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Factors influencing high dropout rates of girl child from education: A case study of black women in North West Province, South Africa

Mhele Karabo[1] & Ayiga Natal[2]

Abstract

Progress in education of the girl child in sub-Saharan Africa in general and South Africa in particular has been impeded by the high rates of school dropout, which occurrence has implications for the attainment of the MDGs, particularly eradication of extreme poverty and hunger, improving the health of children and mothers, achieving gender equality and empowerment of women, curbing the spread of HIV and AIDS and other diseases and improving environmental sustainability. The objectives of the study were to assess the magnitude of school dropout and identify factors influencing this tendency in the North West province. The study used event history data on 582 women collected by use of the cross-sectional research design. It found that school dropout rates are significantly influenced by factors that include high rates of school pregnancies, low grades at a high age, low educational attainment of mothers and a young age at first sexual intercourse. The paper recommends greater emphasis of sexual abstinence through school based programmes, zero tolerance to sexual crimes involving minors by raising the age threshold for such crimes, reducing over-age enrolments and adoption of flexible schooling systems to accommodate pregnant and student mothers.

Keywords:

Education, girl child, South Africa, pregnancy, MDGs, drop out

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Introduction

Sub-Saharan African countries have made progress in increasing access to education for both the girl and the boy child over the last three decades. However, progress continues to be eroded by the high school dropout rates, a development which has been identified as one of the main challenges impeding the attainment of the Millennium Development Goal (MDG) of universal primary education and increasing the rate of secondary education participation in this world region (UNESCO, UNICEF & Save the Children, 2010). The consequences of this failure has much wider ramifications on other MDGs that are directly influenced by educational attainment including eradication of extreme poverty and hunger (De-Muro and Burchi, 2007); reducing childhood mortality (Schultz, 1993; Malhotra and Schuler, 2005); improving maternal health (United Nations, 2001); achieving gender equality and empowerment of women (Lazo, 1995; Dighe, 1995); and curbing the spread of HIV/ AIDS and its impacts (UNESCO, UNICEF & Save the Children, 2010). This challenge has affected more girls than boys (Holmes, 2003). However, addressing the problem of school dropout for girls continues to be a daunting task in many countries, particularly in this world region.

Previous studies have identified a number of interrelated factors in different country settings for the disproportionately higher school dropout rate for the girl child including individual student, cultural, household and school factors. Individual pupil factors such as poor health, lack of motivation, poor nutrition (Hunt, 2008; Glewwe & Jacoby, 1995) and early initiation of sexual activity, pregnancy and child bearing, have been identified by previous studies as major contributors to the dropout of girls from school (Cardoso & Verner, 2007; Grant & Hallman, 2006). Household

factors have also been identified as important in the higher dropout rates of girls from schooling (Alexander, 2008). One of these is the discriminatory allocation of household resources for education, which reduces the willingness to support education of the girl child in the face of limited household resources (Nekatibeb, 2002); and parental decisions on whether or not children, especially older ones, would continue schooling (Liu, 2004).

The nature and form of living arrangements including co-parent and non-parent living arrangements and number of siblings also influenced the risk of girls dropping out of school (Khanam, 2008; Eloundou-Enyegue & Williams, 2006; Rose and Al-Samarrai, 2001). Higher dropout rates and delinquency of children in single parent households, mostly where the fathers were absent (Popenoe, 1996; Blankenhorn, 1995). Children who grew up without both biological parents were also more likely to drop out of school and more likely to become teenage mothers (Astone & Mclanahan, 1991). Conversely, parental co-residence was found to reduce the risk of school dropout through the support, encouragement and guidance provided by parents (Odaga & Heneveld, 1995).

