls' education since they were marginalized for long time.

As they massively join the school, still girls have been challenged by the unplanned pregnancies in schools countrywide. In all cases, apart from enhancing affirmative action, the State also enacted the regulations allowing girls subjected to unplanned pregnancies to be reinstated in school after delivery. This aims at respecting their fundamental right to education. So far, no girl is banned to go ahead with her studies on the ground that she delivered. Indeed, the State is doing its best to make sure that girls' education flourishes much more (USAID/Rwanda, 2014).

Before 1994, the problem of unplanned pregnancies in schools existed but was not almost reported in whole country. After genocide against Tutsi in 1994, this problem has stepped up due to orphans and poverty besides to other social and economic problems in addition to modern technology. This problem is highly rated in primary and secondary schools, and it is a key factor of dropping out in schools and high rate of infancy mortality without forgetting infection of HIV or other sexually transmitted diseases. It further contributes to the increase of the number of women who die during delivery.

As an alternative, to improve the knowledge about HIV, MINEDUC has set up focal points; trained trainers in the fight against HIV and AIDS; created anti-AIDS clubs; promoted girls' education to fight ignorance that is the source vulnerability to HIV and AIDS, and improved HIV component in the school curricula (Ministry of Education, 2014).

Unplanned pregnancies among adolescents represent an important public health challenge in many countries, especially in developing countries. Numerous prevention strategies have been employed by countries across the world to address this problem. However, adolescent unplanned pregnancies are still increasing in Africa, where Rwanda is located. The issue of unplanned pregnancies among adolescents constitutes a worldwide health problem that affects girls, their families and society. It is both frequent and widespread and occurs in all set of society.

The 1995 National Survey of Family Growth in USA indicated the following percentages of unwanted pregnancies by age: < 75% for women 15-19; < 59% for women 20-24 ;< 40% for women 25-29; < 33% for women 30-34; < 41% for women 35-39 ; < 51% for women over 40. While the percentages are higher for younger women, in absolute numbers, women ages account for most unplanned pregnancies because more women in those age groups become pregnant. Although 77% of pregnancies of unmarried women are unplanned, 31% of pregnancies to married women are unplanned.

Poverty is a risk factor for unplanned pregnancy. The following are the percentages of unwanted pregnancies by Federal Poverty Level (FPL): <61% for women <100% FPL <53% for women 100-199% FPL 2018. However, even among women at greater than 200% FPL the percentage of pregnancies that are unplanned is 41%, and thus the consequences are serious.

When a pregnancy is contracted without planning and intent, there is less opportunity to prepare for an optimal outcome. Unplanned pregnancies are associated with adverse maternal behaviors such as delayed entry to prenatal care, poor maternal nutrition, cigarette smoking, and use of alcohol and other drugs. Women whose pregnancies are unplanned are more likely to have infants who are low birth weight and are less likely to breastfeed. Their infants are more likely to be abused and more likely to die in their first year.

Other negative social outcomes such as reduced education and career attainments of parents, increased welfare dependency, divorce, and domestic violence are associated with unplanned pregnancy. Children born from unplanned pregnancies are more likely to be raised by one parent, and these children are more likely to become teen parents themselves.

There are financial burdens related to unplanned pregnancies as well. The Department of Human Services estimates that in Minnesota Department of human services in 2001, there were 18,553 subsidized deliveries at an average cost of \$3,386 for a total of \$62,819,540. There were 22,144 recipients of first year services at a cost of \$6,894 for a total of \$152,669,942. At the national level, the *Healthy People 2010* goal is to decrease to at least 70% the proportion of pregnancies that are unplanned.

The Institute of Medicine Report on Unwanted Pregnancy, *The Best Intentions: Unwanted Pregnancy and the Well-Being of Children and Families* suggests that despite the national attention on teen pregnancy and non-marital childbearing and the continuing controversy over abortion, the common antecedent of all three -pregnancy that is unplanned at the time of conception - remains essentially invisible. It recommends a new national understanding about this problem and a consensus that pregnancy should be undertaken only with planning and intent. Moving towards a goal where all pregnancies are consciously and clearly desired at conception would require long term effort to educate the public on the social, economic, and public health burdens of unwanted pregnancy and stimulate interventions to reduce such pregnancies.

According to the IOM report (An evidence-based guideline for Unintended Pregnancy Prevention, 2011), unplanned pregnancy is not just a problem of individual behavior; it is also a problem of public policy and institutional practices. No single factor accounts for the high rates of unplanned pregnancy; there are socioeconomic, cultural, educational, organizational and individual components related to the above issues.

While the researcher recognizes that females experience similar health risks in pregnancy, it is worthy focusing on adolescents as these risks are more pronounced in younger girls due to their physical and psychological immaturity, coupled with a severe lack of decent antenatal and postnatal care. The risk of maternal mortality is high for women under 18. Other risks are

the high average of secondary school female drop-out rate for pregnancy which is 56 %, the problem of unsafe induced abortion, and suicide! This is not good for future employment prospects and lasting economic resulted. And this is one of cause of failure and poor performance in their studies. (Daulaire 2002).

Monica J. Grant and Kelly K. Hall M (2008) used data from Kwazulu- Natal, South Africa to examine the factors associated with the schoolgirl pregnancy and its impact on educational pathways. Their studies showed that prior schooling discontinuities defined as instances of non- pregnancy related to grade repetition or temporary withdrawals from school are strongly associated with a young woman's likelihood of later becoming pregnant while enrolled in school, dropping out of school if she becomes pregnant, and not returning to school following a pregnant-related drop out. Young women who are the first caregivers to their children are also significantly more likely to leave school than are those who have help with their childcare responsibilities and this causes to drop out and failure which lead to poor school performance and low academic results.

Journal of consultation and clinical psychology (volume 59, No 6), Dec 1991, 830-841) shows that recent studies indicate that 15-22% of American children and adolescents when they are scholars, they deliver in negative behavior such as drug abuse, illegal prostitution and delinquency, unplanned pregnancy which lead them in low performance, failure and drop out of school. Furthermore, the researcher would like to assess causes of unplanned pregnancy in public secondary school and its impact on the school performance under Rwandan scope.

