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Analysis of Factors Associated with Teenage Pregnancy and Available Support Structures, Mongu District, Zambia

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Abstract— *According to the ZDHS (2018), 29 percent of women aged 15-19 were reported having had a birth or pregnant with their first child. The number of teenage pregnancies is higher in rural areas with 36 per cent of teenagers having begun childbearing compared with 19 per cent in urban areas. There are biological, social and economic implications of teenage pregnancy on the life of an adolescence. A child born from a teen mother is likely to have poor health outcomes. A qualitative exploratory study was used to review experiences and perceptions regarding teenage pregnancy. 24 girls aged 13 to 19 accessing services from three Non-Governmental Organizations were recruited in the study. Of this number, eighteen (18) participated in one of the three Focus Group Discussions (FGDs) conducted and six (6) were recruited for the in-depth interviews. Seven (7) key informant interviews were conducted. All the interviews and FGDs were recorded on tape and transcribed verbatim. Thematic framework analysis was used to analyse data by identifying key themes and sub-themes from the transcripts to formulate interpretations and identify hidden meanings in relation to the study objectives. A purposive sampling technique was used. The study revealed economic, social and cultural factors that work together to influence teenage pregnancy. Teenage pregnancy is closely linked to among other issues; poverty, poor parent-child interactions, cultural practices, inaccessible support structures and services. NGOs, churches, schools, health facilities and families were found to be some of the structures available to provide support to teenage mothers. However, inadequate funding and human resources for NGOs, the absence of youth friendly services in health facilities, ridicule and mockery in schools, disapproval from significant others like parents and church members are among the many factors that limit teenagers' access to the support and services they require. Teenage pregnancy is a multi-faceted phenomenon which requires a multi-disciplinary and coordinated response to address the factors that influence teenage pregnancy and establish or strengthen support structures that enable teenage mothers to have better development outcomes.*

Keywords— *Analysis, Factors, Associated, Teenage Pregnancy, Support Structures.*

I. INTRODUCTION

The prevalence of teenage pregnancy is a global concern. Every year, about 21 million girls aged 15–19 years in developing regions fall pregnant and about 12 million of them give birth (Darroch *et. al*., 2016). In developing countries, at least 777,000 births happen to adolescent girls below the age of 15 years (UNFPA, 2015). Sub-Saharan Africa accounts for the highest rate of teenage pregnancy in the world (Chang'ach, 2012:3). According to ZDHS 2018, 29 percent of women aged 15-19 were reported having had a birth or pregnant with their first child. The number of teenage pregnancies is higher in rural areas with 36 per cent of teenagers having begun childbearing compared with 19 per cent in urban areas. Early childbearing was associated with educational level; twice as many teenagers with no education have begun childbearing than those with secondary education (42 percent and 23 percent, respectively) (ibid).

One of the adverse consequences of teenage pregnancy is the failure of girls to continue with school after falling pregnant. In Zambia, adolescent pregnancies among school going girls is an issue of concern, as numbers continue escalating from 13,654 among primary school going girls in 2009, to 13,929 in 2011, then 11,989 in 2015. Similarly, there has been an increase of pregnancies among secondary school girls, from 1,863 in 2009 to 2,096 in 2012, to 3,136 in 2015. This development has translated into school drop outs (MOGE, 2016). Even though in 2011 the Government of the Republic of Zambia introduced the Re-entry Policy, which allows girls falling pregnant to continue with their education after giving birth, the number of admissions back into school, especially among primary school girls, is very low. Further, in developing countries, girls between the ages of 15 and 19 years mainly die from medical complications associated with pregnancy and child delivery (Hayward, 2011). In Zambia, young women die too as a result of complications arising from pregnancy and childbirth (ZDHS 2018). Medical complications associated with teenage pregnancies include neonatal death, preterm birth, foetal distress, birth asphyxia, anaemia, obstructed labour, and obstetric fistula (Acharya, Bhattarai, Poobalan, Van Teijlingen, & Chapman, 2010; WHO, 2016). Teenage pregnancy also has adverse social consequences such as curtailing girls' education and reduces their chances of being employed (UNFPA, 2011; Bhana, Morrell, Shefer, & Ngabaza, 2010). Because teen mothers hardly go past high school, they are more likely to have low-paid jobs due to lack of skills. They also remain dependent on their parents and welfare services (Malhotra 2008).

Other factors associated with teenage include lack of knowledge of and access to conventional methods of

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preventing pregnancy (SAfAIDS, 2011), lack or limited parental guidance and peer pressure (Klavs, Rodrigues, Weiss & Hayes, 2006). Other factors include sexual abuse and rape (UNICEF, 2008) and socio-economic issues that drive young girls into cross-generational intimate relationships for income gain (FAWEZA, 2010; UNICEF 2011:2). However, these are yet to be proved in the context of Mongu district in Zambia. Adolescent reproductive health services such as contraceptives, pregnancy tests, screening and treatment of sexually transmitted infections (STIs) have been found to reduce teenage pregnancy especially when provided at convenient times, in private settings and are delivered in a non-judgmental manner by service providers (WHO, 2012). In recognition of the behaviour-related health problems faced by adolescents in Zambia which include early and unprotected sex, leading to teenage pregnancies, the government of the republic of Zambia through the Ministry of Health embarked on a programme to establish youth friendly spaces to provide health related services to reduce teenage pregnancies, STI and HIV, and morbidity and mortality occurring during pregnancy, child birth and shortly after child birth (ADH-SP 2017-2021). However, some challenges exist in the delivery of youth friendly health services such as lack of common understanding among stakeholders on what constitutes adolescent health services, limited number of trained personnel to deliver youth health services and the absence of appropriate infrastructure and equipment (*ibid*).

A. *Problem Statement*

Teenage pregnancy is a major concern in Zambia because of severe health implications it poses for both the mother and child. According to the ZDHS (2018), 29 percent of young women in Zambia aged 15-19 have already had a birth or are pregnant with their first child. Teenage pregnancy can bring about severe health complications for both the teenage mother and the child. In Zambia, maternal deaths account for 9.5 percent of all deaths among women aged 15 to 49, and teenage pregnancy has been identified as one of the contributing factors (ZDHS, 2018). Hayward (2011), confirms that globally lives of girls aged 15 to 19 years are lost each year as a result of complications related to teenage pregnancy and child bearing which include among others, anaemia and pre-eclampsia (Irvine, Bradley, Cupples & Booham, 1997, WHO, 2016), poor mental health (Liao, 2003; Boden, Fergusson & John, 2008) in form of emotional trauma, anxiety and frustration, and suicidal tendencies (Bezuidenhout 2009:38-39).

Children born to young mothers are likely to die before their fifth birthday, often have low birth weight and likely be born premature than those born from older women (Santelli & Melnikas, 2010; UNFPA, 2015). The children are also at an increased risk of cognitive and academic difficulties, which manifest through poor results on tests of cognitive ability, grade repetition, school dropout (Terry-Humen, Manlove, & Moore, 2005). The study, therefore, sought to analyse the factors that lead to teenage pregnancy in Mongu district and establish support structures available to the teenage mothers to help them cope with their circumstances and enable them to have better development outcomes.

B. *Objectives*

- To establish factors associated with teenage pregnancy in Mongu District.
- To obtain experiences of pregnant teenagers and teenage mothers regarding teenage pregnancy.
- To examine the availability and accessibility of support structures or services catering for pregnant teenagers and teenage mothers.

II. Theoretical Review of Literature

A. *Genetic Basis of Teenage Pregnancy*

Research indicates that there are evolutionary and genetic factors that affect a girl's early fertility and subsequent sexual behaviors. For instance, maturation is the process of developing biological essentials required by living organisms to continue their existence. From this viewpoint, researchers have established convincing evidence stating that a girl's sexual behavior is not only influenced and affected by the environment but also her genes (Cherry, 2014).

A girl can conceive from sexual intercourse as early as she starts to ovulate. Usually, the first ovulation takes place after the first menstrual bleeding, the menarche. Girls experience menarche at very different ages and it is quite difficult to estimate the mean age at menarche worldwide because significant differences between individual countries, but also between sub-populations within a country, are observable. Commonly, the mean age at menarche is considered as 13 years, the median, however, as 14 years (Cherry, 2014. Better knowledge of ovulation among young women has great potential to drastically reduce the prevalence of unintended pregnancies. The benefits for the young women include reduced psychological stress, maternal mortality and unsafe abortion. To achieve this requires sexuality education from the family, at school and from healthcare professionals (Iyanda et. al., 2020).

From the viewpoint of evolutionary biology, adolescence seems to be a very recent phenomenon. It is not found before homosapiens and may lead to an apt advantage because it is a phase of socio-sexual maturation and of acquisition of social and economic skills which may increase reproductive success during later life. During early adolescence, successful reproduction was and is rare.

In other words, the risk of becoming pregnant shortly after menarche increased too. The secular trend, however, affected not only sexual maturation, on the other hand peak height velocity and the development of secondary sexual characteristics such as breast development take place much earlier and most adolescent girls often look like young ladies, long before they reach mental maturity. Consequently, these girls may feel that they are old enough to start experimenting sexual activity. Although sexual freedom and activity patterns among adolescent girls according to cultural and religious background are less emphasized, we have to be aware that today nearly half of the global population is less than 25 years

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old. Even the generation of adolescents, that is, individuals between 10 and 19 years, is the largest in our history. Worldwide, an increasing number of adolescents tend to develop increased interest in sexual activities and consequently, the world is faced with increasing rates of sexually transmitted diseases including human immune-deficiency virus/acquired immune deficiency syndrome (HIV/AIDS) but also of unintended pregnancies and all associated with social and medical risks of early childbearing among adolescent girls.