School dropout has also been attributed to early marriage, motivated by the desire to improve the socioeconomic standing of poor households through bride price (Kakuru, 2003; Kasente, 2003). The perceptions that education of the girl child is a waste of money due to the likelihood of pregnancy and early marriage (Odaga and Heneveld (1995); that education of the girl child only benefits their marital families (Nalwada, Mirembe, Byamugisha & Faxelid, 2010); and that the discounted value of girls education is lower than the discounted value of returns from education (Pal, 2004), also contribute to the withdrawal of girls from education. Additionally, children of more educated parents are more likely to progress in

education (Chowdhury, Nath, Choudhury & Ahmed, 2002; Nath, Hag, Begum, Ullah et al., 2008), with the education of the father having a greater impact on the school retention of boys and that of the mother enhancing educational attainment of girls (UNESCO, 2005; Holmes, 2003; Swada & Lokshin, 2001; Behrman, Foster, Rosenzweig & Vashishtha, 1999).

The school system has also been faulted for limiting the participation of the girl child in education in a number of ways, including the long distances to school, which negatively affect completion probabilities (Gitter & Barham, 2007; Chaudhury, Christiansen & Asadullah, 2006); exclusion and marginalization of the girl child by supporting and promoting cultural stereotypes that enhance society's low expectations of girls and women (Kethugisile, Kwaramba & Lopi, 2000); unfavourable school environments which disadvantage girls by limiting their access to essential services such as sanitary services while at school, negatively affecting their learning achievements through absenteeism, poor academic performance and ultimately low levels of attainment (Alika, & Egbochuku, 2009; Kethugisile, et al. 2000). Sustaining the perception that girls have a low academic potential than boys (Dimbisso, 2009) and the hostile, physical, emotional and sexual harassments, which increase girls sense of vulnerability and distrust of teachers and male students, who perpetrate violence against girls and women also increase the risk of school dropout (Melese & Fenta, 2009; Tesfaye, 2006).

In South Africa, nearly 79% of females are enrolled in school, making South Africa one of the countries with the highest school enrolments in sub-Saharan Africa, but this success has been greatly reduced by the equally high permanent and temporal dropouts from the education systems (Lloyd, 2005). Factors that influence school dropout for the girl child in South Africa have included HIV and

AIDS (Poulsen, 2006) and economic difficulties at the household level (Hallman & Grant 2004). However, the increasing proportion of teenage pregnancies and childbearing, estimated at 30% in the last two decades, has exacerbated the school dropout rate for girls (NRC-IOM, 2005; Mahy & Gupta, 2002). This in part has been attributed to society's tolerant attitude towards early initiation of sexual intercourse and premarital childbearing (Dixon, 2012; Grant & Hallman, 2006; Kaufman, de Wet & Stadler 2000).

However, the new education policy that guarantees school girls' continued schooling in the event of school pregnancy and/or childbirth (Kaufman, de Wet & Stadler, 2001), should result in reduced dropout rate of girls before matriculation. The main objective of this paper is therefore to assess the magnitude of school dropout for girls and identify the main factors perpetuating school dropout for girls. The paper hypothesized that the policy of maintaining pregnant students in school notwithstanding, school dropout for girls is significantly influenced by school pregnancy independent of other individual and household factors.

Data and Methods

Study and sampling designs

The study used a cross-sectional quantitative design to collect data to estimate the rate of school dropout and identify its predictors in North West province of South Africa. The event history method was used to collect retrospective data on events which occurred to women and the time at which such events occurred. It can handle event and censored data simultaneously and accommodates the effects of time-varying covariates (Allison, 1984) and therefore is more effective in understanding the educational trajectories and other life events of each woman from age 14 when they were enrolled in

school to the date of interview.

A multi-stage sampling design was used. The first stage involved selecting the districts of Bojanala and Modiri-Molema from a pool of four districts of North West province by use of simple random sampling; in the second stage four local municipalities were selected by use of stratified random sampling where the urban-rural differences was used as a stratification criterion; and in the third stage 600 households were selected through systematic sampling procedure, using the proportion to population of household size in each local municipality. From each household, one woman aged between 22 and 40 years was then selected for interview. The eligibility criteria used in selecting the target woman for interview were being black, enrolled in school at age 14 and had not been pregnant or given birth before age 14. Where no women meeting the inclusion criteria were found, the next household was selected. A structured and pre-coded questionnaire was used to collected data on schooling and birth histories from age 14 in addition to individual and household characteristics.