The unwanted pregnancy in the public secondary schools can be a serious issue when it is not avoided in advance, and it can have negative effects on the school performance, and this can harm the quality of education and no achievement of educational policy.

Many different articles such as the new times published in January 21, 2015 and *Gender Analysis for USAID/Rwanda Learning Enhanced Across Rwanda Now! ProjecJuly 2014. EXTERNAL VERSION* shows how unplanned pregnancies for female adolescents look like in African countries, and how the affected persons are being treated after getting that problem in different African societies. Normally a female person ought to bear when she is beyond 18 years old in Rwanda even the adolescence period starts from 12-18 years old.

In addition, theorists such as Jean Piaget, Lev Vygotsky Lawrence and Erik Erikson provided the stages of human growth and they identified three stages of human growth such as early childhood (0-8 years old), middle childhood (8-12 years old) and adolescence stage which begins from 12-18 years old. They defined adolescence as culturally constructed period that generally begins as individuals reach sexual maturity and ends when the individual has established an identity as an adult within his or her social context.

In USA adolescence may last well into the early twenties or may be short because the sexual maturity coincides with entry into the adult world. Furthermore, in this period, females begin to develop earlier than do males. Like physical development, there is significant variability in the age at which an individual attains sexual maturity, and females tend to mature at about age thirteen and males at about fifteen even. The young girls are not able to give birth so that they can biologically harm their bodies. At the end of this stages (18 years old), individuals are considered as full mature and adult who can give birth and individuals start discovering their body changes and try first sexual intercourse.

After observing the report from different schools, reading many articles of different authors, the finding from the report of United Nations Population Fund (UNFPA) on September 2013 and the report from United Nations International Children's Emergency Fund (UNICEF) showing the percentages of girls who get unplanned pregnancy in secondary schools under the required ages and other reports from different schools also the different views of psychologists related to the stages of human growth do not match with theories related to wanted pregnancy; the researcher would like to identify "causes of unwanted pregnancy in public secondary schools and its impact on the school performance".

2. MATERIALS AND METHODS

Bearing in mind that sampling is defined as any procedure of using a small number of items, an individual or parts of the whole population to make conclusions regarding the whole population (ZIKMUND, 2003: 36), and considering the difficulties of covering the whole population of this study; the researcher was argued to draw sample from the whole population.

Table 1. Target population of G.S Gisozi

Class	Number of students	Number of teachers
S4	135	4
S5	70	3
S6	155	5

This research sample is multi-stage sample. According to JAVEAU (1985:45), the confidence given by information on a sample in function of population, the sample must represent 20% of population. In summary, the sample is 20%,

Where: N= Population of study

Ni= sample representation

Formula : $N_i = N \times 20 / 100$

$$N_i = 360 \times 20 / 100$$

$$N_i = 72$$

Table 2. Simple size

CLASS	SAMPLE
S ₄	27
S ₅	14
S ₆	31
TOTAL	72

In this study, the sample is made of 72 students from 360 and 12 teachers. Therefore, the total number of sample size is 84.

3. KEY FINDINGS AND DISCUSSION

After collection of data was collected from different educational stakeholders, an analysis was done and the following are the findings.

3.1.1. The way female adolescent teens are treated after childbirth

Different parents and teachers treat the female adolescent teens in many ways. In this study, teachers showed that they treat them in different ways in their classes in order to motivate them and increase their interest in the lessons. It was shown that 46.9% of respondents agree

that they isolate them in a quick way while 34.7 answered that they help them to return back to school after childbirth and 18.4% of respondents responded that they discriminate them strongly as shown in the following table.

Table 3. The way female adolescent teens are treated after childbirth

Question	Answer	Frequency	Percentage
How do you treat the female adolescent teens after their childbirth?	Isolate them quickly	19	22.5
	Discriminate them strongly	51	60.0
	Help them to return back to school after childbirth	14	17.5
	Total	84	100

The most teachers discriminate the female adolescent teens after childbirth. This because 23(46.9%) teachers answered that they discriminate them strongly. This means that they do not tolerate that pregnancy issue, which can be harmful to the quality of education and challenges the achievement of educational policies.

3.1.2. Teachers' advice to the students regarding fighting against unplanned pregnancies

Every teacher has his or her view in advising girls who got unplanned pregnancy. Thus, the research wanted to know the frequency to which teachers advise female adolescent teens. From the findings, it was realized that 75% of total respondents agree that they sometimes advise the female students about fighting against the unplanned pregnancies, while 21% agree that they never do.

Table 4: Advice to students about fighting against the unplanned pregnancies

Question	Answer	Frequency	Percentage
How often do you advice the students fighting against the unwanted	1.Always	0	00
	2.Sometimes	63	75

pregnancy especially the female ones?	3.Never	21	25
	Total	84	100

The research realized that sometimes teachers advise the female adolescent teens, and this can positively influence the reduction of unplanned pregnancies in secondary schools.

3.1.3. Importance of sex education to the students

Sex education can be effectively used when students are aware of its importance. Early pregnancies and unplanned pregnancies occur because of a combination of social norms, traditions and economic constraints. At the same time, resistance to sex education still prevails in Rwandan society. Policymakers must give strong and visible support for efforts to prevent early pregnancy. Specifically, they must ensure that sex education programs are in place.

Many adolescents become sexually active before they know how to avoid unplanned pregnancies and sexually transmitted infections. Peer pressure and pressure to conform to stereotypes increase early and unprotected sexual activity. In order to prevent early pregnancy, curriculum-based sex education must be widely implemented. These programs should develop life skills, provide support to deal with thoughts, feelings and experiences that accompany sexual maturity and be linked to contraceptive counseling and services.