B. Factors Associated with Teenage Pregnancy

Several factors are associated with teen pregnancy and childbearing, and these include risk; behavioural and social factors (Brace, Hall & Hunt, 2008). Mokwena (2003) avers that the inability of teenagers to perceive future repercussions of their behaviour and their psychological immaturity puts them at risk of early and unwanted pregnancies.

It has also been established that sexual abuse or non-voluntary sexual activity is yet another risk factor causing girls to fall pregnant at an early stage (SAfAIDS, 2011). According to UNICEF (2008), children in Zambia are sexually abused by men who are related to them and those within their social circles such as uncles, stepfathers, older siblings, teachers, pastors etc. The vulnerability of children to sexual abuse is increased by the high prevalence rate of HIV in Zambia estimated at 11.6 per cent (ZDHS, 2018), which robs them of parental protection and guidance. About one–third of children in Zambia aged between 15 and 18 have lost at least one parent; making the country second in Africa for the highest number of orphans (UNICEF 2008). FAWEZA (2010) add that due to inadequate boarding facilities in rural areas of Zambia, young girls rent houses in urban areas proximate to schools but away from adult supervision and this exposes them to rape and sexual abuse which may result in unintended pregnancies.

An important behavioural factor that exposes young girls to early pregnancies is early sexual debut (Terry-Humen, Manlove & Moore, 2005). According to SAfAIDS (2011), young women in Sub-Saharan Africa have their first sex experience between the ages of 15 and 19 years; earlier than young men of the same ages who often experience it at 20 years. In Zambia, 14 percent of young women and 15 per cent of young men report having had sex before age 15. More young women (61%) than young men (50%) report that they had sex before they were age 18 (ZDHS, 2018).

In a study conducted in Kenya to establish the prevalence of sexual intercourse among school going adolescents, Siziya, Muula, Rudatsikira & Ogwell (2007), revealed that the use of illicit drugs, drinking alcohol and smoking cigarettes influenced school-going children to engage in sexual intercourse. The association between the use of alcohol and psycho-stimulant drugs and unsafe sexual activity is corroborated by studies carried out in Ethiopia (Kabede, Alem, Mitike, Enguselassie, Berhane, Abebe, Ayele, Lemma, Assefu & Gebremichael, 2005), Malaysia (Lee, Chen, Lee & Kaur, 2006) and South Africa (Palen, Smith, Flisher, Caldwell & Mpofu, 2006).

Contraceptives use by teens is on the rise in developed countries; however, inconsistence use increases the chance of teenage pregnancy (Franzetta, Terry-Humen, Manlove & Ikramullah, 2006). This is supported by a recent study conducted in China, which revealed that teenagers had knowledge of conventional contraceptive methods, but found it unnecessary to use them (Liping, 2010). SAfAIDS (2011) contend that teenagers in developed countries have knowledge and access to medical methods of avoiding pregnancy but the opposite is true for developing countries.

One of the barriers to adolescents accessing contraceptives revealed in a study conducted in Limpopo province of South Africa is the negative attitude of nurses towards the adolescent's sexuality, and their failure to address the adolescents' concerns in a non-judgemental and confidential manner (Jewkes, 2006). In a study aimed at investigating how health care providers' perceptions about sexual and reproductive health impacted young women's decision to utilize contraceptives in Soweto, South Africa, Holt et al. (2012) recommend workshops for nurses to help them better delivery of contraceptive services to adolescents as well as clarification of policy on this matter, and awareness raising of how their opinions adversely affect service provision.

According to Darroch et al. (2016), adolescents fail to access contraception due to factors such as restrictive laws and policies regarding provision of contraceptives based on age or marital status, negative health workers' attitudes towards adolescents' sexual and reproductive health needs, and young people's inadequate knowledge on contraception, distances to service delivery points, financial difficulties. Furthermore, adolescents may lack the ability or freedom the use of a contraceptive methods in a correct and consistent manner. According to the ADH-SP 2017-2021, access to adolescent health friendly services especially in rural areas remains a challenge for young people due to long distances, transport and communication challenges, and inadequate information on where and how to obtain those services. Other factors include inadequate facilities and trained personnel.

Cultural factors have been found to influence the uptake of contraceptives among young people. A longitudinal ethnographic study conducted in Brazil revealed how inconsistent contraceptive use was assimilated with fertility due to cultural norms and beliefs (Gonçalves, Souza, Tavares, Cruz, Suélen & Béhague, 2011). This is corroborated by a study conducted in Ecuador by Goicolea (2010) which revealed that girls' sexuality and reproduction health choices were hindered by secrecy and taboos, inadequate information, and social norms that compelled them to yield to men's desires and wishes. *Ibid* (2010) further argues that negotiation of sexual intercourse and use of condoms only happens where sexual partners perceive themselves as equals. A South African study also established that the incidence of teenage pregnancy is propelled by imbalances in gender relations influenced by deep cultural practices (Bhana, Morrell, Shefer & Ngabaza, 2010).

It has also been found that pregnancy brings status among married teenagers in communities where being a mother is a symbol of attaining womanhood (*ibid*). This is supported by

Russell *et al.* (2004) who through their study of Hispanic teenagers established that parents of some teens viewed teenage pregnancy as a sign of attaining womanhood or manhood, despite the affected teenagers experiencing academic and career derailment.

Furthermore, Finlay, Shaw, Whittington & McWilliams (1995) established through their study that most young mothers, even when the pregnancy was unplanned, wanted their babies and adopted positive attitudes towards motherhood. Rosengrad *et al.* (2006) add that girls are likely to have babies to make themselves happy and raise their self-value if they are educationally and economically disadvantaged. One study conducted in Ecuador, revealed that while pregnancy brought feelings of sadness and pain, motherhood came with positive emotions as that meant a passage to adulthood (Goicolea, 2010). Lemos (2009) also argues that irrespective of the long-term negative consequences associated with teenage pregnancy, becoming pregnant may bring out strong emotions of love, attention and care from family members and friends.

Some cultural practices have been found to expose teenage girls to early and unwanted pregnancies. Under customary law in Zambia, a girl is viewed as an adult once they reach puberty (Mwansa, 2011). This is marked by a period of seclusion from the rest of the community for several months to prepare her for her new roles and status as revealed in a study conducted in a rural Zambia setting by Chilangwa (1994). Other studies (Ten, 2007; Pillitteri, 2011) have confirmed such rituals for young girls to denote passage to adulthood. In fact, Pillitteri (2011) reports incidences of girls being coerced into sex with traditional doctors to prove their readiness for marriage.

Exposure to hardships during childhood and adolescence, a history of teenage pregnancy in the family, instability in the family, and low level of education have a bearing on occurrence of teenage pregnancy. Mothers and older sisters tend to influence teenage pregnancy in the family because of social risks and social influences that run in the family. An individual's attitudes and values regarding teenage pregnancy are influenced by family members, and share similar circumstances such as ethnicity, poverty and lack of opportunities that have a bearing on the likelihood of teenage pregnancy. Having an older sister who became a mother in teenage greatly increases the chances of teenage childbearing in the younger sister and daughters born from teenage mothers are more likely to end up as teenage mothers. Girls who both have an elder sibling and a mother who had teenage births have the highest chances of pregnancy compared to those with no history of teenage pregnancy in their family (Wall-Wieler *et al.*, 2016).

C. Effects of Pregnancy on a Teenage Mother

In view of the pregnancies in teenage mothers, abortion is one of the effects or experiences likely to be spontaneously induced into teenage mothers. Sexual activity during adolescence can lead to unwanted pregnancy which in turn can result in serious maternal complications in the form of septic abortion. In the long term it may lead to pelvic inflammatory disease and subsequent infertility (Christiansen *et al.*, 2013). The other effect among many is anemia. Anemia in pregnancy per se is not caused by young age, poor eating habits and infrequent antenatal care make them vulnerable for it. Prevalence of anemia in adolescent girl is 41.1%. Leading cause of adolescent anemia in India is iron deficiency, other causes could be hookworm infestation, infectious diseases such as tuberculosis, vitamin-A deficiency and hemoglobinopathies. It is significantly high in adolescent who become pregnant i.e. 62.9%. The other effect is developmental issue due to nutritional requirement nutritional requirement for an adolescent mother is more in comparison to adult mother as the former's body is still developing. Over and above, they need to fulfill the demand due to pregnancy. So, failure to meet the demand affects the growth of both mother and infant.

Teenage mothers are likely to experience mental challenges (Boden, Fergusson & John, 2008). One study revealed that teenage mothers are likely to suffer from poor mental health in the first three years following the birth of their child compared to older mothers (Liao, 2003). In the absence of emotional support, the shock of an unwanted pregnancy can lead a teenager to experience emotional trauma, anxiety and frustration, and become suicidal (Bezuidenhout 2009).