Measures

Two dependent variables were identified for the study: whether or not a student dropped out of school after enrolment at age 14, and the survival time to the event of school dropout anytime after age 14. If the event of school dropout occurred after age 14, the dropout status of the student was coded "1" and if otherwise, i.e. if the student did not drop out of school and matriculated at grade 12 and was censored, then it was coded "0". The survival time to school dropout was measured as grades completed at dropout if a student did dropout for any reason or grade of matriculation if a student did not dropout and was therefore censored.

The independent variables were grouped into individual and household characteristics. The individual characteristics included age categorized as less than 25, 25-29, 30-34 and 35 or higher age cohorts; birth order categorized as 1st, 2nd, 3rdand 4th or higher; age started schooling categorized as less than 7 years, 7, 8 and 9 years or older; and grade at age 14 categorized as less than grade 7, grade 7, 8 and grade 9 or higher; age at first sex categorized as less than 18 years, 18-20 years and 21 years or older; 'ever got pregnant after age 14 and while still schooling' categorized as yes or no; and 'ever gave birth while still schooling' which was also categorized as yes or no. The household data used were number of siblings categorized as less than 2, 2, 3, 4 and 5 or more; district of residence categorized as Bojanala and Modiri-Moleme; place of residence categorized as urban or rural; living arrangements at age 14 categorized as living with both biological parents, living with mother alone, living with grandparents and other relatives; mothers highest level of education categorized as less than grade 6, grades 6-10 and grade 11 or higher.

Statistical analysis

Data analysis was done by use of SPSS (PASW20) using three levels thus univariate, bi-variate and multivariate analysis. The univariate analysis was used to describe women by school dropout status, individual and household characteristics to assess the suitability of data for higher level analyses. The results of the univariate analyses are presented in frequency distributions. The bivariate level assessed the association between the school dropout status of women and the individual and household characteristics of women using the chi-square statistic and the levels of associations were tested at the 95% confidence level and $p<0.05$. Further bivariate analysis was done

by use of the Kaplan-Meier survival curve to determine the timing of school dropout using grades at which dropout occurred as the timing of the event of school dropout; and to assess whether or not school dropout was statistically significantly different for women with different individual and household characteristics. The Log Rank Chi^2 test was used to assess the significance of the differences between survival to school dropout and the characteristics of the women.

The multivariate analysis was done by use of two regression models. The first was the binary logistic regression to identify the main predictors of school dropout. This method of analysis was chosen because the dependant variable, ever drop out of school, is dichotomous or binary and was coded "1" if a woman dropped out of school at any time after age 14 and "0" if otherwise. Dropping out was measured by examining the log odds for every unit change in the covariates by using Models I and II. The second multivariate analysis employed two Cox's proportional hazard models which were fitted to identify risk factors of dropping out of school using hazard rates, estimated as the ratio of women who dropped out of school to the total number of women who were enrolled in school at age 14. Model I tested the hypothesis that school pregnancy and birth were significant risk factors of school dropout independent of other individual and household characteristics of women; and Model II tested the hypothesis that school pregnancy and birth remained significant risk factors after controlling for the effects of other individual and household characteristics of women simultaneously. A covariate has a significant effect on school dropout if the associated $p<0.05$.