From the research findings, it is realized that 59.2% of the total respondents agreed that sex education is extremely important while 28.5% agreed that sex education is important and only 12.3% agreed that sex education is slightly important. None agreed that sex education is not important as shown in the following table.

Table 5: Importance of sex education to the students

Question	Answer	Frequency	Percentage
How important is the teaching sex education to the students?	Extremely important	54	75
	Important	10	13.8
	Slightly important	8	11.2

	Not important	0	0
	Total	72	100

This table shows that students know the importance of sex education and teachers should be encouraged to converse with them frequently about their bodies without forgetting the sex-oriented characteristics and changes that occur when they reach the adolescence period.

3.1.4. Performance of female adolescent teens after childbirth

As reported by Breheny, M. and Stephens, C. (2007), the consequences of early and unplanned pregnancies can be educational, economic, social and health related. In this context, the researcher was interested in highlighting these educational consequences as follows: School dropout and absenteeism, poor performance, poor academic performance, lower educational attainment.

From the findings, the research realized that the female adolescent teens performed with little marks 76.1% and they performed lower with 23.9 % marks after childbirth. The table below shows different responses got from the survey.

Table 6. Performance of female adolescent teens after childbirth

Question	Answer	Frequency	Percentage
How do the female adolescent teens perform after child birth?	Perform with excellent marks	0	0
	Perform with little marks	8	66.6
	Perform with poor marks	4	33.4
	Total	12	100

Source: Research findings

From the findings, the research realized that female adolescent teens performed with little marks after childbirth. This is because of many responsibilities of taking care of the newborn.

3.2. **Unplanned pregnancies and school performance**

Early and unplanned pregnancy can affect education, economic, social and health-related aspects. It can also cause absenteeism in class, poor academic performance and school dropout. Early and unplanned pregnancy in education system constitutes the main challenge to learning outcomes achievement.

Adverse educational outcomes and other socio-economic consequences

1. Dropout

Early and unplanned pregnancy often leads adolescents to drop out of school. However, the correlation between early and unplanned pregnancy and drop out is not clear, since adolescent pregnancy can be both the cause and the consequence of dropping out of school. A small study among Kenyan girls aged 10–19 revealed that 62 per cent of the adolescent pregnant girls were already out of school at the time of conception (UNFPA, 2013). However, another study conducted in Brazil among 3,050 young males and females revealed that, among those leaving school, most girls and boys dropped out after becoming teen parents (Almeida and Aquino, 2009).

The third study in Chile revealed that being a mother reduces a girl's likelihood of attending and completing high school by between 24 and 37 per cent (Kruger et al., 2009; UNFPA, 2013c).

Child marriage with consequent pregnancy can be another reason for dropping out of school. A study from Francophone African countries showed that only between 5 and 10 per cent of girls leave school or are expelled because of pregnancy, while most leave because of marriage or union and then become pregnant (Lloyd and Mensch, 2008; UNFPA, 2013c).

2. Disengagement and decreased quality of learning

Pregnant girls and adolescent mothers may stay in school but frequently disengage with learning and go unnoticed by teachers. Students opting out of learning and withdrawing can

still attend classes, but may suffer from anxiety and depression, which affects the learning process (Lall, 2007).

The quality of learning (or the girl's educational experience) is likewise affected by pregnancy, since pregnant students tend to feel tired and lack concentration at school; and they are sometimes obliged to miss classes for medical reasons (Pillow, 2006).

After delivery, adolescent mothers are generally described by teachers as restless and sleepy during lessons and at risk of falling behind with school work due to their double responsibility as students and mothers (Maluli and Bali, 2014).

As a consequence, young mothers often struggle to achieve good academic results and pass their final exams. However, there are also cases of good performance where the mothering experience becomes a motivating factor for improving learning, especially when financial or psychological support is available for young mothers (Maluli and Bali, 2014; Mayzel et al., 2010).

3. Repercussions on employment opportunities and income

A truncated education has negative repercussions on the future of teen mothers, in terms of employment opportunities and general well-being (Fancy, 2012). A small study conducted in Texas (US) compared teen parents who had dropped out of school with those who had stayed in school (McGaha-Garnett, 2007) and found that those who dropped out were more likely to experience peer pressure, were less likely to assume parental responsibilities, had worse relationships with their parents, and tended to spend time with people with lower academic aspirations.

Negative educational outcomes lead inevitably to negative economic impact for the girls, their children and the society as a whole. The lifetime opportunity cost related to adolescent pregnancy measured by the mothers foregone annual income over her lifetime, ranges from one per cent of annual Gross Domestic Product (GDP) in China to 30 per cent of annual GDP in Uganda (UNFPA, 2013c).

3.3. Identification of causes of unplanned pregnancies

3.3.1. The primordial causes of unwanted pregnancies for the female adolescent teens

Parental poverty, environment, peer group, miscommunication between parents, teachers and school children, absence of sexual education are also included among causes of the unplanned pregnancies. A 2006 survey of parents in North Carolina states that mandate abstinence only education found that 91% of parents support sex education in the schools, with 895 supporting comprehensive sex education including discussions of sexual orientation, oral sex, and anal sex (Ito et al., 2006).

For some of the young women, pregnancy and childbirth are planned and wanted, but for many others they are not. Girls may be under pressure to marry and bear children early, or they may have limited educational and employment prospects. Some do not know how to avoid a pregnancy, or are unable to obtain contraceptives. Others may be unable to refuse unwanted sex or to resist coerced sex. Those who do become pregnant are less likely than adults to be able to obtain legal and safe abortion. They are also less likely than adults to access skilled prenatal, childbirth and postnatal care.

3.3.2. The way peer groups and environment influence unplanned pregnancies

Whilst early and unplanned pregnancy affects young people in both developed and developing countries, the critical issue is limited access to education and health services and poorer health outcomes in Low to Middle Income Countries context. In developed countries, early and unwanted pregnancy usually concerns specific population groups. In all countries, socio-demographic and educational factors, cultural norms around adolescent pregnancy and gender inequalities exacerbate the issues raised by early and unwanted pregnancies.