Adolescence is a critical stage in one's life when the individual struggles with the shift from childhood to adulthood (Feldman, 2006). A teenager's social life is negatively affected as parenthood brings along enormous and continuous demands and responsibilities; leaving her with little or no time to care for peer relations, education advancement and career choices (Macleod, 2011). According to Endersbe (2000), pregnant teenagers cultivate feelings of anger towards the father of the baby mainly because of the physical changes that occur to them and not to their partners, and this brings feelings of failure and loneliness. Mpaza (2006) adds that a teenage mother may experience feelings of helplessness and inability to cope with the situation due to confusing advice from many people regarding child-rearing practices.

Teenage mothers are likely to suffer rejection and disapproval from society. One study conducted in South Africa revealed that pregnant teenagers and teenage mothers were viewed as immoral and reported anger and hostility from fellow learners, peers and family. Their teachers were not happy having them in school as that took away the sexual purity once associated with the school environment (Bhana *et al.*, 2010).

One of the most undesirable long-term outcomes of teenage pregnancy is the failure of teenage mothers to complete their education (Natalie-Rico, 2011; Kearney, 2008). Holgate, Evans & Yuen (2006) postulate that teenage mothers experience low self-esteem and no longer perceive themselves as being of the same age as their peers, thereby dropping out of school. Other reasons associated with failure to continue with school are revealed in a study conducted by Sodi (2009) include teenagers failing to balance the demands of child rearing and school as well as ill health following delivery. Because teen mothers fail to proceed beyond high school (Marule 2008; Perper, Peterson & Manlove, 2010), they are

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more likely to have dead-end jobs due to lack of skills (UNFPA, 2011).

Teenage mothers remain dependent on their parents and public assistance (Malhotra, 2008). Schelar, Franzetta & Manlove (2007) contend that life opportunities are significantly reduced for women who have more than one child during teenage and are likely to be in a relationship with a poorly qualified man; further increasing their chances of living in poverty (Ermisch & Pevalin, 2003). Adolescent mothers are likely to raise their children in single-parent households (Hoffman, 2006; Ashcraft & Lang, 2006) where there are prone to abuse and neglect (Hayward, 2011).

According to Partners in Population and Development [PPD] (2013), there is no available information in developing countries to show the cost attached to teenage pregnancy. However, according to the Centres for Disease Control (CDC, 2011), tax payers in the United States lose nearly USD 11 billion every year towards health care, foster care and lost revenue as a result of teen mothers who earn less due to lack of skills and less education.

According to Irvine *et al* (1997) teenage pregnancy and motherhood pose challenges for primary health care in the sense that to reduce unwanted pregnancy requires delivery of health education and provision of contraceptive services, teenagers require suitable obstetric care to reduce the risk of complications in pregnancy and childbirth and there is care needed to address longer-term negative health outcomes related with teenage pregnancy which include post-partum depression and stress-related illness (Liao, 2003; Hayward, 2011).

D. Support Structures for Teenage Mothers

Several studies conducted in the past suggest that social support reduces stress (Whitman, Borkowski, Schellenbach & Nath, 1987), improves mental health (Kalil, Spencer, Speiker, & Gilchrist, 1998) and increases the ability of a teen mother to have life and parental satisfaction (Schilmoeller, 1991). Furthermore, social support that involves material resources, financial, educational, medical and employment play an important role in assisting a teen mother cope with her new status and responsibilities (Ungar, Brown, Liebenberg, Othman, Kwong, Armstrong & Gilgun, 2007).

The role of strong social bonds in managing the demands of teenage motherhood is further supported by a study carried out by Flanagan, Coll, Andreozzi & Riggs (1995) which established that adolescents living with an adult relative were least likely to abuse or neglect their children than those living apart from a relative. However, Cooley & Ungar (1991) caution that when a grandmother is highly involved in caring for the child born from a teen mother, the child is likely to be negatively affected because the teen mother might become less involvement with her child.

Religious activities or programmes for adolescents have been found to encourage healthy peer networks that help delay sexual activity and reduce the occurrence of teenage pregnancy (Manlove *et al.*, 2008, Gold *et al.*, 2010). This is under the backdrop that different people (families, neighbours, peers) and social institutions such as community organisations, faith communities and schools can provide young people with assets such as discipline, mentoring and communication to address teenage pregnancy (Brindis *et al.*, 2005). Warm family ties and mentorship relationships involving someone who a young person can trust, look up to for help and care, high self-worth and a supportive social orientation play a significant role in instilling resilience in a young person (Wolkow & Ferguson, 2001, Beier et al., 2000). In the case of teenagers who fall pregnant, social support has been found to reduce stress (Whitman, Borkowski, Schellenbach & Nath, 1987), improves mental health (Kalil, Spencer, Speiker, & Gilchrist, 1998) and increases the ability of a teen mother to have life and parental satisfaction (Schilmoeller, 1991).

Furthermore, social support that involves material resources, financial, educational, medical and employment play an important role in assisting a teen mother cope with her new status and responsibilities (Ungar, Brown, Liebenberg, Othman, Kwong, Armstrong & Gilgun, 2007). Strong social bonds play a critical role in managing the demands of teenage motherhood (Flanagan, Coll, Andreozzi & Riggs, 1995).

Teaching of values, skills, and self-perception in the lives of young people (Brindis *et al.*, 2005, Rosenthal *et al.*, 2009) has been found to prevent the occurrence of teenage pregnancy. Examples of these values and skills include the desire to advance one's education and developing a positive self-image, honesty and ability to refrain from risky situations (Brindis *et al.*, 2005). According to Fletcher *et al.* (2008), interventions for youth which encourage positive career prospects, vocational preparedness and self-esteem building through vocational and life-skills education, volunteer and work experience have been found to reduce the incidence of adolescent pregnancy.

Sexuality education programmes for adolescents have been found to contribute to the reduction of teenage pregnancies. According to Setswe, Naudé & Zungu (2011), sexuality education equips young people with knowledge, skills, attitudes and values that help them attain good health, well-being and dignity, build healthy social and sexual relationships. As a result, there is delayed onset of sexual activity, decreased number of sexual partners and reduced risky behaviour among young people (UNESCO, 2009).

The Government of the republic of Zambia has incorporated school-based sexuality education (positive attitudes regarding reproductive health and sexuality) and life skills (skills associated with behavior and how to relate with people and the environment) in the curriculum at all levels of the education system to benefit learners and society at large (MESVTE, 2013).

E. Theoretical Framework

The current study is informed by the Resilience theory which is a multifaceted field of study that has drawn the attention of social workers, psychologists, sociologists, educators and many others over the years. The Resilience theory addresses the strengths that people and systems exhibit that help them to rise above difficulty circumstances. The advent of the resilience theory places emphasis on strengths

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and not pathology or deficit (Rak & Patterson, 1996). In recent years, there has been a call for a shift from vulnerability models to triumphs in the face of adverse circumstances (O'Leary, 1998).

The theory places emphasis on resilience which according to Kaplan et al., (1996) is the ability to continue functioning when confronted with major life stressors. Ungar (2013a) refers to resilience as a social construct and suggests a social ecological perspective of resilience by stressing the importance of recognising cultural and contextual realities (the environment), and from that angle, resilience is seen as both the individual's capacity to access health resources and the capacity of the individual's family, community and culture to make available these resources within the context of the existing culture.

The resilience theory drives a shift from illness to health, from vulnerability to thriving, from deficit to protection. The theory focuses on the skills, abilities, knowledge that build up over time as people strive to overcome challenges and adversity. According to the resilience theory, people tend to have a fund or reservoir of energy which they tap into when dealing with struggles (Goldstein, 1997).

The resilient theory speaks of risks and protective factors. According to Rutter (2012), risk factors can either be short-term or a long-term threat to an individual's personal development. They increase the chances of undesirable outcomes that vary in duration and severity. The absence of long-lasting nurturing and harmonious relationships, the absence of social cohesion within social groups and inadequate opportunities to learn are among the sources of risky experiences.

The theory places emphasis on resilience as being the "presence of protective factors (personal, social, familial, and institutional safety nets)" which allow individuals to withstand life stress (Kaplan et al., 1996). An integral component of resilience is the adverse, harmful and harsh life circumstances that bring about individual vulnerability. At any given time, an individual's resilience is calculated by the ratio between the existence of protective factors and the presence of harmful or dangerous circumstances (ibid).

Protective factors support good mental health and positive development in the wake of risks. They act as a buffer to risk factors and prevent further damage on the development of the individual faced with a difficulty situation (Barter, 2005). Thus, they enable the individuals confronted by challenging circumstances to maintain a certain degree of functioning and can positively influence how they proceed with life thereafter. Social support in the form of healthy relationships that an individual has within their environment, are among the protective factors that can contribute to an individual's healthy development and plays a critical role in mitigating the impact of risks (Ungar, 2013b).

At personal level, there are protective factors associated with relational skills such as the ability of a young person to establish healthy relationships, and interpersonal skills such as good communication skills and conflict resolution skills. Other important protective factors at personal level include self-regulation skills such as the ability to control one's behaviour and emotions, and problem-solving skills which include decision-making skills, planning skills, and the ability to engage in positive activities such as training, school, sporting activities. Positive factors at relationship level include parenting competencies such as discipline and positive parent-child connections, and positive peers such as having supportive friends (Development Services Group, 2013). Further at relationship level having caring adults beyond the nuclear family, to include mentors, teachers and individuals in the community. At community level, protective factors include residing in safe and high-quality surrounding, positive school programmes and economic opportunities such as household income, employment opportunities and apprenticeship (ibid).

