



TRADITIONAL REVIEW OF HEALTH AND SOCIO-ECONOMIC IMPLICATIONS OF ADOLESCENT MOTHERHOOD

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ABSTRACT: *Adolescence is a vulnerable period with attendant risks of pregnancy and childbirth. Though adolescent motherhood is a global phenomenon, the incidence is more recurrent in the developing nations with inadequate access to maternal care, leading to amplified effects of pregnancy on adolescents. Though there exist fragmented studies on the consequences of adolescent motherhood, there is a need for an up-to-date review that harmonises the known consequences of adolescent motherhood. **Objective:** This review documents empirical pieces of evidence of the consequences of adolescent motherhood, so as to provide a basis for advocacy for targeted interventions, to reduce adolescent pregnancy. **Methods:** Structured searches from electronic databases were conducted. The databases include: PubMed, British Medical Journal online, The Cumulative Index to Nursing and Allied Health Literature (CINAHL) complete, Lancet, Academia and Mendeley. Studies included used the qualitative, quantitative and the mixed-method designs. Peer reviewed articles, uploaded thesis, editorial briefs, policy briefs and commentaries were all included in the search. Studies included were either published in English Language or translated by the journal to English Language. **Findings:** This study included one hundred and four (104) original articles, reviewed literature, commentaries and briefs. It was discovered that many unpalatable experiences and outcomes are associated with adolescent motherhood. These outcomes impact negatively not only on the adolescent mothers and their neonates, but also on their families and the nation at large. Most of these undesirable outcomes affect the health of the mothers and their babies. There are also social and economic consequences of adolescent motherhood. **Conclusion:** This review concluded that many grave consequences are associated with adolescent parenting. It is therefore necessary to advocate for reduction in the incidence of adolescent pregnancy.*

KEYWORDS: Adolescents, Adolescent Motherhood, Adolescent Pregnancy, Maternal Outcomes, Neonatal Outcomes

INTRODUCTION

Adolescents account for about 1.2 billion and 16% of the world population (UNICEF, 2016). Adolescence is a peculiar physical and developmental phase in an individual's life (Fleming, O'Driscoll, Becker, & Spitzer, 2015). According to Lancet Series on Adolescent Health, (2014) "it is a period of significant physical, emotional, and social changes, presenting new health risks as well as unique opportunities for health promotion." It is a vulnerable period with attendant risks of pregnancy and childbirth (UNICEF, 2017). In the global sphere, adolescent birth rate is four times higher in low-income countries than high income countries (UNFPA, 2015) with the highest rates of early childbearing being recorded in the sub-Saharan African countries (UNICEF, 2017). In the developing world, about 17 million adolescent girls give



birth annually (World Health Organisation [WHO] Fact Sheet, 2014). Although adolescents aged 10–19 years account for 11% of all births worldwide, they account for 23% of the overall burden of disease. This is related not just to their ages (Cherry, & Dillon, 2014) but also to their physical and social health status.

Adolescent pregnancy can be defined as the occurrence of pregnancy or gestation in young females within the ages of 10–19 years (Ganchimeg *et al.*, 2014). Pregnancies and child births among adolescent mothers are more dangerous than among adult women (Graphic Online, 2016; WHO, 2016) because adolescent pregnancy is often unprepared for physically, physiologically, socially, psychologically (Tavares, Tavares, Capingana, Da Gama, & Da Silva, 2016) and even otherwise, and according to Chiazor, Ozoya, Idowu, Udume, and Osagide, (2017) outcomes of adolescent pregnancy are usually not favourable for the adolescent girl, her child(ren), their families and consequently, the nation at large. The challenges faced by adolescent mothers are many (Baxter & Moodley, 2015). Problems resulting from pregnancy and childbirth are the foremost reasons for death among adolescent girls (Loaiza & Liang, 2013; Franjić; 2018; WHO, 2019; WHO, 2020) and adolescent pregnancy deters many young persons from making something good out of their lives. This has been described by Ashimolowo *et al.*, (2017) as a “social risk”. Adolescent pregnancy is therefore regarded as a major psychosocial, medical, and economic phenomenon in both developed and developing countries (Oyedele, Wright, & Maja, 2015; Kirchengast, 2016; Arhin, 2017; Nwosu, 2017), though the negative impact is felt more among the developing nations (Patton, *et al.*, 2016).