Results

Women's Individual and Household Characteristics

Table 1 describes women by selected background characteristics. The table shows that the mean age of the women was 29 years and most of them were below 30 years of age. Only 18% of the women were aged 35 years or older. Nearly 33% were of birth order one and just over 29% were of birth order 4 or more. Nearly 48% and 38% started schooling at 7 and less than 7 years of age respectively, and only 14% started schooling at more than 7 years of age. Age 7 is the official age of school entry in South Africa. Distribution of the women by grade at age 14 shows that nearly 46% were old for the grade they were in at age 14. The age at first sex was below 18 years for 41%; 18-20 years for 47%; and 21 years or older for only 13% of the women; and the majority (57% and 75%), had experienced a teenage pregnancy or given birth while still a student respectively. Table 1 also shows that 65% of the women were from Bojanala district; nearly 78% lived in rural areas; and the mean sibling number was 3.4, with only 26% having 5 or more siblings. At age 14, 42% of the women lived with both biological parents, 31.4% lived with mother alone and over 26% lived with either grandparents or other relatives. Only 22% of the mothers of the women completed grade 11 or higher, 49% completed grades 6-10 and 30% completed lower than grade 7.

Differentials in School Dropout

Results of proportion of school dropout, mean grade at school dropout and the timing of school dropout are presented in Table 1 using the chi-square test statistic and Kaplan-Meir means and survival plots in Figure 1. Overall, nearly 53% of the women had dropped out of school at any time after age 14. The table also shows

that the proportion of school dropout increased with age cohorts; birth order of women; and age at school entry; and decreased with increase in grade at age 14. Dropout rates were higher at 2nd, 4th and 5th or higher birth orders and decreased with increase in age at first sex with 68.6% of women who initiated first sex at ages less than 18 years dropping out of school compared to 32.4% of women who initiated first sex at 21 years or older. Nearly 60% and 78% of the women who had fallen pregnant at school or had given birth at school dropped out of schooling. Additionally, more than 67% of the women whose mothers had lower than grade 6 school attainment dropped out of school. Age cohorts, birth order, age at school entry, grade at age 14, age at first sex, getting pregnant at school, giving birth while schooling, place of residence, number of siblings and mother's highest educational attainment were statistically significantly associated with school dropout.

Table 1: Percentage distribution of women by school dropout status and mean grade at school dropout by individual and household characteristics

Individual and household characteristics	%	Number of women	% remaining in school	% dropped out of school	X_2 P value	Mean grade at school dropout	Log-Rank
Age cohort							
Under 25	25.3	147	51.0	49.0	12.58***	11.6	13.4***
25-29	31.6	184	54.3	45.7		11.6	
30-34	25.3	147	44.9	55.1		11.4	
35+	17.9	104	33.7	66.3		10.8	
Birth order							
1	32.5	187	52.9	47.1	14.55***	11.6	13.3***
2	21.9	126	46.0	54.0		11.4	
3	16.3	94	58.5	41.5		11.8	
4+	29.2	168	36.9	63.1		10.9	

Age at school entry							
Under 7 years	37.8	220	60.9	39.1	35.26****	11.8	37.1****
7 years	47.8	278	42.8	57.2		11.3	
8 years	8.1	47	36.2	63.8		11.6	
9 or more years	6.4	37	16.2	83.8		11.4	
Grade at age 14							
Grade 6 or	20.8	121	26.4	73.6	43.88****	10.4	59.6****
lower	25.0	145	38.6	61.4		11.0	
7	33.9	197	58.4	40.6		11.9	
8	20.3	118	59.3	40.7		12.0	
9+							
Age at first sex							
Under 18	40.7	236	31.4	68.6	44.31****	10.7	56.1****
years	46.6	270	55.9	44.1		11.8	
18-20 years	12.8	74	67.6	32.4		12.1	
20+ years							
Ever been pregnant at school							
Yes	56.7	252	40.1	59.9	27.84****	11.6	19.7****
No	43.3	330	62.1	37.9		11.2	
Ever given birth at school							
Yes	74.9	436	21.0	78.1	50.84****	10.8	45.0****
No	25.1	146	56.0	44.0		11.6	
District of residence							
Bojanala	64.9	378	47.6	52.4	0.01	11.3	0.4
Modiri-Molema	35.1	204	47.1	52.9		11.6	
Place of residence							
Urban	22.5	131	54.2	45.8	3.11*	11.6	3.2*
Rural	77.5	451	45.5	54.5		11.3	
Number of siblings							
0-1	18.8	109	56.0	44.0	12.46**	11.7	16.2**
2	19.8	115	44.3	55.7		11.5	
3	18.8	109	52.3	47.7		11.7	
4	16.9	98	52.0	48.0		11.5	
5+	25.8	150	36.7	63.3		11.4	