Risks and protective factors often create chains and present themselves in various combinations (Barnová & Gabrhelová, 2017). When more of them occur together, they present a greater effect; they accumulate over time. Individuals dealing with cumulated risks in their environments, require more protective factors to enable them cope and be able to maintain normal functioning. Ungar *et al*., (2015) identified a three-phase reciprocal process that helps young people to cope with harsh situations. In the first phase, individuals tend to utilise their individual coping strategies especially when faced with lower risk exposure but those may not adequately address more complex circumstances. In the event of high-level stress, the individuals are not able to successfully cope, and they will consider alternative strategies to better deal with their circumstances and will seek informal support. If that still does not yield any positive results and the problem persists, they will in the third phase seek support from formal services and institutions.

III. Methodology

This study was exploratory in nature. According to Collins, Du Plooy, Grobbelaar, Puttergill, Blanche Terre, Van Eeden, Van Rensburg, Wigston (2000), exploratory research "can help to determine how further research can be done about the problematic situation, or about a specific topic on certain pieces of information is usually obtained through questions and recommendations and lay the basis for a meaningful research design so that further research can be done." This study was in line with the above description as it centred on obtaining qualitative information to provide better understanding of the factors associated with teenage pregnancy and available support structures for pregnant teenagers and teenage mothers in Mongu district, Zambia. Study participants were selected from three areas within Mongu district i.e. Mukoko village, Malelekwa compound and Yeta township. Distinct socio-economic and geographical differences exist between the three study areas. Mukoko though situated near the central business area of the district has a rural low-income community with many families engaged in small-scale agriculture. Malelekwa is a densely populated settlement with high levels of poverty, which are visible through the absence of proper sanitation, makeshift housing units and the absence of electricity in many homes. Malelekwa is situated near Mongu harbour which is a site for

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movement and interactions of various kinds of populations (Measure Evaluation, 2006). Therefore, the main livelihood strategies of Malelekwa include fishing and trading. Yeta is a middle-income community with many families gaining their livelihood through formal employment.

Girls residing in the research areas aged between 13 and 19 who were either pregnant or had a child were recruited in the study. The total population of 300 teenagers were targeted for the study. To avoid any form of discomfort on the pregnant teenagers, only those who were two months away from delivery and girls whose children were six (6) months and above were recruited in the study. The girls were recruited from Non-Governmental Organisations (NGOs), Child Care Foundation and public schools where they accessed such services as counselling, education support and life skills. The researcher accompanied NGO staff during their regular follow up visits to the girls' homes to recruit them into the study through purposive sampling which is a non-probability sampling technique defined by McMillan and Schumacher (2006) as "selecting information-rich cases for study in-depth." This type of sampling is based on the subjective judgment of the researcher, obtainable information or the researcher's prior knowledge of the population being studied rather than scientific criteria (Bless & Higson-Smith, 1995).

Sampling was conducted continuously according to the subjects that were available to the researcher until the sample size of twenty-four (24) girls was obtained. Six (6) girls were identified from each of the three research sites to make a total of eighteen (18) girls who participated in the focus group discussions. An additional six (6) girls were recruited for the in-depth interviews. The researcher sought permission from NGO authorities to interview one member of staff and eight (8) girls accessing services from their organizations. According to Dolores (2007), purposive sampling increases the utility of information by interviewing people who are relevant to the research questions. Therefore, the researcher used this sampling method to recruit into the study seven (7) key informants who came from diverse backgrounds to obtain varied opinions and views on the issue of teenage pregnancy. Data from Focus Group Discussions, key informant interviews and in-depth interviews were recorded and transcribed verbatim. According to Bryman (2008) data analysis entails coding; breaking down data by thoroughly reading through the transcripts to understand the scope and coverage of the data set and obtain ways in which to organise it. The researcher used thematic framework to analyse data. This entailed identifying key themes from the data by reading and rereading transcripts. The researcher made use of field notes and paraphrased common ideas in order to formulate interpretations and identify hidden meanings in relation to the study objectives. Anonymity, privacy, confidentiality and informed consent of participants were strictly upheld.

IV. Findings

A. *Factors Associated with Teenage Pregnancy in Mongu District*

(i) Cultural Norms and Practices

Nearly all the key informants felt that teenage pregnancy is partly influenced by initiation ceremonies performed when a girl reaches puberty to mark the passage from childhood to adulthood. They particularly cited *Sikenge*; a ceremony performed by the Lozi people of the area that entails keeping a girl who has reached puberty in seclusion for an extended period of time to receive education from older women on how to take care of herself and her husband when she gets married. Some of the key informants felt that the 'curriculum' delivered to a teenager during this period was not age-appropriate and had potential to encourage her to practice what she was taught before the right time came.

> *"Nowadays, girls reach puberty at a very tender age…. some as early as 12 years, and with Mongu district having many tribes such as Bunda, Luvale and Lozi who still practice initiation ceremonies for adolescents to mark passage to adulthood, these girls tend to perceive themselves as adults once they are out of seclusion and may engage in pre-mature sexual activity" (Area Councillour).*

Cultural norms were also cited as yet another barrier to open discussions on sexual matters between a parent and a teenage daughter.

> *"In this part of the country (Mongu district), some families still observe cultural norms and values that prevent mothers from openly discussing sexual matters with their children …worse still, a father! The best a mother could possibly do is to ask a close friend or relative to sit her child down to discuss sexual issues."* (SMAG member).

(ii) Poor Child-Parent Communication

According to some key informants, parents nowadays spend less time at home due to busy work schedules and other engagements to fend for their family. Some participants however, felt that some parents were just irresponsible and did not care much about the wellbeing of their children.

> *"Teenage is a critical stage in a girl's life, where any actions or decisions made by her have long-term consequences; whether good or bad. Unfortunately, nowadays, parents are too busy with their lives such that they hardly notice that their girls are growing up and need to be supported with information to make better decisions during this important phase of their lives."* (NGO staff 3)
>
> *"Some parents are simply irresponsibility...they leave home early and return home when children are already sleeping…meaning they have no time to know what is happening in the lives of their children. So, should they be surprised when they discover their daughter is pregnant?"* (Teacher)

One key informant recommended programmes that encourage open discussions on sex and sexuality between parents and their children. The informant felt that parents should engage more with their teenage girls on issues of relationships, sex and not to leave that role to other people such as family members or the teenagers' friends. They stated that many times, teenagers obtained inaccurate information

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from their peers and close family members.

> *"It will be good to have programmes which promote child-parent dialogues on sexual and reproduction matters…this is something NGOs, churches and other community groups can do. In my opinion, parents need to be supported to gain confidence to break the barriers cultural, religions and personal barriers that inhibit open discussion with their children. When children gain accurate information from trusted sources, they are likely to make use it." [Teacher]*

One participant from the in-depth interview recounted how she obtained inaccurate information from her friend about getting pregnant.

> *"My friend told me I wouldn't fall pregnant if I slept with a boy just once…but here I am, pregnant!"*

(iii) Peer Pressure and Substance Abuse

Participants from the FGDs, key informant interviews and in-depth interviews cited peer pressure as one of the reasons fueling teenage pregnancy in Mongu District. One of the key informants, alluded to the fact that teenage stage as being a period where peer advice and opinions are more important than parental guidance and counsel. Apart from that, wanting to feel part of a group and gaining peer approval is important during this period. Therefore, a young person is likely to engage in sex not because she wants to but because she fears to lose her membership with a group.

> *"Teenage is a period where peer advice and opinions are more important than parental guidance and counsel. Apart from that, wanting to feel part of a group and gaining peer approval hold important during this period. A teenager is likely to take all the risks associated with early sexual activity than to lose her friends."* (Teacher)
>
> *"Just because one friend has expensive phone or clothes bought for her by a boyfriend, some girls tend to get boyfriends as well who can buy them similar items."*

One of the participants from the in-depth interviews recounted how peer influence resulted in her falling pregnant.

"*My mother noticed I started coming home late and questioned me about it. I managed to give her many reasons for my late coming such as having extra lessons at school, serving a punishment for getting late to school when the truth was that my friends lead me into having our boyfriends walk us home every day. This is how I got pregnant, and when I look back, I should have listened to my mother."*

(iv) Inadequate Knowledge and Use of Contraceptives

Key informants had differences of opinion regarding whether or not teenage girls had adequate knowledge of contraceptives and their importance in preventing pregnancy. Some informants felt that adolescents were fully aware of conventional methods of contraception but were not utilizing that knowledge due to factors such as fear of parents and peers knowing they were using them and that generally, teenagers were risk-takers.

> *"Most teenagers know available methods of preventing pregnancy. However, taking risks is part of their nature…they often think it (pregnancy) can't happen to them (NGO staff 3).*

However, some informants felt that girls in urban and peri-urban areas knew of methods of preventing pregnancy compared to those in rural areas who had limited information on and access to sexual and reproductive health services and products due to long distances to available facilities.

> *"The girls in rural areas are more disadvantaged because they have limited access to sexual and reproductive health services. In many cases, health facilities are situated many kilometers away from home."* (Midwife)

While all of the key informants acknowledged the importance of contraceptives in curbing teenage pregnancy, some participants expressed reservations in allowing adolescents to utilize them. Their views and opinions were influenced by religious and morals beliefs.