Empirical evidences from this literature search revealed that closely linked with adolescent parenting are high maternal mortalities (WHO, 2013), perinatal mortalities related to obstructed labour and systemic infections (Ganchimeg *et al.*, 2013), prematurity and low birth weight babies (Tyrberg, Blomberg, & Kjølhed, 2013), mental health challenges (Hodgkinson, *et al.*, 2014; Thompson, *et al.*, 2015; Thompson, 2016), socio-economic challenges as well as inability to accomplish their educational goal, disavowal by loved ones, maltreatment, shortage of social resources, domestic violence, manipulations (UNFPA, 2013; Harrison *et al.*, 2014; WHO, 2018), unemployment, impoverishment (Assini-Meytin & Greene, 2015; Cook & Cameron, 2015; World Bank, 2017) and lower earning capacity which negatively influences future family finances. This article was written so that existing evidences about the consequences of adolescent motherhood may be brought to the fore.

METHODS

Electronic libraries and databases including Google, Google scholar, Cochrane Library, British Medical Journal online, ERIC Institute of Education Sciences, The Cumulative Index to Nursing and Allied Health Literature (CINAHL) complete, Lancet, PubMed, Academia, and Mendeley were searched for relevant data. Qualitative studies, quantitative studies, studies with mixed-method approaches, original articles, meta-analyses, traditional reviews, and systematic reviews were included in the study. The review included peer-reviewed articles, uploaded thesis, editorial briefs, policy briefs, and commentaries. The scope of the review was the impact and/or consequences of adolescent parenthood, with greater emphasis on adolescent motherhood.



The search terms included early motherhood, pregnant adolescent, adolescent pregnancy, pregnant teenager, adolescent motherhood, teenage pregnancy, impacts of adolescent motherhood, impacts of early motherhood, impacts of adolescent parenting, challenges of adolescent motherhood, consequences of adolescent motherhood, effects of adolescent motherhood, and risks associated with adolescent motherhood. Only texts published in English Language or translated to English Language were included in the review. Relevant articles that were initially not included in the list but came out during the reference scan, were specifically searched out on Google scholar and Pub Med by the researcher and included in the review.

Articles included in the review were 10 years old or lesser (2010 to 2020). The results generated by the search engines were evaluated by reading the abstracts and sometimes the references, especially of review publications. Review articles which have their major references older than 10 years were not included in the study, and duplication of a single study from multiple search engines was avoided.

RESULTS

Overall, 104 articles met the inclusion criteria and were subsequently included in the review. The review included original and review articles among different populations, different continents, and countries across the globe including the United States of America, Europe, Columbia, Romania, Thailand, India, Rwanda, Kenya, Ghana, Ethiopia, and Nigeria. The findings were presented and discussed under two main subheadings—health implications of adolescent motherhood and socio-economic implications of adolescent motherhood.

DISCUSSION

Adolescent pregnancy has been fingered as a cause of high rates of maternal and child debility and deaths. It also has adverse impacts on the socio-economic growth of a country (WHO, 2014; World Bank, 2017) and the United Nations submitted that if Sustainable Development Goals (SDG) must be achieved, there must be a decrease in the number of maternal and child deaths arising from adolescent pregnancy (The United Nations General Assembly [UNGA], 2015).

Health Implications of Adolescent Motherhood

Maternal Outcomes

Adolescent pregnancy is a leading public health problem across the globe (Kappeler, 2015). As submitted by Graphic Online, (2016) and WHO, (2016) pregnancies and child births by adolescent mothers are more dangerous than that of adult women. Evidences prove that obstetric risks arising from adolescent pregnancies often lead to health problems or threat which may span the entire lives of both mother and child (Wall-Wieler *et al.*, 2016). Adolescent motherhood often leads to many unfavourable health conditions which include: maternal and child mortality arising from complications during pregnancy and childbirth (WHO, 2016), complications resulting from unsafe abortions (Babayara, 2015; Darroch, Woog, Bankole, & Ashford, 2016), eclampsia, systemic infections (Ganchimeg *et al.*, 2014), and hypertension (Pattinson, Fawcus, & Moodley, 2014). As submitted by Verguet, Nandi, Filippi, and Bundy,