Living arrangements							
Both parents	42.0	242	50.0	50.0	3.58	11.5	2.3
Mother alone	31.4	181	48.1	51.9		11.4	
Grand parents	14.9	86	38.4	61.6		11.3	
Other relatives	11.6	67	49.3	50.7		11.5	
Mothers highest education							
Under grade 6	29.6	172	32.6	67.4	21.90****	10.7	32.8****
6-10	48.8	284	52.8	47.2		11.6	
11+	21.6	126	55.6	44.4		11.8	
Total	100.0	582	47.4	52.6		11.4	

Level of significance= *=0.05, **=0.01; *=0.001; =****=0.0001

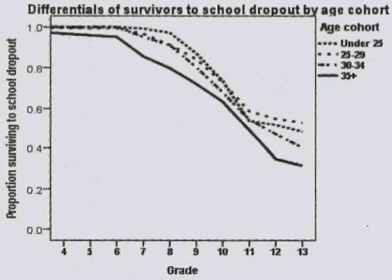
Table 1 shows that the mean grade at school dropout is grade 11 and it decreased from 11.6 for women in the less than 25 year age cohort to 10.8 for women in the 35 years or older age cohort; decreased with increase in birth order; decreased with age at school entry; and increased with grade at age 14 from grade 10 to 12 for women who were 14 years in grade 7 and grade 9 respectively. Dropping out of school was also earlier for women who initiated sexual activity at below 18 years, got pregnant at school and gave birth while schooling. Urban women dropped out of school a year later than rural women; women with less than 2 and 3 siblings; and those whose mothers had less than grade 6 attainment dropped out of school at least one year earlier than other women. Figure 1 presents the Kaplan-Meir plots for age cohort, birth order, age at school entry, grade at age 14, mother's educational attainment and women's age at first sex. The Figure shows that school dropout started early at grade 6 and increased with grades until matriculation at grade 12. The plots also show that the proportionality condition of the Cox regression model has been observed in the data used.

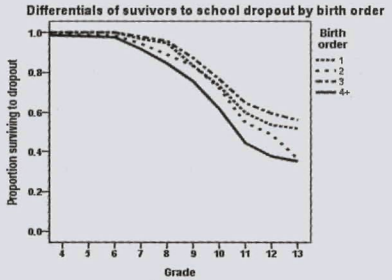
Factors Influencing School Dropout

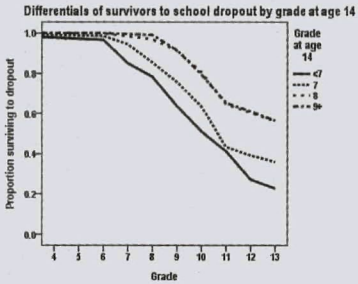
The study hypothesized that getting pregnant and giving birth at school were significant factors influencing school dropout and were independent of the effects of other covariates simultaneously. The results are presented in Table 2 using the binary logistic regression and the Cox proportional hazard model. Model I of the logistic regression model shows that women were 4.1 and 1.5 times significantly more likely to have dropped out of school if they gave birth while enrolled at school or became pregnant while at school respectively. In Model II, giving birth and getting pregnant while at school remained significant predictors of dropping out of school even after the effects of other individual, household and sexual covariates were simultaneously controlled for.

