Teenage Pregnancy and Dropout Rate From School After Delivery in Northern Thailand

Original Article

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ABSTRACT

Aim: To examine the percentage of teenage mothers returning to schools after delivery and predicting factors.

Materials and Methods: TA retrospective cohort study of pregnant women aged <20 years at the time of delivery at Chiang Mai University Hospital, Thailand between January 2005 and December 2014. The patients were evaluated for baseline demographics and dropout rate from school.

Results: Teenage pregnancies accounted for 2580 of 20,568 pregnancies (12.5%) in the past 10 years. 201 were contactable and data were obtained with verbal informed consent. 57.7% dropped out from school, with the main reason being the need to raise their child by themselves (46.6%). Maternal age did not affect dropout rate (57.6% of those aged <18 years vs. 57.8% of those aged ≥18 years returned to school). However, advanced partner age resulted in higher dropout rates (20.6 ± 3.7 vs. 22.6±4.8 years, *P = 0.002*). Those who were students prior to pregnancy were two times more likely to return to education after giving birth than nonstudents (relative risk 2.01, 95% confidence interval 1.4–2.8).

Conclusion: 57.7% did not return to education and the main hindrances to young mothers returning to school were advanced paternal age, and being non-student.

Key Words: School dropout, teenage pregnancy, unwanted pregnancy

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INTRODUCTION

Teenage pregnancy is a major socio-economic problem worldwide; 16 million girls give birth each year. In Thailand, the prevalence of teenage pregnancies is estimated to be 44.6 per 1000 live births. Adolescence is between ages 10 and 19 years according to the World Health Organization (WHO)[1,2]. Adolescence is a transitional period from childhood to adulthood during which one goes through physical and mental developments and adaptations[3,4]. Teenage pregnancy is hence regarded as a high-risk[5-8], with teenage pregnancy mortality being twice that of the general population[9]. During this transitional period, education is a major part of the adolescent's life that eventually contributes to their future life prospects and endeavors. In support of this view, government policy stipulates 12 years of compulsory education for all Thai children. The Office of the Basic Education Commission estimated that 135, 342 girls dropped out of schools from 2005 to 2009[10]. Other studies have found that teenagers who have not completed their schooling are more likely to fall pregnant than those with higher education[11]. Although data show that 14% of girls leave school because of "marriage", what percentage of adolescents drop out of school due to pregnancy remains unclear. Adolescent pregnancy taints family reputations because it goes against social norms. Pregnancy and sexual activity among teenagers is not widely accepted in Thai society. If a teenager does become pregnant, she and her parents are likely to feel shame. Parents usually do not want their child in school while she is pregnant and the school may pressure her to drop out on the basis of pregnancy. Even though, no law prohibits pregnant girls from attending schools, many of them end up dropping out of school[12].

Thailand's government policy has been changed in recent years to stress the importance of educating young mothers[13]. The "Prevention and Remedial Measures for Adolescent Pregnancy Bill" was approved by the National Legislative Assembly of Thailand on February 4, 2016 and legally protects Thai youths' access to medically sound reproductive health information and services. Schools and

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the Ministry of Health are held accountable for offering comprehensive sex and reproductive health education, counseling students about pregnancy prevention, and allowing teenage mothers to remain enrolled in school. The government also emphasizes the need to properly educate teenagers after child birth. In this study, we aim to examine the rate of school drop-out due to pregnancy and to determine obstacles hindering the return to education among young mothers in Northern Thailand.

PATIENTS AND METHODS

Women aged <20 years old who delivered at Chiang Mai University Hospital, Thailand between January 2005 and December 2014 were recruited into the study. Their phone numbers were obtained from hospital electronic database. These patients were then called by our trained doctors and asked specific questions according to a questionnaire with verbal informed consent obtained. The questionnaire and phone script were approved by the local ethics committee (OBG-2558-03127). The sample size was calculated using 50% drop off from high school (CDC data).