In all regions of the world, poverty and socio-economic marginalization are the main determinants of early and unplanned pregnancy. A systematic review of studies investigating the factors associated with adolescent pregnancy among 13–19 year olds in the European Union (Imamura et al., 2007) as conducted in 2007 highlighted the strong relationship between socio-economic deprivation and adolescent pregnancy. US data shows that

unplanned pregnancy is mostly concentrated among poor and low-income women (Guttmacher Institute, 2013).

In developing countries, poor and marginalized girls are among those more likely to become pregnant, not only after getting married very young in some contexts in exchange for a dowry – but also because they may engage in consensual or forced transactional sex to support themselves and their families. According to the (UNFPA, 2013c) qualitative research conducted in Uganda, young people described poverty as an impetus for having children as a source of income, labor and old age insurance (Beyeza-Kashesya, 2010). Adolescent psychology is associated with notable changes in mood sometimes known as mood swings.

Cognitive, emotional and attitudinal changes which are characteristics of adolescence, often take place during this period, and this can be a cause of conflict on the one hand, and positive personality development, on the other hand. Because adolescents are experiencing various strong cognitive and physical changes, for the first time in their life, they may start to view their friends, their peer group as more important and influential than their parents/guardians. Because of peer pressure, they may sometimes indulge in activities not deemed socially acceptable, although this may be more of a social phenomenon than a psychological one (Peer groups 2008).

The home is an important aspect of adolescent psychology: home environment and family have a substantial impact on the developing minds of teenagers, and these developments may reach a climax during adolescence. For example, abusive parents may lead a child to “poke fun” at other classmates when he or she is seven years old or so, but during adolescence it may become progressively worse. If the concepts and theory behind right or wrong were not established early on in a child’s life, the lack of this knowledge may impair a teenager’s ability to make beneficial decisions as well as allowing his or her impulses to control his or her decisions (Christie 2008).

3.3.3. Impact of the lack of sex education and miscommunication between parents, teachers and female adolescent teens on early and unplanned pregnancies

In every day's work, people think differently in a given assertion. The above question has been asked to the teachers who provided many different answers. The table below illustrates how teachers react on this question. Using of existing channels like parents' meetings (*Akagoroba k'ababyeyi*), to discuss about sexual and reproductive health and rights, including early pregnancy, sexual transmitted infections (STIs) and school related gender based violence (SRGBV). In addition, encouraging children to discuss certain issues related to sexuality with parents or other trusted adults might help to increase parent-children-teacher communication (Ministry of Education, 2014).

Unplanned pregnancy can be disruptive to school and career advancement. As noted above, there is movement to integrate a comprehensive program of sexual/reproductive health and rights into the curriculum, and there are many NGO-based school club initiatives to support girls in being assertive and making informed decisions about sex.

Table7: Impact of the lack of sex education and miscommunication between parents, teachers and female adolescent teens

Question	Answer	Frequency	Percentages
Do the lack of the sex education and miscommunication between parents, teachers and female adolescent teens contribute to the early and unwanted pregnancy for girls?	A) Yes	12	100
	B) No	00	00
	Total	12	100

From the above research findings, the researcher concludes that all teachers (100%) have the same understanding that lack of sex education and miscommunication between parents, teachers and female adolescent teens contribute to the early and unplanned pregnancies for girls.

3.3.4. School leaders and student opportunity to deal with causes and consequences of the unwanted pregnancy through the clubs

Table 8: Opportunity of the student clubs to deal with the unplanned pregnancies

Question	Answer	Frequency	Percentages
Do your school leaders provide the opportunity to the students to deal with causes and consequences of the unwanted pregnancy through the clubs?	A)Yes	9	75
	B)No	3	25
	Total	12	100

From this table, it is analyzed that school leaders give the highest opportunities to the students to deal with causes and consequences of unplanned pregnancies, and so will reduce the number of those who can be affected by such issues.

3.3.5. Causes of unplanned pregnancies

Unplanned pregnancy has many different causes, among them the researcher has identified the following ones: Parental poverty, environment, and peer group, miscommunication between parents, teachers and school children, orphans, inaccessibility of contraceptive and absence of sexual education are also included among them.

Table 9. Causes of unplanned pregnancies

Causes	Agree		Disagree	
	Fi	%	Fi	%
Socio-economic conditions	2	16.6	3	25
Mental disabilities	0	00	0	00
Lack of sex education	2	16.6	1	8.3
Inclusive education	0	00	0	00
Environment	1	8.3	3	25
Orphans	0	00	0	00
Peer group	7	58.3	5	41.6

From the research findings, the respondents agree that the socioeconomic conditions, lack of sex education, environment, and peer group are the worst causes of the unplanned pregnancies. As shown by the table, mental disabilities, inclusive education, orphans are not the highest causes faced by female adolescent teens in the public secondary schools.

Many adolescents become sexually active before they know how to avoid unwanted pregnancies and sexually transmitted infections. Peer pressure and pressure to conform to stereotypes increase the likelihood of early and unprotected sexual activity. In order to prevent early pregnancy, curriculum-based education must be widely implemented. When analyzing the answers from the respondents, it is really that some causes are serious and require the government intervention in order to find out the lasting solutions.

3.3.6. Mental dysfunction parameters and bad school orientation

Mental parameters include many aspects such as intelligence, personality, reasoning, judgment, perception, sensation, motivation and consciousness. When one among them has a problem all those aspects become disturbed and when an individual is disabled she or he is not able to perform any task due to the mental disability. The first version of Binet and Simon's test was published in 1905, they broadened the scope of their test to measure variations in intelligence among all children, and finally they discovered same intellectual quotient (IQ). Originally, the letters IQ is precisely what the scores represented. To obtain an IQ score, an examiner divided a student's mental age by his or her chronological age, the multiplied this number by 100. For this computation, mental age was based on the number of items a person passes correctly on the test: If an individual's mental and chronological ages were equal, an IQ of 100 was obtained; this was considered to be an average score. IQs above 100 indicated that the individual's intellectual age was greater than her or his chronological age, in other words, that the individual was more intelligent than typical students of the same age, and numbers below 100 indicated that the individual was less intelligent than her or his peers.

