ORIGINAL ARTICLE

PHYSICAL AND PSYCHOSOCIAL IMPACTS OF PREGNANCY ON ADOLESCENTS AND THEIR COPING STRATEGIES: A DESCRIPTIVE STUDY IN KUALA LUMPUR, MALAYSIA.

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ABSTRACT

Teenage pregnancy carries serious impacts on adolescent health. This study aimed to examine the effects of pregnancy on adolescents and to explore how they cope with the problems they faced during the pregnancy. It involved 26 adolescents residing in a government shelter home in Kuala Lumpur. A self-administered questionnaire containing a mixture of open- and closed-ended questions was used. Among physical (sleeping problem and self-care problem), psychological (emotional difficulties and low self-efficacy) and social (stigma and discrimination, financial difficulty, friendship problem and school dropout) problems, emotional difficulties were the most common problems, whereas stigma and discrimination was the least common. Young adolescents aged less than 16 years old were significantly associated with poor self-care (p=0.01). To cope with their problems, the adolescents generally used avoidance, withdrawal, and social support, particularly from parents and peers. Doctors were the least popular among all. In conclusion, holistic and individualised care is needed. Strategies to reduce emotional problem experienced by pregnant adolescents should be implemented. The available healthcare services for teenage pregnancy should also be promoted. **Keywords:** adolescent, pregnancy, impacts, emotional problem, stigma, discrimination, coping

INTRODUCTION

Teenage pregnancy is one of the emerging sexual and reproductive health problems among adolescents in many countries^{1, 2}. It is defined as pregnancy carried by girls aged between 10 to 19 years¹. Its exact prevalence is difficult to determine due to under-reporting and abortion. The reported Malaysian adolescent birth rate in 2013 was about 14 births per 1000 women aged 15-19². The rate was substantially lower than that reported by Thailand, Indonesia and Philippines with 47, 52 and 53 births per 1000 adolescents respectively².

The impacts of pregnancy faced by adolescents can be very significant because they are more likely to have various medical and obstetric If the pregnancy continues, they may opt for baby dumping. This phenomenon is gravely disturbing as it is not uncommon in Malaysia. Between 2005 and 2011, 517 cases of baby dumping were reported,

complications such as unsafe abortions, anaemia, pregnancy-induced hypertension, pre-eclampsia, and pre-term delivery³⁻⁵. Many of these adolescents tend to have insufficient antenatal care and it increases their risk of death during childbirth⁶. Not only that, their children are also likely to suffer from having a low Apgar score and low birth weight, as well as developmental delay³⁻⁵.

Apart from these complications, psychosocial impacts of teenage pregnancy are noteworthy. The adolescent mothers are at risk of depression, social isolation, stigma, school dropout, poor education attainment, limited job opportunities, poverty, drug use and repeated pregnancy⁷⁻¹⁰. In order to cope with the psychosocial impacts, some of them may resort to unsafe and illegal abortions. and the numbers are increasing¹¹. Many of these babies were deceased when they were found¹².

Therefore, in order to ensure better outcomes of teenage pregnancy, it is pertinent to understand

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the impacts of teenage pregnancy on Malaysian adolescents and their coping strategies. Hence, the current study was carried out to examine the physical, psychological and social impacts of teenage pregnancy on adolescents residing in a shelter home in Kuala Lumpur. Their coping strategies were also explored. Through this understanding, we hope that interventions can be designed to support the affected adolescents to improve the outcomes of teenage pregnancy.

METHODOLOGY

This was a cross sectional descriptive study that also used qualitative research approach. It involved all 26 residents of a shelter home for pregnant adolescents in Kuala Lumpur. Data collection was done in the month of November 2010. This study used a self-administered questionnaire containing closed- and open-ended questions that focussed on the physical, psychological and social impacts of pregnancy on the adolescents (sleeping problem, self-care problem, emotional problem, low self-efficacy, stigma and discrimination, financial difficulties, peer relationship problem, and school problem), and their coping strategies. To help us understand the immediate impacts of pregnancy, their home environment prior to their stay at the shelter home was also explored. Open-ended questions were used in order to allow the respondents to further describe the problems faced by them in their own words. The questions were based on literature review and opinions from two local experts in adolescent health. All the questions were in Bahasa Malaysia.

Using SPSS version 21, data was analysed descriptively and the differences in the impacts experienced between the younger adolescents (age 12 to 15 years old) and older adolescents (age 16 to 18 years old) were examined. Responses of the open-ended questions were also analysed through thematic analysis by two independent researchers.

This study was approved by the Research and Ethics Committee of Universiti Kebangsaan Malaysia and the Social Welfare Department of Malaysia. Written informed consent was taken from the legal guardians, adolescents and their parents. All of the residents had agreed and were allowed to participate in this study.

RESULTS

Participants' characteristics

The participants' age ranged between 12 to 18 years. The majority of them were Malays, unmarried, and from low-income families, and stayed in urban areas (Table 1). The complete report on their common characteristics was published previously¹³.