All available participants were interviewed and their baseline demographic data was recorded. Their demographic characteristics, maternal and neonatal data were collected. Categorical data were analyzed by using Chi-square test or Fisher's exact test. Continuous data were reported as arithmetic mean, median, standard deviation, and range. Differences were evaluated by using T-test or Wilcoxon test. The level of statistical significance was set at $P<0.05$. All statistical analyses were performed using the computer software program STATA® (TX, USA) version 14.

RESULTS

During the study period, teenage pregnancies accounted for 2,580 of 20,568 pregnancies (12.5%). 201 patients were contactable and data were obtained with verbal informed consent. Their mean age was 18.11+1.1 years (range 14- 20 years). The mean age of their partners was 21.7+ 4.5 years (range 14-41 years (Table 1). The age of the first intercourse was 16.57 + 1.42 years old. Almost half of the patients had more than one partner (43.5%), with a maximum of eight partners. Up to 90% of patients interviewed were Thai, with others being Shan (8.5%), Burmese (1%), Cambodian (0.5%), and German (0.5%). Buddhists constituted 95.5%, Christians 3.0%, and Muslims 2.0%. In total, 92.8% were from Northern Thailand, 3.6% were from other parts of Thailand, and 3.6% were from overseas. Approximately half (51.2%) fell pregnant before marriage, and 42.8% were students prior to pregnancy. In terms of education, 5.0% had no education, 8.0% finished primary school, 45.3% finished elementary school, 31.0% finished high school, and 10.9% completed vocational training (Table 1).

The rate of intentional pregnancy was rather high at 68.2%. We also found that nearly half (44.8%) of these pregnant teenagers were from broken families; 65.5%, 15.6%, and 17.6% were raised by single mothers, single fathers and relatives, respectively.

Of all teenage pregnancies, 133 (66.2%) did not use any form of contraception. 30.8% stated having no knowledge about contraception, 36.1% intended to be pregnant, 8.3% did not have access, 12.0% were complacent, 6% could not afford contraception, and 6.8% did not anticipate sexual intercourse. Among 72 (33.8%) women who used contraception, none used long-acting reversible contraception. However, the questionnaire did not cover the reason of pregnancy when contraception was used. Of the women who used contraception, 86.6% were on oral contraceptive pills, 10.2% used condoms, and 5.1% used other forms of contraception.

After delivery, 42.3% returned to education; 21.2% entered non-formal education, another 21.2% attended government universities, and 17.6% returned to respective previous schools. The decision to return was made by oneself (65.9%), parents (42.3%), and partners (4.7%). Conversely, the reasons for not returning included the need to bear a child (46.6%), the need to start earning an income (37.9%), no economical means to return to education (5.2%), parental request to drop out (4.3%), and education deemed irrelevant (5.2%) (Table 2 and Figure 1).

Maternal age did not affect dropout rate (57.6% of those aged <18 years vs. 57.8% of those aged ≥18 years). Furthermore, advancing partner age resulted in more dropout rates (partner age of 20.6+3.7 years in the return group vs. 22.6+4.8 years in the drop-out group, $P = 0.002$). Those who were students prior to pregnancy were two times more likely to return to education after giving birth than nonstudents (relative risk [RR] 2.01, 95% confidence interval 1.4–2.8).

We found that advancing age of teenage mothers did not correlate with rate of return to education. 43/102 (42.2%) adolescent mothers aged ≤18 years and 42/99 (42.4%) aged >18 years returned to school (*P value = 0.97*). Level of education also did not significantly correlate with school dropout rate. 44/117 (37.6%) of mothers with elementary-level education and below returned to education, while 41/84 (41.0%) who had high school-level education and higher returned to school (*P value = 0.15*). Intention to get pregnant did not significantly affect mothers' decision to return to school. Those with intended pregnancy were less likely to return to education 24/64 (37.5%) compared with those without such intention at 61/137 (44.5%), but this finding is not statistically significant.