When an individual has for instance dysgraphia, dyscalculia, and dyslexia also; when she or he has mental disabilities, indeed he is not able to learn well. Therefore, individual differences also influence either negatively or positively learning because there are talented and gifted students who learn differently from others.

3.3.7. Factors that negatively associate with the school poor performance

As stated by SNTROCK John W. (2005), unplanned pregnancy, poor intrinsic and extrinsic motivation, psychological aspects such as mental disabilities and sensory impairment, discrimination after childbirth, orphans, bad school orientation, and dysfunction of mental parameters, incapacity of reasoning and problem solving inabilities, low capacity of critical thinking and language development, and individual consciousness, teacher's personality, class size, and teacher remuneration are also negative causes behind school poor performance.

3.3.8. Suggestions to avoid school poor performance for female adolescent teens

There are numerous types of interventions that can result in the formulation of laws and policies to protect adolescents from unplanned pregnancies. They include gaining a better understanding of how economic incentives and livelihood programs can delay the age of marriage. There is further developing better methods to assess the impact of education and school enrolment on the age of marriage. Lastly, there are assessing the feasibility of existing interventions to inform and empower adolescent girls, their families and their communities to delay the age of marriage, and to assess the potential of taking interventions to scale.

Around the world, more girls are enrolled in school than ever before. Educating girls has a positive effect on their health, the health of their children, and that of their communities. Also, girls in school are much less likely to be married at an early age. Sadly, school enrolment drops sharply after five or six years of schooling. Policy-makers must increase formal and non-formal educational opportunities for girls at both primary and secondary levels.

In some parts of the world, girls are expected to marry and have children in their early or middle adolescent and many places; laws do not prohibit marriage before the age of 18. Even in places where they do, these laws are not enforced. Policy-makers must put in place and enforce laws that ban marriage before 18 years of age.

According to Breheny, M. and Stephens, C. (2007), *the* development of multi-faceted programs that support the prevention of adolescent pregnancy goes together with improving public knowledge about family planning and reproductive health. Promoting healthy sexual behaviors (Fall 2002: 8) ensures the right to education and a duty of care. Furthermore,

ensuring that young people have education and skills on avoiding pregnancy, contraception and decisions about pregnancy is vital. Lastly, promoting gender equality in schools, engaging boys and young men in pregnancy prevention, preventing school-related gender-based violence (SRGBV) and supporting girls rights to prevent child marriage are worthy doing.

3.4. Factors that negatively affect the school performance

Quality education puts students at the Centre of the process; and student achievement must be the school's first Priority. Since schools exist because of students, this would seem self-evident. Perhaps because of the complexity of educational systems, teachers may not always believe in the school's ability to help all students. For example, teachers interviewed in Guinea and Mexico had little awareness of the school's role in pupil failure and dropout. Instead, they tended to blame the pupils and their family environment (Carron & Chau, 1996).

Research around the world has shown that low expectations for student achievement permeate educational systems. Rather than setting high standards and believing that students can meet them, teachers and administrators in many developing countries expect that up to half the students will drop out or fail, especially in primary grades. Schools committed to student learning communicate expectations clearly, give frequent and challenging assignments, monitor performance regularly, and give students the chance to participate in and take responsibility for diverse school activities (Craig, Kraft, & du Plessis, 1998).

Many factors positively influence school performance and others affect negatively the school performance and this leads to the poor quality of education and non achievement of both educational policies and standards. The table below illustrates different reasoning and views of teachers on how school gets poor performance due to the different negative aspects.

Table 10. Factors that negatively affect school performance

Question	Answers	Frequency	Percentages
Factors that negatively affect school performance	Unwanted pregnancy	2	16.6
	Socioeconomic conditions	3	25
	Environment	1	8.5
	Teachers' qualification	0	00

	Class size	0	00
	Mental disabilities	3	25
	School motivation	1	8.3
	Teacher remuneration	0	00
	Poor school library	2	16.6
	Total	12	100

Source: Research findings 2019

From the findings, the highest factors associated with the school poor performance are the socioeconomic conditions which represented by (25%), mental disabilities of the learners (25%), and both the unplanned pregnancy and poor school library represented by (16.6%). The rests are the additional aspects but which negatively influence the school performance.

3.4.1. Plausible strategies to overcome school poor performance specifically in public secondary school

The contribution of teaching materials on student's performance is helpful. When they are used effectively, a lot of students perform well. So, they motivate learners, improve school organization and increase teacher remuneration. Cooperation between teacher and students parents must be motivated and reinforced. Positive behavior must be rewarded and negative behavior must be discouraged. Using effective teaching aids and technological devices as well as pedagogical supports, guiding and counseling the learners, and encouraging discipline either at home or at school are further important. Providing special training to teachers regardless of their levels, practice of the competences based curriculum which provides a lot of time to the students' practice of their studies, and school orientation should be done according to the choice and interest.

Provision of school libraries is of an utmost importance. They enable learners to read more and revise also to do their own researches on a given topics and so it will help students in public talk. It is better to create school clubs where students get the opportunities to express themselves and show their talents and wishes. The disabled learners and those who need special education must be sent in the special schools reserved for them.

Each public school must have school psychologists to carry out psychological and educational assessment, counseling, consultation, and ethical, legal and administrative codes of their profession. They would understand causes of the behaviors and their effects on learning. A school psychologist is not a teacher but he must analyze problems and find their solutions in different situations. He or she must understand the clinical psychology in personal history, learning's problems of the family, analyze the methods of teaching in order to success finally analyze the behaviors problems of teachers, learners, parents and neighbors.

4. Results and discussion

From the results of this study, we found that unplanned pregnancies have a negative impact on the school performance in public secondary schools as shown by the different reports. There are many factors that contribute to the school poor performance and unplanned pregnancies are part of them. It may be difficult to clarify some issues related to unplanned pregnancies and to deliver all necessary skills to students to understand the matter.