> *"Nowadays, we have forms of contraceptives...the implants for instance, which prevent pregnancy for a period up to about five years! However, my observation is that, once a girl accesses this kind of contraception, it grants her freedom to engage in sexual activity because she knows she cannot get pregnant. Therefore, this promotes immorality and might just fuel the spread of HIV." (Area councillor)*
>
> *"From a biblical point of view, sex outside marriage is unacceptable. Therefore, by supporting the use of contraceptives by adolescents is an endorsement of sex outside marriage, which is an act contrary to Christian values and principles... the church preaches purity and preservation of one self. Our church encourages the use of contraceptives only among married."* (Pastor).

Myths and misconceptions regarding the use of conventional family planning among the girls revealed as one of them stated,

> "my friends told me that using contraceptives as a young person leads to barrenness in later years."

(v) Family Income

Key informants cited poverty as one of the major causes of teenage pregnancy in Mongu district because girls used sex to acquire money and materials from men. According to key informants, girls whose parents afforded to get them what they wanted were less likely to engage in transactional sex compared to those from impoverished households. They further stated that teenagers from low-income households had limited access to education, financial resources and were more prone to exploitation and manipulation by the men especially older ones.

> *"As you may be aware, this area (Mongu district) has one of the highest levels of poverty in the country. Financial hardships at home drive girls into sex with older men who can buy them food, clothes and other items they see with their friends such as mobile phones."* (Teacher)

One in-depth interview participant narrated how lack of food at home prompted her to find a boyfriend who bought her

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food to carry to school.

> *"My mother sells vegetables at the market. There is no enough money at home to carter for all our needs. I often went to school without food, and this prompted me to have a boyfriend. At first, he [boyfriend] said he just wanted to help me but eventually he demanded sex in return for his help."*

B. Personal Experiences of Teenage Mothers

The study revealed that some teenage mothers experienced regret for having fallen pregnant because that brought many challenges such as failure to continue with school, inadequate income to support themselves and their babies. All the girls who participated in the study were still dependent on their families for financial and material support, with only a few reporting receiving support from their partners. Others felt lonely, excluded and distanced by their friends and family members.

"*Some of my friends don't visit me anymore*." They lamented.

C. Availability and Accessibility of Support Structures for Teenagers Mothers

(i) Health Facilities

Some participants in the FGDs and in-depth interviews mentioned clinics as facilities that provided support to adolescents in terms of obtaining information on how to care for their children and access family planning services to prevent subsequent pregnancies. However, the study participants highlighted the absence of youth friendly facilities and services. Therefore, young people were not very free attend the clinics together with older women.

> *"It would be nice to have family planning clinics for young mothers. The ones we visit carter for both us teenagers and older women…one can't be free to be attended to together with women the age as their mother."*

(ii) Community Groups (Safe Motherhood Action Groups)

One key-informant stated the role of SMAGS which are groups of community-based volunteers that work hand in hand with health facilities to promote safe motherhood by ensuring mothers deliver their babies in health facilities and not at home in order to reduce maternal deaths. These groups also provide mothers with basic information on how to care for their babies and themselves.

> *"As SMAGs, we promote safe motherhood by ensuring that women attend the antenatal clinics as required and deliver their babies from health facilities with the help of nurses." (SMAG member)*

Another key informant also highlighted the importance of community groups like SMAGS in terms providing maternal health information in communities. The key informant however, stated that these groups were inactive, and communities were not very aware of their role and activities.

"What I understand by community groups like SMAGS is that these are groups of individuals who volunteer their time to serve their communities and do not receive a salary for their work. Therefore, they may not reach out to all community members who need their services." (NGO staff 3).

(iii) Non-Governmental Organizations

Both in-depth interviews and FGDs revealed that non-government organizations provide support to pregnant teenagers and teenage mothers through the provision of education school bursaries to continue with their education, delivery of life skills to restore confidence and self-worth in order to prevent subsequent pregnancies. Other forms of support cited by the study participants included linking the girls to community savings groups to improve their income.

> *"I am currently receiving education support from Maboshe Memorial Centre, and this has enabled me to continue with my education. During school holidays, I attend life skills sessions where I learn about sexual reproduction health."* (Participant F)

One NGO staff bemoaned inadequate financial and materials to reach out to many teenagers requiring support.

> *"As much as we want to support these girls who fall pregnant to continue with school for instance, we are hampered by financial and materials to recruit all those who need support. We are dependent on external funding which is sometimes erratic and comes with strict guidelines on how it should be utilized."* (NGO staff).

(iv) Family Support

Some key informants shared that teenage pregnancy comes with numerous demands for the teenage mother such as providing round the clock care to her child. As a result, teenagers despaired, became lonely and experienced feelings of helplessness. Family support comes handy to the teen mother by supporting her in caring for her child while she returns to school.

> *"Our school system now allows girls to return to school after delivering their babies. Girls who have close family members who are able to look after their child are able to continue with school."* (Teacher)

One in-depth interview participant shared how family acceptance and encouragement helped her to approach motherhood with optimism.

> *"My parents were very disappointed when I fell pregnant. For a couple of weeks, my communication with them was negatively affected. However, they eventually came around and began to support with the baby's needs' such as foods and clothes. This helped me to forgive myself for my mistake and started focusing on raising my child."*

(v) School Support

Some key informants identified schools as one of the structures that provided support to pregnant girls and teenage mothers by allowing them to continue with their school and provided guidance and counselling to help them focus on their studies while ensuring that subsequent pregnancies do not occur. However, some of them felt that while the education system in Zambia allowed girls who fell pregnant to return to school after delivery babies, some school environments were hostile to the teen mothers as they were teased and ridiculed

by their peers and some teachers for having babies while still in school.

> *"In some instances, girls are mocked by both teachers and students for being mothers and this discourages them to continue with school* (NGO staff)

One in-depth interview participant shared how she lost most of her friends when she returned to school after having her baby as she was considered a mother and that she was viewed as 'bad company.'

"I lost nearly all my friends when I got back to school after giving birth…they said they could not have a mother in their group."

(vi)Church Support

One key informant identified faith-based organisations and church structures as playing a role in supporting young people by giving them hope and love as they dealt with the challenges of motherhood. However, another key informant felt that while the church was expected to embrace everyone, sometimes there was intolerant of young women who fell pregnant as these were viewed has having sinned and gone against the will of God.

> "*The church's role is to give hope and encouragement...and not to condemn. Therefore, girls who fall pregnant should not be judged but shown love and acceptance."*

One in-depth interview participant recollected how the church council asked her to stop singing in the church choir when she became pregnant.

"When I became pregnancy, the church asked to stop signing in the church choir. Because everyone was talking about me, I stayed away from church and didn't return there until many months after my son was born."

V. Conclusion

The findings from this exploratory study clearly indicate an interplay of economic, social and cultural factors associated with teenage pregnancy. Teenage pregnancy is closely linked to poverty, pressure influence and substance, and the absence of open child-parent dialogues on issues of sexuality and sex risk reduction. Other factors include traditional beliefs and practices that expose teenagers to age-inappropriate messages on sexual matters and the absence of youth friendly health services are challenges that undermine the accessibly and utilization of conventional methods of conception.

While structures that support pregnant teenagers and pregnant mothers exist, they are not easily accessibility to pregnant teenagers and teenage mothers. And in many instances, the quality of the services offered do not meet the expectations of this target group. Some public health facilities do not have adequate youth friendly infrastructure and services need to effectively delivery youth health services, and community groups such as SMAGS have beneficial interventions for mothers but are inactive. Non-governmental organizations are a key provider of services that address the needs of teenage mothers. However, these organizations can only support a limited number of girls because of inadequate funding and limited human resource.

Teenage pregnancy being a multi-faceted phenomenon requires a multi-disciplinary and coordinated response. There is need to strengthen structures that support pregnant teenagers and teenage mothers in order to enable them cope with the demands of motherhood as well as support them to progress in life. Further research is required to establish the perceptions of men and adolescent boys regarding teenage pregnancy and the role they can play to prevent it as well as support pregnant teenagers and teenage mothers.

VI. Recommendations

Following the key findings of the study, it is clear that teenage pregnancy is a phenomenon requiring the involvement of various stakeholders and the delivery of different interventions, some of them include the following:

a. School-based Sexuality Programmes

This study recommends the enhancement of school-based sexuality education as one of the strategies to address teenage pregnancy. Age appropriate sexuality education that is scientifically proven should be introduced early enough in a young person's life before they reach the age of sexual initial, which is around 12 years. Sexuality education programmes that provide options for teenagers such as abstinence and guidance on the use of condoms and other forms of conception have proved successful.

The Government of the republic of Zambia through the Ministry of Education, Science, Vocational Training and Early Education has included school-based sexuality education in school curriculum at all levels of the education in order to teach young people positive attitudes regarding reproductive health and sexuality and life skills such as relationship building (MESVTE, 2013). These skills will enable young people to deal with day-to-day pressures of teenage life such as peer pressure, which leads to pregnancy. Additionally, teenagers will learn to value themselves and their lives, and this can lead to delay of sexual activity.