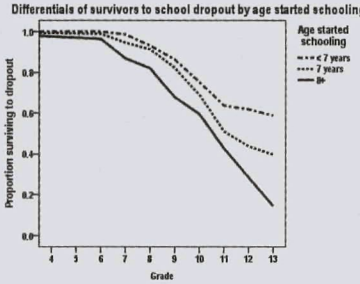
Other factors that increased the likelihood of dropping out of school included grade at age 14, age at first sexual intercourse and mother's highest educational attainment. Women who were enrolled in grade 6 or lower and grade 7 at age 14 were 2.30 and 1.78 times significantly more likely to have dropped out of school. Additionally, women who had initiated sexual intercourse at less than 18 years and those whose mothers had less than grade 6 school attainment were 3.62 and 1.97 times respectively significantly more likely to have dropped out of school. Conversely, belonging to the 30-34 age cohort, birth order 4 or more, joining school at 7 years of age and having 2 siblings, significantly reduced the likelihood of dropping out of school.

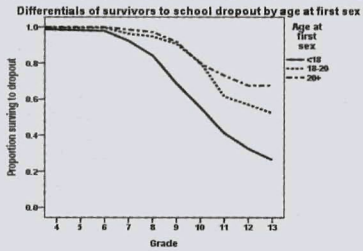
Figure 1: Kaplan-Meier plots showing differentials of survivors by selected background characteristics of women











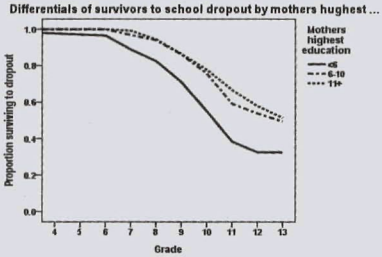


Table 2: Results of logistic regression model and the Cox proportional hazards showing the effect of ever falling pregnant rates and giving birth while enrolled in school after controlling the effects of other individual and household covariates

	Logistic regression		*Cox proportional hazard model*	
	OR		*HR*	
Covariates	**Model I**	***Model II***	***Model I***	***Model II***
Gave birth while at school				
Yes	4.43****(2.65-.42)	2.9**** (1.72-4.95)	1.36**** (1.18-1.56)	0.87 (0.66-1.16)
No ®	1.00	1.00	1.00	1.00
Ever Pregnant at school				
Yes	1.53** (1.08-2.17)	1.62* (1.06-2.48)	1.69**** (1.34-2.14)	0.71** (0.55-0.91)
No ®	1.00	1.00		1.00
Age cohort				
Under 25 ®		1.00		1.00
25-29		0.72 (0.38-1.38)		0.82 (0.57-1.19)
30-34		0.51* (0.27-0.94)		0.68* (0.49-0.95)
35+		0.60 (0.32-1.14)		0.82 (0.58-1.15)
Birth order				
1 ®		1.00		1.00
2		0.74 (0.39-1.39)		0.85 (0.58-1.24)
3		0.67 (0.35-1.28)		0.80 (0.54-1.18)
4+		0.42** (0.21-083)		0.67 (0.44-1.04)
Age at school entry				
Under 7 years ®		1.00		1.00
7 years		0.24*** (0.8-0.69)		0.65 (0.40-1.04)
8 years		0.52 (0.18-1.48)		0.95 (0.61-1.48)
9 or more years		0.39 (0.11-1.33)		0.76 (0.45-1.29)
Grade at age 14				
Grade 6 or lower		2.30** (1.18-4.49)		2.08**** (1.39-3.10)
7		1.78* (1.00-3.19)		1.70*** (1.17-2.47)
8		0.81 (0.47-1.40)		0.93 (0.64-1.36)
9+ ®		1.00		1.00

Age at first sex				
Under 18 years		3.62**** (1.85-7.08)		2.79****(1.76-4.41)
18-20 years		1.61 (0.86-3.02)		1.54 (0.98-2.42)
20+ years ®		1.00		
Place of residence				
Urban ®		1.00		1.00
Rural		0.77 (0.47-1.24)		0.84 (0.62-1.14)

Covariates	***Logistic regression***		***Cox proportional hazard model***	
	OR		***HR***	
	Model I	***Model II***	***Model I***	***Model II***
Number of siblings				
0-1 ®		1.00		1.00
2		0.38** (0.18-0.81)		0.58** (0.37-0.91)
3		1.37 (0.67-2.80)		1.08 (0.71-1.65)
4		0.73 (0.38-1.41)		0.78 (0.52-1.16)
5+		0.67 (0.36-1.25)		0.88 (0.61-1.27)
Mothers highest education				
Under 6		1.97* (1.11-3.50)		1.52** (1.08-2.14)
6-10		1.02 (0.62-1.69)		0.96 (0.69-1.33)
11+ ®		1.00		1.00
Constant		0.43***		

®= reference category; OR=Odds ratio; HR=Hazard rates; *=0.05, **=0.01; *=0.001; =****=0.0001 level of significance.