Unplanned pregnancies contribute to poor school performance because after child birth, female adolescent teens sometimes return back to school with shame and they are demotivated in class. They are subjected to absenteeism due to the mother's responsibilities and postnatal care of baby. Sometimes, after child birth, some young mothers do not return back to school or they irregularly attend the school, and this reduces the learning effort.

We have seen another impact of the unplanned pregnancies on the school performance such as drop out of school, disengagement and decreased quality of learning and repercussions on employment opportunities and income.

The findings of this action study are related to the opinions of different authors such as: Luker (1996), Hoffman (2006) and Lall (2007) who researched on the causes of unplanned pregnancies and their impact on the school performance.

The consequences of adolescent pregnancy and childbearing on education are serious and numerous as stated by different educationalists. Pregnant teenagers are more likely than women who delay childbearing to experience maternal illness, miscarriage, stillbirth, and

neonatal death. Teen mothers are less likely to graduate from high school and more likely than their peers who delay childbearing to live in poverty and to rely on welfare.

The children of teenage mothers are often born at low birth weight, experience health and developmental problems, and are frequently poor, abused, and/or neglected (Hoffman & Maynard, 2008; Martin et al., 2011; NCPTUP, 2010). Furthermore, teenage pregnancy poses a substantial financial burden to society. There is an estimated amount of \$10.9 billion annually lost in tax revenues, public assistance, child health care, foster care, and involvement with the criminal justice system (NCPTUP, 2011).

Pregnant girls and adolescent mothers may stay in school but frequently disengage with learning and go unnoticed by teachers. Students opting out of learning and withdrawing can still attend school, but may suffer from anxiety and depression, which affects the learning process (Lall, 2007).

The quality of learning (or the girl's educational experience) is likewise affected by a pregnancy, since pregnant students tend to feel tired and lack concentration at school, and are sometimes obliged to miss classes for medical reasons (Pillow, 2006). (Maluli and Bali, 2014) added that after delivery, adolescent mothers are generally described by teachers as restless and sleepy during lessons and at risk of falling behind with school work due to their double responsibility as students and mothers. As a consequence, young mothers often struggle to achieve good academic results and pass their final exams. However, there are also cases of good performance where the mothering experience becomes a motivating factor for improving learning, especially when financial or psychological support is available for young mothers (Maluli and Bali, 2014; Mayzel et al., 2010).

Expulsion of pregnant girls from school is a very serious impact on the school achievement. In some contexts, the reality for many girls is that they are deliberately expelled (or excluded) from schools as a consequence of getting pregnant or as a sign of sexual activity before or outside of marriage (Onyeka et al., 2011). However, this penalty often does not apply to a boy who is responsible for a girl getting pregnant and who is generally able to continue his education after a period of suspension in some cases. At worst, school staff may go to great lengths to identify shame and exclude pregnant girls, often infringing their rights. Pressure

from parents, communities and religious authorities also results in girls being excluded while pregnant, remaining out of education after childbirth and then being forced to find another school to continue their studies.

5. Conclusion

This research entitled “causes of unplanned pregnancies in public secondary schools and their impact to the school performance case study of G.S GISOZI” was conducted in scientific and practical way as the other research projects. Since the research was descriptive in nature, the researcher administered the questionnaire to the respondents; this helped the researcher to avoid any biased views.

After analysis and interpretation of findings, the researcher found that unplanned pregnancies have a negative impact on the school performance as it shown in this study, specifically, in G.S. Gisozi as the case study.

6. REFERENCES

- Achoka, J. S. and Njeru, F. M. (2012). De-stigmatizing teenage motherhood: Towards achievement of universal basic education in Kenya. *Journal of Emerging Trends in Educational Research & Policy Studies*, 3(6), 887–892.
- Akande E. Oluwole (2008). Health consequences of teenage pregnancy in sub-Saharan Africa. 19th annual World Congress on Fertility and Sterility in Durban, South Africa.
- Akinrinola Bankole, Susheela Singh, Ann M. Moore, Florence Mirembe, Deirdre Wulf and Elena Prada (2006). Unintended pregnancy and induced abortion in Uganda. Report, November 2006
- Albert, Bill. (2012). *With One Voice 2012: America's Adults and Teens Sound Off About Teen Pregnancy*. Washington, DC: National Campaign to Prevent Teen and Unintended Pregnancy. [Online]. www.thenationalcampaign.org/resources/pdf/pubs/WOV_2012.pdf, accessed March 19, 2013
- Alemayehu Hailu Gebre (2008). President of ANFEAE, Literacy Plus program (Ethiopia).
- Alene Getu, Worku Alemayehu (2008). Differentials of fertility in North and South Gondar zones, northwest Ethiopia: A comparative cross-sectional study. Report