Schools must devise strategies of preventing mockery, stigma and ridicule from peers and learners which prevent teenage mothers from accessing education after delivering their babies. In support of education advancement for teenage mothers, schools should be friendlier to encourage them to continue with school.

b. Youth Friendly Health Services

The government through the Ministry of Health should scale up youth friendly services, which are provided by trained and non-judgmental health care providers so as to encourage young people to access the services which include family planning services, STI screening and HIV testing should be delivered in privacy and confidence, and at times convenient to young people. The easier it is for teenagers to access these services, the more likely new and subsequent teenage pregnancies will be curtailed.

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c. Youth Development Programmes

There is need for the introduction of youth development programmes to help young people shape their future through activities such as community volunteer work or internship programmes, apprenticeship, support groups and recreational activities. Such programmes are important to develop education and career goals for adolescents. When young people acquire values and skills to pursue educational aspirations and the development of a positive self-concept, they are likely to avoid risky behaviour because they tend to value their lives. This concurs with the findings of Fletcher et al (2008) that interventions for youth which encourage positive career prospects, vocational preparedness and self-esteem building through vocational and life-skills education, volunteer and work experience reduce the incidence of adolescent pregnancy.

d. Recreational and Extra-Curricular Activities

Youth recreational activities in communities such as sports are required to compliment the school-based pregnancy prevention initiatives to help youths to have self-discipline. Apart from that, engaging in out-door supervised activities limits the youth's free time which they can easily utilize wrongly by patronizing drinking places, abuse drugs and engage in sexual activity.

e. Community Programmes

Churches and non-governmental organizations should introduce programmes that bring both parents and their children together to promote open and free discussion on sexual and reproductive health. Through such programmes, parents should be encouraged to share their own sexual expectations and values and be role models to their children. Strong family bonds are important in supporting teenage mothers to handle the many demands that come with motherhood. Family acceptance is important in helping teenage mothers to deal with motherhood with enthusiasm. Counseling talks on child care and facilitation of income generating activities for youths who have not proceeded with school due to pregnancy are among services that the church and non-government organisations should provide to teenage mothers.

Religious youth programmes should be introduced or enhanced to develop strong moral character among teenagers and help them build a network of friends who provide social support in upholding safe sexual behaviour such as abstinence. This too, will minimize the amount of unsupervised time teenagers have when they are away from school. As seen from this study and many others conducted, pregnant teenagers and teenage mothers often experience frustrations, loneliness and despair arising from huge demands and responsibilities that come along with motherhood. These girls also experience lack of acceptance from peers and other people close to them. Therefore, the church should act as channel of hope by being more receptive to these girls even though they have committed an act outside of godly principles.

REFERENCES

[1] Acharya, et al. (2010) Factors Associated with Teenage Pregnancy in South Asia: a systematic review. *Health Science Journal*, (1): 3-14. African perspective. Cape Town: Juta.

[2] Agarwal, A. (2006). Teenage Pregnancy – 7 Traumatic Effects of Teenage Pregnancy! Available at: http://ezinearticles.com/?Teenage-Pregnancy---7-Traumatic-Effects-Of-Teenage-Pregnancy!&id=938637 [accessed on 01/11/2020].

[3] Anand, P & Kahn, L.B. (2013). The effect of teen pregnancy on siblings' sexual behaviour. [accessed on 02/09/2021]. Available at: http://som.yale.edu/sites/default/files/files/Siblings_4_18_13(1).pdf

[4] Barnová, S., & Gabrhelová, G. (2017). Resilience in Schools. Karlsruhe: Ste-Com, GmbH.

[5] Beier, S.R., Rosenfeld, W.D., Spitalney, K.C., Zansky, S.M. & Bontempo, A.N. 2000. 'The potential role of an adult mentor in influencing high-risk behaviours in adolescents', Archives of Pediatric and Adolescent Medicine, vol. 154, pp 327–331.

[6] Bezuidenhout, F.J. (2009) A reader of selected social issues, Third Edition. Emotional Development of Adolescents. Pretoria: Van Schaik.

[7] Bhana, D., Morrell, R., Shefer, T. & Ngabaza, S. (2010) South African teachers' responses to teenage pregnancy and teenage mothers in schools, Culture, Health & Sexuality: An International Journal for Research, Intervention and Care, 12:8, 871-883. [accessed on 17/12/2020]. Available at: http://dx.doi.org/10.1080/13691058.2010.500398

[8] Bless, C. & Higson-Smith, C. 1995. Fundamentals of social research methods: an African perspective. Cape Town: Juta.

[9] Blum, R. (2013). John Hopkins Bloomberg School of Public Health. A Global Look at Adolescent Pregnancy Prevention: Strategies for Success. In: Office of Adolescent Health, ed. Webcast. Washington, DC: US Department of Health and Human Services.

[10] Boden, J.M., Fergusson, D.M. & John Horwood, L. (2008). Early motherhood and subsequent life outcomes. Journal of Child Psychology & Psychiatry & Allied Disciplines, 49(2), 151-60.

[11] Botting, B., Rosato, M & Wood, R. (1998). *Teenage mothers and the health of their children.* Population Trends 93: 19-28.

[12] Boyce, C. & Neale, P. (2006). Conducting In-depth Interviews: A guide for design and conducting in-depth interviews for evaluation input. Pathfinder International.

[13] Brace, A.M., Hall, M., Hunt, B.P. (2008). Social, Economic and Health Costs of Unintended Teen Pregnancy: The Circle of Care Intervention Program in Troup County, Georgia*:* [accessed on 04/11/2020]. Available at: http://faculty.mercer.edu/thomas_bm/documents/jgpha/documents/Archive/Hunt,%20Econimics%20of%20Pregnancy%202008.pdf

[14] Bryman, A. (2011). Social Research Methods. Oxford: Oxford University Press.

[15] Campaign to Prevent Teen Pregnancy: Washington D.C: ISBN

[16] Brindis, C.D., Sattley, D., Mamo, L. (2005). From Theory to Action: Frameworks for

[17] Implementing Community-Wide Adolescent Pregnancy Prevention Strategies. San Francisco, CA: University of California, San Francisco, Bixby Center for Reproductive Health Research & Policy, Department of Obstetrics, Gynecology & Reproductive Sciences, and the Institute for Health Policy Studies. [accessed on 17/11/2020]. Available at: http://crhrp.ucsf.edu/

[18] Central Statistical Office (CSO) [Zambia], Ministry of Health (MOH) [Zambia], and ICF International. (2014). Zambia Demographic and Health Survey 2013-14. Rockville, Maryland, USA: Central Statistical Office, Ministry of Health, and ICF International.

[19] Central Statistical Office (CSO), Zambia. (2010). Census of population & housing. Central Statistical Office. Lusaka: Government Printers.

[20] Centre for Diseases Control (CDC). (2011). Teen pregnancy: Improving the lives of young people and strengthening communities by reducing teen pregnancy. [accessed on 03/02/2021]. Available at: http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2011/teen-pregnancy-aag-2011_508.pdf

[21] Centre for Health & Gender Equity. (2012). Busting the Myth: 20,000 Paper Dolls Say We Want Female Condoms. [accessed on 01/12/2020]. Available at:

http://www.genderhealth.org/files/uploads/Paper_Dolls_Press_Release.pdf
[22] Chang'ach, J.K. (2012) Impact of Teenage Pregnancy on the Education of the Girl-Child: A Care Study of Keiyo South District. Keiyo-Marakwet Country, KENYA. *International Journal of Social Science Tomorrow* (1): 1-8.
[23] Cherry, A. (2014). Biological Determinants and Influences Affecting Adolescent Pregnancy. 10.1007/978-1-4899-8026-7_2.
[24] Chilangwa, B. (1994) Girl Child Education. Pilot Project. Lusaka: Zambia Educational Publishers.
[25] Christiansen, C.S., Gibbs, S., & Chandra-Mouli, V. (2013). Preventing early pregnancy and pregnancy-related mortality and morbidity in adolescents in developing countries: the place of interventions in the pre-pregnancy period. J Pregnancy. [accessed on 02/04/2021]. Available at: https://doi.org/10.1155/2013/257546
[26] Collins, K.J., Du Plooy, G.M., Grobbelaar, M.M., Puttergill, C.H., Blanche Terre, M.J., Van Eeden, R., Van Rensburg, G.H., Wigston, D.J. (2000). Only Study Guide for RSC2001-H. University of South Africa. Pretoria.
[27] Cooley, M.L., & Unger, D.G. (1991). The role of family support in determining developmental outcomes in children of teen mothers. Child Psychiatry and Human Development, 21(3), 217-234.
[28] Darroch, J., Woog V., Bankole A., & Ashford, L.S. (2016). Adding it up: Costs and benefits of meeting the contraceptive needs of adolescents. New York: Guttmacher Institute.
[29] Department of Social Development, South African Social Security Agency & United Nations Children's Fund. (2012). The South African Child Support Grant Impact Assessment: Evidence from a survey of children, adolescents and their households. [accessed 11/12/2020]. Available at: https://www.unicef.org/evaldatabase/files/CSG_QUANTITATIVE_STUDY_FULL_REPORT_2012.pdf
[30] Development Services Group, Inc. (2013). Protective Factors for In-Risk Populations Served by the Administration on Children, Youth, and Families. [accessed on 03/05/2020]. Available at: https://dsgonline.com/wp-content/uploads/2019/06/DSG-Protective-Factors-Literature-Review-2013-Exec-Summary.pdf
[31] Dolores, C.T. (2007). Purposive Sampling as a tool for informant selection. Department of Botany, University of Hawaii at Manoa, USA.
[32] Elo, S. & Kynga, S. H. (2008). The qualitative content analysis process. Journal of Advanced Nursing 62 (1): 107–115. [accessed 12/01/12]. Available at: http://academic.csuohio.edu/kneuendorf/c63309/ArticlesFromClassMembers/Amy.pdf
[33] Endersbe, J.K. (2000). Teen mothers raising a baby: perspectives on healthy sexuality. Minnesota, Capstone Press.
[34] Ermisch, J. & Pevalin, D. (2003). Who has a child as a teenager? ISER working paper 2003-30. Colchester: Institute for Social and Economic Research, University of Essex.
[35] Feldman, R.S. (2006). Understanding Psychology. McGraw Hill Independent Advisory Group Teenage Pregnancy: First Annual Report (2000) Department of Health. Crown Copyright.
[36] Finlay, A., Shaw, N., Whittington, D., & McWilliams, M. (1995). Adolescent reproductive behaviour in the western board area. Report published by the Western Health and Social Services Board (NI).
[37] Flanagan, P., Coll, C., Andreozzi, L., & Riggs, S. (1995). Predicting Maltreatment of Children of Teen Mothers. Pediatrics & Adolescent Medicine, *149*, 451-455.
[38] Forum for African Women Educationalists in Zambia (FAWEZA). (2010). National Score Card on Zambia's Progress towards gender equality [accessed on 10/11/2020]. Available at: http://faweza.org.zm/index.php?option=com_docman&task=cat_view&gid=38&Itemid=59&limitstart=5
[39] Franzetta, K., Terry-Humen, E., Manlove, J., & Ikramullah, E. (2006). Trends and recent estimates: Contraceptive use among U.S. teens. Child Trends Research Brief, *2006-04*, 1-7.
[40] George, R. M., & Lee, B.J. (1997). Abuse and neglect of the children. In R. Maynard (Ed.), Kids having kids (pp. 205-230). Washington, DC: The Urban Institute Press.
[41] Goicolea, I. (2010). Amazon Basin of Ecuador: a rights and gender approach to adolescents' sexual and reproductive health. Global Health Action 2010, 3: 5280 - DOI: 10.3402/gha.v3i0.5280. [accessed on 29/05/2012]. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2893010/pdf/GHA-3-5280.pdf
[42] Gold, M.A., Sheftel, A.V., Chiappetta, L., Young, A.J., Zuckoff, A., DiClemente, C.C. & Primack, B.A. (2010). Associations between religiosity and sexual and contraceptive behaviors. Journal of Pediatric & Adolescent Gynecology. 23(5): 290- 297.
[43] Goldstein, H. (1997). Victors or victims? In D. Saleebey (Ed.), The strengths perspective in social work practice (2nd ed., pp. 21-36). New York City, NY: Longman.
[44] Gonçalves, H., Souza, A. D., Tavares, P. A., Cruz, Suélen, H. & Béhague D.P. (2011). Contraceptive medicalisation, fear of infertility and teenage pregnancy in Brazil, Culture, Health & Sexuality: An International Journal for Research, Intervention and Care, 13:2, 201-215. [accessed on 17/02/2021]. Available at: http://dx.doi.org/10.1080/13691058.2010.521576
[45] Haveman, R, Wolfe, B., & Peterson, E. (1997). Children of early child bearers as young adults. In R. Maynard (Ed.), Kids having kids (pp.257-284). Washington, DC.: The Urban Institute Press.
[46] Hayward, G. (2011). Teenage Pregnancy and Its Health Implications. [accessed on 10/02/2021]. Available at: http://www.ijphr.ukm.my/Manuscript/special%20issue%202011_15.pdf
[47] Hoffman, S.D. (2006). By the numbers: The public costs of teen childbearing. National
[48] Campaign to Prevent Teen Pregnancy: Washington, D.C.
[49] Holcombe, E., Peterson, K.K. & Manlove, J. (2009). Ten Reasons to Still Keep the Focus on Teen Childbearing. Child Trends.
[50] Holgate, H.S., Evans, R. & Yuen, F.K.O. (2006). Teenage Pregnancy and Parenthood: Global Perspectives, issues and Interventions. London and New York: Routledge.
[51] Irvine, H., Bradley, T., Cupples, M. & Booham, M. (1997). The Implications of Teenage Pregnancy and Motherhood for Primary Health Care: Unresolved issues. The British Journal of General Practice, 47 (418): 323-326.
[52] Iyanda, A.E., Dinkins, B.J., Osayomi, T., Adeusi, T.J., Lu, Y., & Oppong, J.R. (2020). Fertility Knowledge, Contraceptive use and unintentional pregnancy in 29 countries: a cross-sectional study. International Journal of Public Health (2020) 65:445–455
[53] Jewkes, R. & Christofides, N. (2008). Adolescent pregnancy: Rethinking prevention. Keynote address, 5thYouth Policy Initiative Roundtable: Adolescent Pregnancy. Pretoria. Human Sciences Research Council.
[54] Johns, B., Nikita, B., Alison, C & Slavea, C. (2014). Impact of Safe Motherhood Action Groups on Use of Maternal Health Care in Zambia. Bethesda, MD: Zambia Integrated Systems Strengthening Project, Abt Associates Inc.
[55] Kabede, D., Alem, A., Mitike, G., Enguselassie, F., Berhane, F., Abebe, Y., Ayele, R., Lemma, W., Assefu, T. & Gebremichael, T. (2005). Khat and alcohol use and risky sex behaviour among in-school and out of school youth in Ethiopia. BMC Public Health 5, 109.
[56] Kalil, A., Spencer, M.S., Speiker, S.J. & Gilchrist, L.D. (1998). Effects of grandmother co-residence and quality of family relationships on depressive symptoms in adolescent mothers. *Family Relations 47*(4), 443-441
[57] Kanku, T., & Mash, R. (2010). Attitudes, perceptions and understanding amongst teenagers regarding teenage pregnancy, sexuality and contraception in Taung. South African Family Practice, 52(6)
[58] Kaplan, C. P., Turner, S., Norman, E., & Stillson, K. (1996). Promoting resilience strategies: A modified consultation model. Social Work in Education, 18(3), 158- 168.
[59] Kearney, C.A. (2008). School absenteeism and school refusal behaviour in youth: A contemporary review. Clinical Psychology Review 28 (2008): 451-471.
[60] Klavs, I., Rodrigues, L.C., Weiss, H.A. & Hayes, R. (2006). Factors associated with early sexual debut in Slovenia: results of a general population survey. Sexually Transmitted Infection 82, 478-483.
[61] Lee, L.K., Chen, P.C., Lee, K.K., & Kaur, J. (2006). Premarital sexual intercourse among adolescents in Malaysia: a cross sectional Malaysian school survey. Singapore Medical Journal 47, 476-481.