(2016), adolescent mothers of very low socioeconomic status are more susceptible to greater possibility of maternal mortality and as reported by Babayara, (2015) adolescent motherhood can lead to premature death of the girl-child as a result of inadequate access to health care, inadequate self-care, irresponsible behaviour, among other things. According to Muvunyi, (2015) premature death among these set of individuals may also be as a result of increased burden of infectious diseases, such as HIV/AIDS and other sexually transmitted diseases. Furthermore, as revealed by Muvunyi, (2015) adolescent pregnancy is also associated with poor cognitive development because most pregnant adolescents live in social isolation as a result of shame; thus, they are prone to mental health problems like anxiety and depression. There are other consequences of adolescent motherhood:

Anaemia in Pregnancy can result from many causes including micronutrient deficiencies of iron, folate, and vitamins A and B12; parasitic infections such as malaria and hookworm; or chronic infections like tuberculosis and Human Immunodeficiency Virus (McClure *et al.*, 2014; Ononge, Campbell, & Mirembe, 2014; Okube, Mirie, Odhiambo, Sabina, & Habtu, 2016). However, poor dietary intake of iron rich foods is the major risk factor for anaemia among pregnant women in Sub-Saharan Africa (McClure *et al.*, 2014). As reported by Nair and Devi, (2015) a prevalence of 40.7% anaemia among adolescent mothers compared to 20.63% among 20–29-years-old mothers was recorded. This is in congruence with findings by Kawakita *et al.*, (2016) in America, and Narukhutrpicchai, Khрутmuang, and Chattrapiban, (2016) in Thailand who submitted that adolescent mothers had a higher prevalence of anaemia (25%) than older mothers (21.5%). This was also corroborated by Rita, Naik, Desai, and Tungal, (2017) who found a prevalence of 79.2% anaemia among adolescent mothers in India. We can therefore say that adolescent pregnancy predisposes to anaemia.

Other likely obstetric outcomes of adolescent pregnancy are **preeclampsia and eclampsia**. Preeclampsia and eclampsia are known as hypertensive disorders of pregnancy (National Institute of Health [NIH], 2019). As of now, the cause remains unknown (NIH, 2019) but a substantial burden of negative pregnancy outcomes can be credited to them both in the developed as well as low and middle-income countries of the world (Gupte and Wagh, 2014). They are major global risk factors for maternal and perinatal mortality and morbidity (Gupte & Wagh, 2014). Preeclampsia and eclampsia are associated with poor placental perfusion and decreased blood flow to the unborn child, leading to reduced oxygen and nutrient supply to the unborn child (NIH, 2019), causing failure of a number of organs and/or systems in the body. (Gupte & Wagh, 2014). In younger women, preeclampsia and eclampsia are likely to intensify the risk of conditions such as preterm birth, intrauterine growth restriction (IUGR), low birth weight, and hospital admissions to Intensive Care Units (ICUs) (Abalos *et al.*, 2014), and as recorded by Nair and Devi, (2015) preeclampsia was almost three times common among pregnant adolescents (14.87%) than pregnant young adults (5.39%).

A study by Kawakita *et al.*, (2016) revealed a two-fold higher prevalence of preeclampsia among adolescent mothers in America than young adults. In a study conducted by Olaya-Garay *et al.*, (2017) in Neiva, Colombia, about 28.3% of adolescent mothers had preeclampsia as against 3.2% among adult mothers. In Nigeria, Esike *et al.*, (2017) reviewed seven years health records at a hospital in Afikpo. They found the occurrence of eclampsia to be 1.12% or 1 in 89 deliveries; about 11–14.1% of mothers who had eclampsia were 19 years of age and below. This was at par with the submission by Rita *et al.*, (2017) who revealed that a higher prevalence of eclampsia (13.6%) exists among adolescent mothers in India. On the other hand



however, Socolov *et al.*, (2017) reported that among adolescent mothers in Romania, there was no risk of developing preeclampsia or any form of chronic or gestational hypertension.

Adolescent pregnancy could predispose to **infections** (Ganchimeg *et al.*, 2014). Narukhutrpicchai *et al.*, (2016) recorded a higher incidence of condyloma infection among adolescent mothers (1.5%) than older mothers (0.6%) in Thailand. Also, Usynina, Postoev, Odland, and Grjibovski, (2018) noticed a higher prevalence of kidney infections among adolescent mothers (37.5%) compared to 33.9% in non-adolescent mothers, while the prevalence of genital infections among adolescent mothers was higher (24.3%) compared to 16% in non-adolescent mothers.