- ALLEN, K.EILEEN, and MAROTZ, LYNNERR, (1986) *Developmental Profiles: Birth to six*, Albany, NY: Delmar.)
- Apter.D. (2011).*Recent development and consequences of sexuality education in Finland*.BZgA FORUM 2.
- Arie, S. (2014). Has Britain solved its teenage pregnancy problem? *British Medical Journal*, 348:g2561.
- Atuyambe, L., Mirembe, F., Johansson, A., Kirumira, E. K. and Faxelid, E. (2007). Experiences of pregnant adolescents – voices from Wakiso district, Uganda. *African Health Sciences*, 5(4), 304-309.
- Banerjee, B., Pandey, G. K., Dutt, D., Sengupta, B., Mondal, M. and Deb, S. (2009). Teenage pregnancy: a socially inflicted health hazard. *Indian Journal of Community Medicine*, 34(3), 227-231
- Bankole, A. and Malarcher, S. (2010). Removing barriers to adolescents’ access to contraceptive information and services.*Studies in Family Planning*, 41(2), 117-124.
- BARDON, J.I. (1990).Forward .In .I.B Gutkin&C.R Reynolds, *The handbook of school psychology* (2ndeEd.)New York, NY: Wiley
- BARON, Robert A. (2001) *Psychology*, 5thed. Psychological Association (1981).Specialty guidelines for the delivery of services by school psychologists. Washington, Dc: AuthorSNTROCK John W. (2005), *Psychology* 7, 7thEd, Newyork, Mc Grill –
- Barrett, M., Soon, R., Whitaker, A. K., Takekawa, S. and Kaneshiro, B. (2012). Awareness and knowledge of the intrauterine device in adolescents. *Journal of Pediatric and Adolescent Gynecology*, 25(1), 39-42.
- Baumgartner, J. N., Waszak Geary, C., Tucker, H. and Wedderburn, M. (2009). The influence of early sexual debut and sexual violence on adolescent pregnancy: a matched case-control study in Jamaica. *International Perspectives on Sexual and Reproductive Health*, 35(1), 21–28
- Berne, Linda & Barbara Huberman, eds. (1999).*European Approaches to Adolescent Sexual Behavior and Responsibility*. Washington, DC: Advocates for Youth. [Online]. <http://www.advocatesforyouth.org/storage/advfy/documents/ european.pdf>, accessed June 25, 2013.
- Blake, Susan M., et al. (2001). “Preventing Sexual

- Brown, Jane D, et al. (2006). "Sexy Media Matter: Exposure to Sexual Content in Music, Movies, Television, and Magazines Predicts Black and White Adolescents' Sexual Behavior." *Pediatrics*, 117(5), 1018-27.
- Bryman, Alan. (2008). *Social Research Methods*, Oxford; 3ed. Oxford University Press.
- Chandra-Mouli, V., Camacho, A. V. and Michaud, P. A. (2013).WHO guidelines on preventing early pregnancy and poor reproductive outcomes among adolescents in developing countries.*Journal of Adolescent Health*, 52(5), 517–522.
- Christie, Deborah. "Clinical review.ABC of adolescence Adolescent development (<http://www.bmj.com/cgi/content/full/330/7486/301>) ". www.bmj.com. Retrieved 30-10-2009
- Chumlea (1982) and Tanner (1990).Quoted in the plenum series in culture and health.
- CIA(2009), the World factbook-Ethiopia, <https://cia.gov/library7publications/the-worldfactbook/geos/et.html>(accessed 06.10.10
- COLLINS, W.ANDREW, ed.1984.Development During Middle Childhood: The Year from six to twelve. Washington DC: national Academy Press.)
- Corkindale, C. J., Condon, J. T., Russell, A. and Quinlivan, J. A. (2009).Factors that adolescent males take into account in decisions about an unplanned pregnancy.*Journal of Adolescence*, 32(4), 995– 1008.
- Creswell, J. W. & Miller, D. L. (2000).Determining validity in qualitative inquiry. *Theory into Practice*.
- CSA (2008).Summary and statistical report on the 2007 population and housing census. Federal Democratic Republic of Ethiopia Population Census Commission. Addis Abeba:
- Devries, K. M., Kishor, S., Johnson, H., Stöckl, H., Bacchus, L. J., Garcia-Moreno, C. and Watts, C. (2010). Intimate partner violence during pregnancy: analysis of prevalence data from 19 countries. *Reproductive Health Matters*, 18(36), 158–170.
- Gender Analysis for USAID/Rwanda, Learning Enhanced across Rwanda Now Project, (2014).
- GEORGES Z. Nalenga Causes of unwanted pregnancy among adolescents in Addis Abeba, Ethiopia May 2012).

- Gipson, J. D., Koenig, M. A. and Hindin, M. J. (2008). The effects of unintended pregnancy on infant, child, and parental health: a review of the literature. *Studies in Family Planning*, 39(1), 18–38.
- Guttmacher Institute (2001). *Perspectives on sexual and reproductive health*. Volume 43
- Guttmacher Institute. (2013). Unintended pregnancy in the United States. Fact Sheet December (retrieved on 14 May 2014 from <http://www.guttmacher.org/pubs/FB-Unintended-Pregnancy-US.html>).
- *Handbook of diversity issues in health psychology*. Edited by Pamela M. Kato and Traci Mann, 1996, USA.
- *Healthy Minnesotans: Public Health Improvement Goals 2004:*
- Ministry of Education, National School Health Policy, 2014
- NEWMAN, PHILLIP R, and NEWMAN, BARBARA M 1997 *Childhood and Adolescence*. Pacific Grove, CA: Brooks/Cole.)
- United Nations population Fund (UNFPA)
- VIPANB.KUMAR (2011:156-184), *Developmental psychology*, New York USA, Himalaya publishing house.
- Winner of the UNESCO Confucius Prize for Literacy 2008. www.Unesco.org
- Achoka, J. S. and Njeru, F. M. (2012). De-stigmatizing teenage motherhood: Towards achievement of universal basic education in Kenya. *Journal of Emerging Trends in Educational Research & Policy Studies*, 3(6), 887–892.
- Akande E.Oluwole (2008). Health consequences of teenage pregnancy in sub-Saharan Africa. 19th annual World Congress on Fertility and Sterility in Durban, South Africa.
- Akinrinola Bankole, Susheela Singh, Ann M. Moore, Florence Mirembe, Deirdre Wulf and Elena Prada (2006). Unintended pregnancy and induced abortion in Uganda. Report, November 2006
- Albert, Bill. (2012). *With One Voice 2012: America's Adults and Teens Sound Off About Teen Pregnancy*. Washington, DC: National Campaign to Prevent Teen and Unintended Pregnancy. [Online]. www.thenationalcampaign.org/resources/pdf/pubs/WOV_2012.pdf, accessed March 19, 2013
- Alemayehu Hailu Gebre (2008). President of ANFEAE, Literacy Plus program (Ethiopia).