The Cox proportional hazard Model I shows that the risk of dropping out of school significantly increased by 1.36 and 1.69 if a woman gave birth or became pregnant while enrolled at school. The risk of dropping out of school was also significantly increased by 2.08, 1.70, 1.52 and 2.79 times if a woman was in grade 6 or lower at age 14, in grade 7 at age 14, initiated sexual intercourse at less than 18 years and had a mother with less than grade 6 school attainment

respectively. In contrast, results in Model II show that getting pregnant at school, belonging to age cohort 30-34 and having 2 siblings significantly reduced the risk of dropping out of school by 29%, 32% and 42% respectively.

Discussion

The importance of educating girls and women in sub-Saharan Africa cannot be overemphasized because education of women is critical for the attainment of all MDGs, particularly eradication of extreme poverty and hunger, improving the health of children and mothers, achieving gender equality and empowerment of women, curbing the spread of HIV and AIDS and other diseases and improving environmental sustainability. Despite the progress already made in education of girls and women, further progress in this regard in sub-Saharan Africa, and South Africa in particular where there are policies to keep girls at school, is being impeded by the high rate of school dropout among girls and efforts to address the problem has eluded authorities in these countries for a long time. The current study investigated the magnitude of school dropout and identified its pattern and factors influencing it in the North West province of South Africa, where school dropout of girls has become endemic.

The study established that school dropout in the North West province is significantly influenced by high rates of school pregnancies and school births; nearly 57% and 75% of women investigated reported ever having been pregnant or given birth while enrolled in school respectively. Of the women who had ever become pregnant or ever given birth, 60% and 78% respectively dropped out of school. Other factors that influenced school dropout in a significant way included low grade at a high age, low educational attainment of mothers and a young age at first sexual

intercourse, which exacerbated school pregnancies. Age cohort, age at school entry, higher birth orders and number of siblings, although significant, reduced the risk of school dropout.

The role of school pregnancy and giving birth at school in influencing school dropout observed in the current study is consistent with findings of studies conducted in sub-Saharan Africa (Hunt, 2008; Cardoso &Verner, 2007) and in South Africa in particular (Llyod, 2005; Mahy & Gupta, 2002). Pregnancy and childbearing among the schooling population is a reflection of the collapse of population wide social and reproductive values (Pillow, 2004; Helge, 1989). Although not encouraged, the increasing tolerance of early initiation of sexual activity and premarital childbearing in the general population could be contributing significantly to pregnancy and childbearing among the schooling population in South Africa. This view is supported by the findings of the current study as well as a previous study which showed that the age at initiation of sexual activity is directly related to the risk of unplanned pregnancy (Martelelo, Lam & Ranchhod, 2008). Yet another study found that girls who were already sexually active at a young age were more likely to drop out of school (Hindi& Fatusi, 2009).

School girls of up to grade 12 constitute a large number of females who are going through physical, sexual and emotional adaptation and challenges. Ignorance and naivety on sexual matters and how to protect against unwanted pregnancy makes school girls particularly vulnerable to exploitation particularly by older men who are often responsible for their pregnancy. This problem is exacerbated by the relatively high levels of unmet needs for pregnancy prevention among the general populace. Some of the perpetrators of school girls' pregnancies are the teachers in whose care the girls are entrusted, who students may find difficult to resist. A previous study observed

that older men lured school girls into unprotected sexual activities using gifts leading to pregnancy (Blanc, 2001). Many of these girls are often abandoned with children leading to school dropout or early marriage to protect the family honour (Nyakubega, 2009). Adopting a mix of domestic, community and school interventions is therefore important not only to prevent unwanted pregnancies, but also to ensuring that girls remain in school. One such strategy would involve increasing access to reproductive health services including access to contraceptive commodities.