There are differing opinions as to whether **gestational diabetes** is a possible outcome of adolescent pregnancy. Abbas, Ali, Ali, Fouly, and Altraigey, (2017) in a study conducted at a tertiary hospital in Egypt, reported that adolescent mothers had a higher prevalence of 0.5% compared to 0.3% among adult mothers, but on the contrary, Kawakita *et al.*, (2016) found among American pregnant adolescents that the incidence of gestational diabetes was lower compared with the incidence among pregnant young adults. This was consistent with a report by Narukhutrpicchai *et al.*, (2016) in their study in Thailand, where they mentioned that gestational diabetes was less prevalent among adolescent mothers (0.7%) as against older mothers (3.0%). Karatas, Kanmaz, Hamdi, Budak, and Beyan (2019) also stated that gestational diabetes occurred significantly lesser among adolescent mothers than older women.

Pregnancy among adolescents can result in **depression** and can also result from depression. During adolescence, symptoms of depression related to chronic mental health challenges, poor social and academic outcomes often occur (Patton *et al.*, 2014). Perinatal depression, “which includes minor and major depressive symptoms during pregnancy and the first year post-delivery, is a public health concern because it poses health risks for both the mother and infant” (American College of Obstetricians & Gynecologists, 2015). Corcoran, (2016) emphasised that adolescent pregnancy can lead to negative consequences such as depression.

In Africa, according Biratu and Demewoz, (2015) the occurrence of antenatal depression in Ethiopia was estimated to be about 24.94%. In Nairobi, Kenya, about 18% had antepartum depression (Ongeri, Otieno, Mbui, Juma, & Mathai 2016). Again, in Nairobi, Kenya, Osok, Kigamwa, Vander Stoep, Huang, and Kumar (2018) reported that about 32.5% of adolescent girls had symptoms of clinically elevated depression and about 15.9% experienced severe depressive symptoms. The reported situation in Nigeria by Adekanle, Adebayo, Fasanu, and Abidoeye (2015) was worse. It revealed that all (100%) pregnant adolescents in their study conducted in Osogbo experienced depression compared to 42% of pregnant adult women.

From another perspective, a number of causes have been identified as responsible for adolescent pregnancy, one of them being depression (Vladutiu, Evenson, Borodulin, Deng, & Dole, 2014). According to James-Hawkins, Denardo, Blalock, and Mollborn, (2014) they discovered among adolescent females and males from the United States of America that people with depression had higher chances of unplanned childbirths. James-Hawkins *et al.*, (2014) expressed that even though many of the childbirths stated in their study did not occur during the participants’ adolescence, the results of the study revealed that depression is a major risk factor for early and unplanned pregnancy. This was also confirmed by Corcoran, (2016) who reported that depression increases young women’s vulnerability to unplanned pregnancy.



Suicide and Suicide Ideation: According to the World Health Organization (2019), about 800,000 persons take their own lives yearly. As expressed by Wilson-Mitchell *et al.*, (2014) about 23% of pregnant adolescents in Jamaica experienced psychological distress and suicidal thoughts. In Northeast Ohio, Fletcher, Markley, Nelson, Crane, and Fitzgibbon, (2015) reported that more than half (61.1%) of the pregnant adolescents contemplated suicide as a result of their pregnancy. This was corroborated by Gelaye, Kajeepeta, and Williams, (2016) who reported that antepartum suicidal ideation from a number of studies ranged from 3% to 33% with the highest occurrence from the United States (23–33%). Also in Edinburgh, it was discovered that younger mothers were more prone and susceptible to antepartum suicidal ideation than the older women (Kim *et al.*, 2015). This was supported by Madigan, Vaillancourt, McKibbin, and Benoit, (2015) and Corcoran, (2016) and also in agreement with Gelaye *et al.*'s, (2016) submission who argued that maternal age impacts on the prevalence of antepartum suicidal ideation among pregnant women. Overall, according to Harrison, Weinstangel, Dalziel, and Moreau, (2014) and Hodgkinson *et al.*, (2014) adolescent mothers are likely to experience higher levels of mental health challenges than adult females (44% to 16%), some of which include antenatal and postpartum depression, post-traumatic stress disorder, anxiety, and drug abuse.