Table 1: Demographic data, n (%)

Characteristics	Total Number (%)
Race	
- Thai	180 (89.6)
- Burmese	2 (1.0)
- Shan	17 (8.5)
- Others	1 (0.9)
Nationality	
- Thai	190 (94.5)
- Myanmar	6(3.0)
- Cambodia	1 (0.5)
- Stateless	3 (1.5)
Religion	
- Buddhism	192 (95.5)
- Christianity	7 (3.0)
- Islam	2 (1.0)

Table 2 Returning to education, n (%)

Returning to education	Total (%)
Return to school	
Yes	85 (42.3)
No	116 (57.7)
Reason for not returning to school (N=116)	
• Worries of not being accepted	1 (0.9)
• Child care by oneself	54 (46.6)
• Earning income	44 (37.9)
• No budget for education	6 (5.2)
• Families influence	5 (4.3)
• Do not see the point of returning	6 (5.2)
Influence of decision to return back to school (N=85)	
• Oneself	56 (65.9)
• Partner	4 (4.7)
• Parents	36 (42.3)
Institute returned (N=85)	
• Previous school	15 (17.6)
• New school	3 (3.5)
• Non formal education	18 (21.2)
• Vocational school	7 (8.2)
• Government university	18(21.2)
• Private university	5 (5.9)

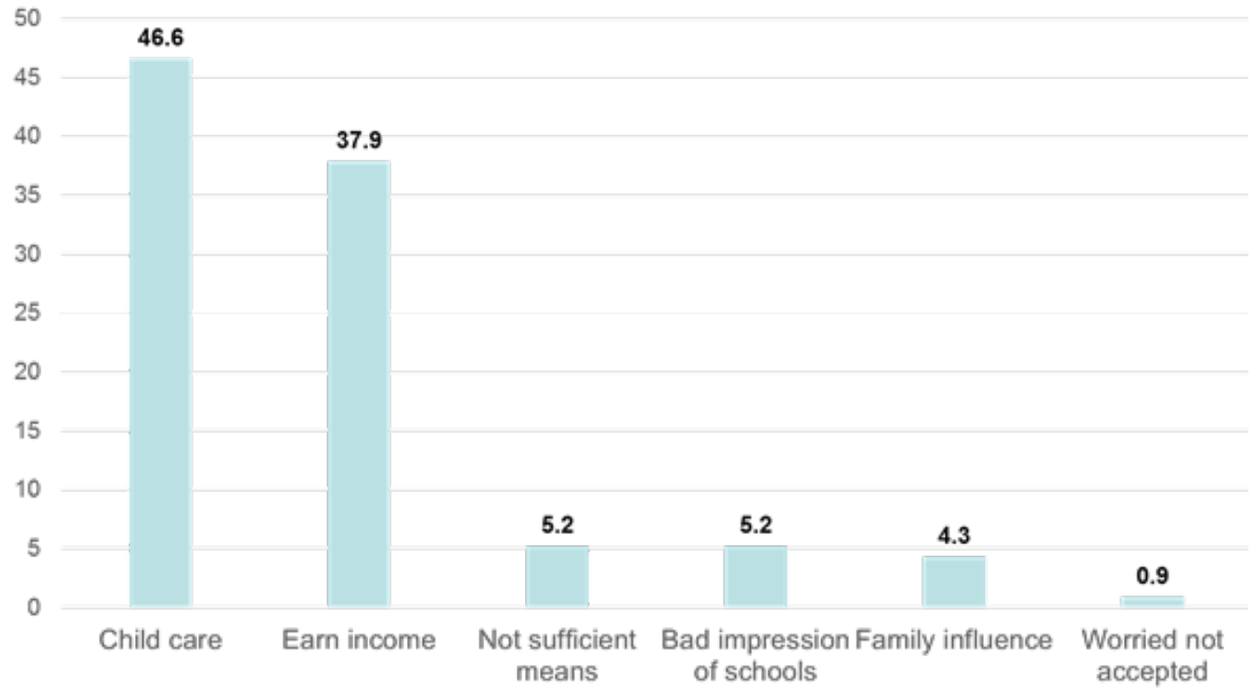

Fig. 1: Reasons for not returning to school (total N = 116)