- AleneGetu, WorkuAlemayehu (2008). Differentials of fertility in North and South Gondar zones, northwest Ethiopia: A comparative cross-sectional study. Report
- ALLEN, K.EILEEN, and MAROTZ, LYNNERR, 1986 *Developmental Profiles: Birth to six*, Albany, NY: Delmar.)
- Apter.D. (2011).*Recent development and consequences of sexuality education in Finland*.BZgA FORUM 2.
- Arie, S. (2014). Has Britain solved its teenage pregnancy problem? *British Medical Journal*, 348:g2561.
- Atuyambe, L., Mirembe, F., Johansson, A., Kirumira, E. K. and Faxelid, E. (2007). Experiences of pregnant adolescents – voices from Wakiso district, Uganda. *African Health Sciences*, 5(4), 304-309.
- Banerjee, B., Pandey, G. K., Dutt, D., Sengupta, B., Mondal, M. and Deb, S. (2009). Teenage pregnancy: a socially inflicted health hazard. *Indian Journal of Community Medicine*, 34(3), 227-231
- Bankole, A. and Malarcher, S. (2010). Removing barriers to adolescents' access to contraceptive information and services.*Studies in Family Planning*, 41(2), 117-124.
- BARDON, J.I. (1990).Forward .In .I.B Gutkin&C.R Reynolds, *The handbook of school psychology* (2ndeEd.)New York, NY: Wiley
- BARON, Robert A. (2001) *Psychology*, 5thed. Psychological Association (1981).*Specialty guidelines for the delivery of services by school psychologists*. Washington, Dc: AuthorSNTROCK John W. (2005), *Psychology* 7, 7thEd, Newyork, Mc Grill –
- Barrett, M., Soon, R., Whitaker, A. K., Takekawa, S. and Kaneshiro, B. (2012). Awareness and knowledge of the intrauterine device in adolescents. *Journal of Pediatric and Adolescent Gynecology*, 25(1), 39-42.
- Baumgartner, J. N., Waszak Geary, C., Tucker, H. and Wedderburn, M. (2009). The influence of early sexual debut and sexual violence on adolescent pregnancy: a matched case-control study in Jamaica. *International Perspectives on Sexual and Reproductive Health*, 35(1), 21–28
- Berne, Linda & Barbara Huberman, eds. (1999).*European Approaches to Adolescent Sexual Behavior and Responsibility*. Washington, DC: Advocates for Youth. [Online]. <http://www.advocatesforyouth.org/storage/advfy/documents/ european.pdf>, accessed June 25, 2013.

- Blake, Susan M., et al. (2001). "Preventing Sexual
- Brown, Jane D, et al. (2006). "Sexy Media Matter: Exposure to Sexual Content in Music, Movies, Television, and Magazines Predicts Black and White Adolescents' Sexual Behavior." *Pediatrics*, 117(5), 1018-27.
- Bryman, Alan. (2008). *Social Research Methods*, Oxford; 3ed. Oxford University Press.
- Chandra-Mouli, V., Camacho, A. V. and Michaud, P. A. (2013).WHO guidelines on preventing early pregnancy and poor reproductive outcomes among adolescents in developing countries.*Journal of Adolescent Health*, 52(5), 517–522.
- Christie, Deborah. "Clinical review.ABC of adolescence Adolescent development (<http://www.bmj.com/cgi/content/full/330/7486/301>) ". www.bmj.com. Retrieved 30-10-2009
- Chumlea (1982) and Tanner (1990).Quoted in the plenum series in culture and health.
- CIA(2009), the World factbook-Ethiopia, <https://cia.gov/library7publications/the-worldfactbook/geos/et.html>(accessed 06.10.10
- COLLINS, W.ANDREW, ed.1984.*Development During Middle Childhood: The Year from six to twelve*. Washington DC: national Academy Press.)
- Corkindale, C. J., Condon, J. T., Russell, A. and Quinlivan, J. A. (2009).Factors that adolescent males take into account in decisions about an unplanned pregnancy.*Journal of Adolescence*, 32(4), 995– 1008.
- Creswell, J. W. & Miller, D. L. (2000).*Determining validity in qualitative inquiry. Theory into Practice*.
- CSA (2008).*Summary and statistical report on the 2007 population and housing census*. Federal Democratic Republic of Ethiopia Population Census Commission. Addis Abeba:
- Devries, K. M., Kishor, S., Johnson, H., Stöckl, H., Bacchus, L. J., Garcia-Moreno, C. and Watts, C. (2010). Intimate partner violence during pregnancy: analysis of prevalence data from 19 countries. *Reproductive Health Matters*, 18(36), 158–170.
- Gender Analysis for USAID/Rwanda, Learning Enhanced across Rwanda Now Project, (2014).
- GEORGES Z. Nalenga Causes of unwanted pregnancy among adolescents in Addis Abeba, Ethiopia May 2012).

- Gipson, J. D., Koenig, M. A. and Hindin, M. J. (2008). The effects of unintended pregnancy on infant, child, and parental health: a review of the literature. *Studies in Family Planning*, 39(1), 18–38.
- Guttmacher Institute (2001). *Perspectives on sexual and reproductive health*. Volume 43
- Guttmacher Institute. (2013). *Unintended pregnancy in the United States*. Fact Sheet December (retrieved on 14 May 2014 from <http://www.guttmacher.org/pubs/FB-Unintended-Pregnancy-US.html>).
- *Handbook of diversity issues in health psychology*. Edited by Pamela M. Kato and Traci Mann, 1996, USA.
- *Healthy Minnesotans: Public Health Improvement Goals 2004:*
- *Ministry of Education, National School Health Policy, 2014*
- NEWMAN, PHILLIP R, and NEWMAN, BARBARA M 1997 *Childhood and Adolescence*. Pacific Grove, CA: Brooks/Cole.)
- United Nations population Fund (UNFPA)
- VIPANB.KUMAR (2011:156-184), *Developmental psychology*, New York USA, Himalaya publishing house.
- Winner of the UNESCO Confucius Prize for Literacy 2008. www.Unesco.org