Neonatal Outcomes

Neonates of adolescent mothers are highly susceptible to prenatal death, premature delivery, low birth weight, and other early life disease conditions (Black, Fleming, & Rome, 2012; Ganchimeg *et al.*, 2013; Marvin-Dowle, Kilner, Burley, & Soltani, 2018; WHO, 2016). Also, there is a higher risk of growth and developmental challenges such as cognitive, speech, and language delays for children born to adolescent mothers (Morinis, Carson, & Quigley, 2013).

Preterm Births leading to infant mortality commonly results from adolescent pregnancy (Alouini, Randriambololona, & Randriamboavonjy, 2015; Socolov *et al.*, 2017). Prematurity in neonates refers to a child being born before the 37th week of pregnancy. These children are usually “small for gestational age” which leads to Low Birth Weight (LBW) babies and consequently, infant mortality. Many a time, children of adolescent mothers who survive preterm births may experience some form of disabilities such as learning incapacities, visual and hearing impairments all through their lifetime (WHO, 2019).

In Nigeria, Takai, Bukar, and Audu, (2014) reported a prevalence of 30.3% among adolescent mothers in their study in Maiduguri. This was significantly higher than that of the women aged 35 and above (10.7%). Also in Nigeria, using the 2013 Nigeria Demographic Health Survey, Dahlui, Azahar, Oche, and Aziz, (2016) estimated a prevalence of 11.5% preterm births among mothers aged 15–24 years, which was higher than the 7.8% and 7.2% estimated among mothers aged 25–34 years and 35–49 years respectively. This was in tandem with findings from a study conducted at a teaching hospital in Ghana by Anyikam *et al.*, (2016) who reported a prevalence of 20.6% preterm births by adolescent mothers. Also, as reported by Narukhutrpicchai *et al.*, (2016) in Thailand, a prevalence rate of 16.2% was noticed among adolescent mothers, as against 5.5% by non-adolescent mothers. A similar situation was noticed in Northern England. It was reported that the prevalence of preterm delivery at less than 37 weeks, less than 32 weeks, and less than 28 weeks were 6.9%, 2.0%, and 0.7% respectively by adolescent mothers (Marvin-Dowle *et al.*, 2018).



Stillbirth and loss of child after birth: As defined by World Health Organization, (2019) stillbirth occurs when child is born with no signs of life at or after 28 weeks of gestation. World Health Organization (2016) submitted that when compared with children of older mothers, there is a 50% rise of stillbirths and neonatal mortalities among adolescent mothers. Although as reported by Waldenstrom *et al.*, (2015) it is not clear specifically whether the increased numbers of stillbirths among adolescent mothers is due to their young maternal age, being pregnant for the first time or an amalgamation of both, worthy of note however is the fact that women who do not become pregnant by choice are more likely to record stillbirths.

As reported in a Southern Nigerian study, stillbirth and neonatal fatality rate was 0.6% (Omo-Aghoja, Onohwakpor, Adeyinka, & Omene, 2014). In Northern Ghana, more adolescent girls (8.9%) experienced stillbirth compared to older women (6.3%) and adolescent girls were 1.44 times more likely to experience stillbirths than older women (Yussif, Lassey, Ganyaglo, Kantelhardt, & Kielstein, 2017). In the same study, greater number of adolescent mothers (7%) experienced neonatal mortality within 6 weeks post-delivery as against 5.4% adult women. However, a different case was reported by Kassa *et al.*, (2019) in North West Ethiopia. In this place, a lower neonatal mortality (0.8%) was recorded among adolescent mothers than among older mothers (2%).

Low Birth Weight (LBW) is also a possible outcome for neonates of adolescent mothers. It has been verified that low socioeconomic status which is usually prevalent among pregnant adolescents can lead to low-birth-weight babies among adolescents (Bihoun *et al.*, 2017; Coley *et al.*, 2016; Johnson, Abraham, Stephenson, & Jehangir, 2016; Manyeh *et al.*, 2016; Amjad *et al.*, 2018). A report by Traisrisilp, Jaiprom, Luewan, and Tongsong (2015) revealed an association between maternal age and low birth weight babies; as also discovered by Goisis, Remes, Barclay, Martikainen, and Myrskylä, (2017) in Finland, maternal age is significantly associated with child birth weight and mothers with decreased maternal age (less than 20 years of age) have a lot of low-birth-weight babies (<2500g). This was also validated by Marvin-Dowle *et al.*, (2018). They submitted that in Northern England, adolescent mothers experienced low birth weight deliveries of 9.3%, very low birth weight of 1.6%, and extremely low birth weight of 1.1% among their deliveries.