[62] Lemos. G. (2009). Freedom's Consequences. Reducing teenage pregnancy and their negative effects in the UK. London. Lemos & Crane.
[63] Liao, T. (2003). Mental health, teenage motherhood, and age at first birth among British women in the 1990s. ISER working paper 2003-33. Colchester: Institute for Social and Economic Research, University of Essex.
[64] Liping, W. (2010). A survey on the knowledge, attitude and behaviour regarding contraception use among pregnant teenagers in Beijing, China. Clinical Nursing Research 201 19:403 DOI: 10.1177/1054773810375982. [accessed on 29/05/2012]. Available at: http://cnr.sagepub.com/content/19/4/403
[65] Macleod, C. (2011). "Adolescence", Pregnancy and Abortion: Constructing a Threat of Degeneration. New York: Routledge.
[66] Malhotra, S. (2008). Impact of Sexual Revolution: Consequences of Risky Sexual Behaviours. Journal of American Physicians and Surgeons, 13 (3): 88-90.
[67] Manlove, J., Logan, C., Moore, K.A. & Ikramullah, E. (2008). Pathways from family religiosity to adolescent sexual activity and contraceptive use. Perspectives on Sexual and Reproductive Health. 40(2): 105-117.
[68] Marule, M. (2008). By the Numbers: The Public Cost of Teen Childbearing. National Campaign to Prevent Teen Pregnancy. United States of America: Brooks/Cole publishers.
[69] McMillan, J.H. & Schumacher, S. (2006). Sixth Edition. Research in Education: Evidence-Based Inquiry. USA: Pearson Education, Inc.
[70] Measure Evaluation. (2006). Priorities for local AIDS control efforts (PLACE) in Zambia: Identifying Gaps in HIV Prevention in Mongu, Western Province.
[71] Ministry of Education, Forum for African Women Educationalists of Zambia and United Nations International Children's Education Fund. 2004. Guidelines for the Re-entry Policy. Lusaka: New Horizon Printers.
[72] Ministry of Education, Science, Vocational Training and Early Education, Zambia. 2013. Zambia *Education Curriculum Framework 2013*. Lusaka. Curriculum Development Centre.
[73] Ministry of General Education, Zambia. 2016. Educational Statistical Bulletin: Directorate of Planning and Information. Lusaka.
[74] Ministry of Health, Zambia. (2011). *Adolescent Health Strategic Plan 2011 – 2015*. [accessed on 11/12/2016]. Available at: http://www.mcdmch.gov.zm/sites/default/files/downloads/ADH%20Strategic%20Plan%202011-15.pdf
[75] Mokwena, J.P. (2003). The general health and coping strategies of teen mothers. University of the North, South Africa.
[76] Mouton, J. 2011. How to succeed in your master's and doctoral studies. Pretoria: Van Schaik.
[77] Mpaza, N.D. (2006). Educators' Attitude towards Teenage Pregnancy. University of Zululand, South Africa.
[78] Mwansa, A. (2011). Re-entry to school after giving birth: An evaluation of the process used to design and implementation policy in Zambia. CREATE Pathways to Access. Research Monograph No. 70.
[79] Natalie-Rico, B.A. (2011). Adolescent Mothers and Educational Achievement: The factors Associated with Teenage Pregnancy and the Effects of Pregnancy on Truncated Education. Georgetown University. ProQuest LLC.
[80] O'Leary, V. E. (1998). Strength in the face of adversity: Individual and social thriving. Journal of Social Issues, 54(2), 425-446.
[81] Palatnik, A. & Seidman, S.D. (2012) Survey of opinions of mothers and teenage daughters on sexual behavior and contraception: descriptive study and literature review. International Journal of Women's Health 2012:4 265–270. [accessed on 17/07/2012]. Available at: http://dx.doi.org/10.2147/IJWH.S29731
[82] Palen, L.A., Smith, E.A., Flisher, A.J., Caldwell, L.L. & Mpofu, E. (2006). Substance use and sexual risk behaviour among South African eighth grade students. Journal of Adolescent Health 39, 761-763.
[83] Partners in Population and Development (PPD). (2013). Adolescent pregnancy: status, socio-economic cost, policy and program options for 25 member countries of PPD. PPD Policy Brief on Adolescent Pregnancy.
[84] Perper, K., Peterson, K. & Manlove, J. (2010). Diploma Attachment Among Teen Mothers. Child Trends, Fact Sheet: Washington, DC. [accessed on 08/03/2021]
[85] Available at: http://www.childtrends.org/Files//Child_Trends-2010_01_22_FS_DiplomaAttainment.pdf
[86] Pillitteri, P. S. (2011). School menstrual hygiene management in Malawi: More than toilets. Sanitation and Hygiene Applied Research for Equity. [accessed on 02/04/2021]. Available: http://www.wateraid.org/uk/what_we_do/how_we_work/equity_and_inclusion/10745.asp
[87] Rak, C., & Patterson, L. (1996). Promoting resilience in at-risk children. Journal of Counseling and Development, 74(4), 368-373. [accessed on 03/05/2021] Available at: http://www.valdosta.peachnet.edu/~whuitt/psy702/files/resbuild.html
[88] Rosengrad, C., Pollock, L., Weitzan, S., Meers, A., & Phipps, M.G. (2006). Concepts of the advantages and disadvantages of teenage childbearing among pregnant
[89] adolescents: A qualitative analysis. *Pediatrics*, *118*(2), 503-510.
[90] Rosenthal, M.S., Ross, J.S., Bilodeau, R., Richter, R.S., Palley, J.E. & Bradley, E.H. (2009). Economic evaluation of a comprehensive adolescent pregnancy prevention program: pilot program. *American Journal of Preventive Medicine*. 37(6): 280-287.
[91] Rutter, M. (2012). Resilience as a dynamic concept. Development and Psychopathology, 4, 335- 344. doi: 10.1017/S0954579412000028.
[92] Santelli, J.S & Melnikas, A.J. (2010). "Teen Fertility in Transition: Recent and Historic Trends in the United States." Annual Review of Public Health 2010, vol. 31, pp. 371-383).
[93] Save the Children. (2013). Surviving the first day: State of the World Mother's Report 2013. [accessed on 28/01/2021]. Available at: http://www.savethechildren.org/atf/cf/%7B9def2ebe-10ae-432c-9bd0df91d2eba74a%7D/SOWM-EXECUTIVE-SUMMARY-2013.PDF
[94] Schelar, E., Franzetta, K., & Manlove, J. (2007). Repeat teen childbearing: Differences across states by race and ethnicity. Child Trends Research Brief, *23*, 1-7.
[95] Schilmoeller, G.L., Baranowski, M.D., Higgins, B.S. (199)1. Long-term support and personal adjustment of adolescent and older mothers. Adolescence; 26: 787-797.
[96] Setswe, G., Naudé, M. & Zungu, L. (2011). Basic Community Health Nursing. 2nded. Cape Town: Pearson Education.
[97] Sieving, R.E, Eisenberg, M.E., Petting, S. & Skay, C. (2006). Friends' influence on adolescents' first sexual intercourse. Perspectives on Sexual and Reproductive Health 30, 13-19.
[98] Siziya, S., Muula, A.S., Rudatsikira, E. & Ogwell, A.E. (2007). Prevalence of sexual intercourse among school going adolescents in Coast Province, Kenya. Tanzania Health Research Bulletin; 9(3):159-63.
[99] Sodi, E. (2009). Psychological impact of teenage pregnancy on pregnant teenagers. Polokwane, South Africa. University of Limpopo.
[100] Southern Africa HIV and AIDS Information Dissemination Services (SAfAIDS). (2011). Position Paper on Addressing Adolescent Pregnancy Challenges in Southern Africa in the Era of HIV. [accessed on 03/11/2020]. Available at*:* http://www.safaids.net/content/position-paper-addressing-adolescent-pregnancy-challenges-southern-africa-era-hiv
[101] Solarsh, G.C. & McKerrow, N.H. (2004). Social Paediatrics. In: Coovadia, H.M. & Wittenberg, D.F. (eds). Paediatrics & Child Health. 4th Edition. Cape Town. Oxford University Press.
[102] Solomon-Fears, C. (2013). Teenage pregnancy prevention: statistics and programs. [accessed on 09/03/2021]. Available at: http://www.fas.org/sgp/crs/misc/RS20301.pdf
[103] Ten, V.T.A. (2007). Menstrual Hygiene: A Neglected Condition for the Achievement of Several Millennium Development Goals. Europe External Policy Advisors. [accessed on 03/01/2021]. Available at: http://www.eepa.be/wcm/dmdocuments/BGpaper_Menstrual-Hygiene.pdf
[104] Terry-Humen, E., Manlove, J., & Cottingham, S. (2006). Trends and recent estimates: Sexual activity among U.S. teens. Child Trends Research Brief, 2006-08, 1-8.
[105] Terry-Humen, E., Manlove, J., & Moore, K. (2005). Playing catch-up: How the children of teen mothers fare. National Campaign to Prevent Teen Pregnancy: Washington, DC
[106] Ungar, M. (2013b). The impact of youth-adult relationships on resilience. International Journal of Child, Youth and Family Studies, 4(3), 328-336.

[107] United Nations Children Fund (UNICEF). (2013). UNICEF Annual Report 2013 – Zambia. [accessed on 03/03/2021]. Available at: http://www.unicef.org/about/annualreport/files/Zambia_COAR_2013.pdf
[108] United Nations Population Fund (UNFPA). (2011). Population Dynamics in the Least Developed Countries: Challenges and Opportunities for Development and Poverty Reduction [accessed on 10/03/2021]. Available at https://www.unfpa.org/webdav/site/global/shared/documents/publications/2011/CP51265.pdf
[109] United Nations Population Fund (UNFPA). (2015). Girlhood, not motherhood: Preventing adolescent pregnancy. New York: UNFPA.
[110] Wall-Wieler, E., Roos, L. L., & Nickel, N.C. (2016). Teenage pregnancy: the impact of maternal adolescent childbearing and older sister's teenage pregnancy on a younger sister. BMC Pregnancy and Childbirth (2016) 16:120 DOI 10.1186/s12884-016-0911-2
[111] Whitman, T.L., Borkowski, J.G., Schellenbach, C.J., & Nath, P.S. (1987). Predicting and understanding delay of children of adolescent mothers: A multidisciplinary approach. American Journal of Mental Deficiencies, 90(1), 40-56.
[112] Wolkow, K.W. & Ferguson, H.B. (2001). 'Community factors in the development of resiliency: Considerations and future directions', Community Mental Health Journal, vol. 37, no. 6, pp 489–498.
[113] World Health Organisation (WHO) (2007). Adolescent pregnancy: unmet needs and undone deeds: a review of the literature and programme. [accessed on 10/05/2021]. Available at http://www.who.int/maternal_child_adolescent/documents/discussion/en/index.html
[114] World Health Organization. (2011). Evidence for gender responsive actions to prevent and manage adolescent pregnancy. Copenhagen, Denmark: Author
[115] World Health Organisation (WHO). [2012]. Making health services adolescent friendly: Developing national quality standards for adolescent friendly health services. [accessed on 11/01/2021].Available: http://www.who.int/maternal_child_adolescent/documents/adolescent_friendly_serv ices/en/
[116] World Health Organisation (WHO). (2016). Global health estimates 2015: deaths by cause, age, sex, by country and by region, 2000–2015. Geneva.
[117] Zambia Statistics Agency, Ministry of Health (MOH) Zambia, and ICF. 2019. Zambia Demographic and Health Survey 2018. Lusaka, Zambia, and Rockville, Maryland, USA: Zambia Statistics Agency, Ministry of Health, and ICF.