South Africa has been cited as one of the countries with very high rates of sexual and gender based violence. Many of the victims of this violence are young women, most of them students, who are susceptible to unwanted pregnancies (McGurk, 1993). The current policy regime regarding school pregnancy and giving birth while at school allows girls to continue schooling and refers some in this category as'students with special needs'. While the policy allows the girls to return to school, the school environment and attitudes of teachers and other students are not enabling for such students to continue with their education (Chigona& Chetti, 2007; Kaufman et al., 2001). Additionally, child care is often a fulltime job which is incompatible with schooling in the current school system and environment, and this contributes to student mothers' school dropout. Getting teachers and students to change their attitudes and allow student mothers to achieve their schooling objectives and instituting flexible schooling and child care options for student mothers, is imperative for addressing school dropout due to pregnancy and childbirth.

The study further found that students who were in a low grade at a higher age were at an elevated risk of dropping out of the education system, and this is consistent with findings from studies

done elsewhere (Sabetes, Hossain & Lewin, 2010; Education Policy and Data Center, 2009; Cameron, 2005). In South Africa, the minimum official age at starting grade one is 7 years of age, which implies that by age 14, students should be in grade 7, which is the final grade in the primary education cycle. The fact that a large number of students in this study were in grades lower than grade 7 at age 14 suggests that they either started schooling late, or repeated grades due to disruptions for reasons such as illness or parent work transfers. Late school entry and grade repetitions are sources of difficulties for students, school teachers and administrators from a number of perspectives. For students, older students and repeaters are ridiculed by their younger classmates and this could lead to dropout. Older students are also likely to perform poorly in class and often have difficulty in coping and may dropout (Taylor, Thabo, Shindler & Akoobhai, 2010). At the household and community level, older age at school competes with other household demands including the need for remunerative and non-remunerative income, which could also contribute to dropout from schooling (Sabates et al., 2010). Previous studies also found that older age at school was particularly problematic for girls because they often came under pressure to marry (Cain, 1977; UNESCO, 2005). It is therefore important to identify late starters early, provide them with appropriate interventions to secure progression through the school system.

The finding that a mother's educational attainment is a significant determinant of school dropout has been observed by previous studies (RaoMohan, 2000). Some of the findings attributed the low school attainment for girls whose mothers had low level of education to an inability to provide appropriate educational support (Sabetes et al., 2010). It is possible that mothers with low education just do not have the resources needed to ensure their children,

including boys, continue schooling. One study reported that low education was associated with low household income which caused girls to drop out of schooling (Ampiah & Adu-Yeboah, 2009). It was also likely that girls whose mothers had low education engaged in income generation which affected their participation in education. However, the current study did not investigate the association between level of mother's education and household income because of lack of appropriate data.

Limitations

Although this study has identified some of the main causes of school dropout for girls, it has been limited by lack of data on the economic status of households which previous studies found to be significantly associated with school dropout. Additionally, the findings of the study could have been affected by the accuracy of reporting data on pregnancy and childbirth which issues are usually affected by social desirability biases, which is likely if the pregnancy was aborted.

Conclusion

It can therefore be concluded that the two interdependent factors, namely school pregnancy and child birth are key in terms of influencing dropout of education for the girl child. However, these factors appear to be exacerbated by early age at initiation of sexual activity, low grade at older age implying a late age at school entry or repetition of grades, and low educational attainment of mothers of school dropout girls. The study recommends the adaption of policies which give greater emphasis on sexual abstinence through school based programmes; zero tolerance to sexual crimes involving minors; addressing the problem of overage enrolment and repetition; and adopting a flexible schooling system to accommodate pregnant and student mothers.

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