Congenital Malformations: As reported by Abbas *et al.*, (2017) a higher prevalence of congenital malformations was noticed among children born by adolescents (2.0%) when compared with adult mothers (0.5%).

Socio-Economic Implications of Adolescent Motherhood

According to Muvunyi, (2015) increase in population and overall fertility rate is associated with adolescent parenthood, constituting social problems such as population explosion, overcharged health facilities, over-subscribed education facilities, increased pressure on land, high unemployment rate, increased social dependency, parents' relationship break down, and lower self-esteem.

Adolescent mothers are prone to **living in poverty** and they are usually more dependent on welfare programmes than adult mothers because of under-empowerment or lack of job (Martorell, 2015; Muvunyi, 2015). Impecuniosity and adolescent pregnancy are interconnected with increased birth rates connected to smaller incomes. A study in the United States revealed that about 63% of adolescent mothers benefitted from public assistance or welfare within the



first year of childbirth and even overall, about 52% of mothers on welfare reportedly had their first child in their adolescent years (National Conference on State Legislatures, 2018). Also, about 78% of the progenies of unmarried adolescent mothers did not complete high school and were poorer than the federal poverty average (Ratcliffe & Kalish, 2017).

Early pregnancy **hinders the chances of getting formal education** among adolescent girls because absence of motherhood experience, increased responsibilities for self and child-care, poor health status, and inadequate assistance faced by adolescent mothers often lead to dwindled study hours (Gyan, 2013). Empirical evidences suggest that adolescent motherhood predisposes to academic failure. In a study by Winnie, (2012) it was discovered in Embu municipality, Kenya that adolescents drop out of school as a result of unsatisfactory academic performances directly related to adolescent pregnancy. Also, Babayara, (2015) from a study in Kintampo municipality of Ghana confirmed that adolescent pregnancy predisposes young girls to poor academic performance and eventual drop out from school. This was corroborated by Edwards and Friko, (2015) who found out that the situation was the same in Northern Ghana. This was in agreement with findings by Muvunyi, (2015) among Rwanda adolescents in their rural communities. Pregnant adolescents spend most of their time taking care of themselves and their children and as such, have lesser time for educational activities (Kumar *et al.*, 2018; Maemeko, Nkengbeza, & Chokomosi, 2018). This results into inability to cope with academic demand and poor academic performance, (Maemeko *et al.*, 2018) ultimately resulting in adolescents' school dropout and only a few return after childbirth (Gyan, 2013; Assini-Meytin & Greene, 2015; Baxter & Moodley, 2015; Martorell, 2015) because of stigmatisation and shame (Gyan, 2013; Chumbler *et al.*, 2014). Overall, lower educational attainment and lower skill base of adolescent mothers adversely affects them by reducing their economic chances for good income in the future (Muvunyi, 2015; National Conference on State Legislatures, 2018). In another vein, pregnant adolescents drop out of school and usually do not return post-delivery because their teachers and peers discriminate against them (Onyeka, Miettola, Llika, & Vaskilampi, 2011; Uromi, 2014; Barmao-Kiptanui, Kindiki, & Lelan, 2015).

CONCLUSION

Empirical evidences revealed that adolescent motherhood has so many negative outcomes associated with it. These outcomes are negative indicators for the achievement of the Sustainable Development Goal (SDG) 3 because of the high number of maternal and child deaths arising from adolescent pregnancy and its ripple effects on personal, family, and national economic growth.

RECOMMENDATION

This review has brought to the fore many maternal and neonatal outcomes of adolescent pregnancy. This should form a basis for developing sustainable strategies and programs that will work to reduce adolescent pregnancy resulting from violence (rape, child marriage, etc) by the nation. Such strategies may include setting up functional adolescent reproductive health centres, imposing great punishment on people who violate adolescents and making available alternative product resources to which adolescents can divert their energies. In another vein, it is important to keep giving information and education adolescents on the consequences of



adolescent motherhood so as to dissuade them from negative behaviour that may lead to unwanted pregnancies.

Finally, since this review did not include infant outcome, it is recommended that further reviews be done to find out documented evidences of how children of adolescent mothers fare beyond the neonatal period.

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