DISCUSSION

At the time of the study, the rate of teenage pregnancy in our institution was 12.5% of all pregnancies or 2580 of 20,568 recorded pregnancies. This rate is much higher than the national average of 4.5% reported in 2015. Moreover, it was also very high compared with other Asian countries or worldwide. North Korea has the lowest adolescent birth rate in the world at 0.1% and the lowest in South-east Asia is Singapore at 0.5%[14]. The result of our study was on par with that of Rajvithi Hospital, Bangkok, at 12.3% in 2010[15]. Between 2000 and 2012, teenage pregnancy rate increased by three times among Thai women under the age of 15 years[16].

From our cohort, the rate of intentional pregnancy was two-thirds. Half of these mothers with intended pregnancies were from broken families and were raised by single parents. This finding is alarming because it supports the generalization that teenage pregnancies are the fruits of parents who themselves were pregnant at young ages. A vicious cycle is created whereby children of teenage pregnancies have higher tendency to become pregnant at young age.

The rate of school dropouts in our study was 57.7% of all teenage pregnancies within the past 10 years. To the best of our knowledge, no similar studies have been conducted in this region; hence no data is available for comparison.

Interestingly, the age of partners significantly affected the rate of mothers' return to education; mothers with older partners were less likely to return to education (22.6 ± 4.8 vs. 20.6 ± 3.7, *P value = 0.002*). This could be due to how older men are more likely to be breadwinners and earn a substantial income to support his family; hence their wives could stay at home and raise their child. Conversely, women with younger partners tended to return to education for better future job prospects.

Maternal occupation prior to pregnancy also significantly affected maternal school dropout rate. Being students prior to pregnancy resulted in more teenage mothers returning to complete education (51/86 = 59.3%). Women with other occupations prior to pregnancy who previously dropped out of schools due to various other reasons were less likely to return to education or less likely to at least complete compulsory schooling (34/115 = 29.6%). These results were significant at *P value > 0.01*, with RR = 2.0 and 95% CI of 1.4–2.8. However, interestingly, almost one-third of nonstudents returned to education. Even though this proportion is small, it holds promise. Conversely, more than half of students returned to education. Mothers who were students prior to pregnancy were two times more likely to return to school than nonstudents. While this number appears substantial, it could be further improved. This finding also raises the importance of addressing the reasons for school dropout other than pregnancy and establishing much-needed policy

to encourage young mothers to complete schooling after giving birth, especially those who left their school at an early age. To ensure the basic right of education for all, especially young mothers, the central government should work closely with schools and communities. Such collaboration could eventually change the course of young mothers' lives and ensure that the vicious cycle of adolescent pregnancies resulting in their own children also experiencing teenage pregnancy is not repeated due to lack of education and poverty.

Other important finding was that few adolescents, as low as 33.8%, used contraception of any form. This is worrying considering that Thailand is a hotspot for HIV infection and other sexually transmitted diseases. Only 10.2% of those who used contraception used condoms. Failure to educate adolescents in safe-sex practices and self-protection from falling pregnant surfaced as an issue from the growing rate of teenage pregnancies. This problem should be addressed systematically and sexual education should be reassessed and evaluated.

The strength of this study is that the number of interviews conducted was high enough to represent adolescent mothers in Northern Thailand. This was despite teenage mothers tended be embarrassed and not providing accurate phone numbers for tracking. A study weakness is that this study dates back 10 years, which might have introduced recall bias. Considering the study strengths and weaknesses, further prospective case-control studies could recruit more participants and focus on obtaining more accurate results. Further study could be done to evaluate the effectiveness of the new teenage pregnancy law that came into effect last year.The current study's findings could be useful in guiding future government policies on prevention, and addressing and solving the social problems of teenage pregnancies.

CONFLICT OF INTERESTS

There are no conflicts of interest.

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