Table 1: Demographic characteristics of the participants

Characteristics	n	%
Age		
12 to 15 years	7	26.9
16 to 18 years	19	73.1
Race		
Malay	25	96.2
Indian	1	3.8
Marital status		
Not married	25	96.2
Married	1	3.8
Prior place of living		
With parents/family	23	88.5
Not with family	3	11.5
Prior areas of living		
Urban	19	73.1
Rural	7	26.9
Total family income in a month		
Less than RM1000	14	53.8
RM1000-RM3000	11	42.3

Impacts of pregnancy

The impacts of pregnancy were classified into three categories: physical, psychological and social impacts (Table 2).

i. Physical impact: sleeping problem
Nearly two-thirds of the participants (15/26) had
sleeping problem (Figure 1). Two fifths of them
(6/15) had disturbed sleep due to nausea,
vomiting, myalgia, dizziness, shortness of breath
or foetal movement. Sixty percent of them (9/15)
had disturbed sleep because of their emotional
problem and preoccupation with their pregnancy.
The reasons were:

"I am thinking of what will happen to me and this has made me unable to sleep or have good sleep. I am thinking of how to solve my problem"

"wake up (at night) because I feel guilty"
"I am stressed with my pregnancy and that
makes me unable to sleep"

However only 8 of 15 adolescents who had sleeping problem (53.3%) sought help (Figure 2), mainly

from parents as they thought it was too trivial to share with others.

Table 2: The impacts of pregnancy on the adolescents

Physical impacts:	Description
Sleeping problem	The sleep quality was affected by pregnancy symptoms, emotional problems and nightmares.
Self-care problem	Problems in looking after own self (self-care).
Psychological impacts	Description
Emotional problem	Angry, sad, guilty, fear, confused, hopeless, irritable, and anxious.
 Low self-efficacy 	Not confident and motivated to do self-care.
Social impacts	Description
Stigma and discrimination	Felt being discriminated and treated unjustly by family members, friends and/or community.
Financial difficulty	Needed money for wedding, to care for themselves and the baby, their family and abortion.
Poor peer relationship	Poor relationship with friends, being treated differently and could not do activities with friends.
• School dropout	Discontinued schooling due to limited school activities, discrimination by friends at school and emotional problem.

ii. Physical impact: self-care problem A third of the adolescents (8/26) admitted to have problems in taking care of themselves (Figure 1). Due to their socio-economic status, they found it difficult to practise a healthy diet as well as live in a conducive and safe environment. They wrote:

"I am not able to care for my own self"
"There's food that I really want to have
(but I am not able to)"

"feel unsafe to walk to school"

However, 87.5% of those with self-care problems admitted to receive help from significant others, especially their parents (Figure 2).

iii. Psychological impact: emotional problem Almost all of the participants (24/26) admitted to have emotional problems (Figure 1). They felt angry, fearful, confused, hopeless, ashamed, irritable, or anxious. They also felt sad and guilty for upsetting their parents. Eighteen adolescents with this problem (75.0%) received support (Figure 2). More adolescents sought help from their peers (68.4%) compared to their parents (57.8%). Example of the answers written by them:

"I am stressed with my pregnancy and that makes me unable to sleep"

"Stress because my boyfriend did not admit (responsible for the pregnancy)"

"Sad... also (because) knowing my parents are sad"

"I feel guilty and sad as I have hurt my parents"

"I felt angry, did dangerous things and felt sad all of a sudden"

In this study, majority of them (20, 76.9%) were satisfied with their home environment prior to institutionalisation as they felt peaceful and safe to live with their families. Their mother's support and care were also considered as an act of love. Some of their descriptions are as follows:

"Parents give me encouragement and motivate me to build a better life after my delivery"

"Parents understand and give (me) chance"
"My mother is there to look after me and she cares about me"

"I feel peaceful (at home)"

iv. Psychological impact: low self-efficacy Nearly half of them (12/26) perceived themselves to be incapable of looking after themselves and their pregnancy without help from others (Figure 1). They were not confident and lacked motivation to perform self-care. Many of them admitted to seek parental support for their self-care.

"I am not happy and have no mood to look after myself"

"I am not able to care for my own self"

v. Social impact: stigma and discrimination

Only 6 of the adolescents (23.1%) faced problems related to stigma and discrimination (Figure 1). They felt their boyfriends, neighbours and even family members ridiculed them. They also felt discriminated by their parents and thought their parents gave less support and stricter control over their social life. They wrote:

> "I was not satisfied with my home environment because:

- I felt being treated as an outsider"
- no one loves (me)"
- nobody actually understands (me)"

All of these adolescents admitted to have emotional problems. Two of them felt that they lost their freedom to socialise with people outside their home:

> "My parents and family did not allow me to go out and meet other people."

Furthermore, they felt misunderstood and not loved. Thus, they (3/6) were dissatisfied with their environment home prior to their institutionalisation. They described:

> "I was humiliated by my boyfriend, family and community"

> "treated differently by friends and family" "parents are not as caring as they used to be"

Among those who had problems with stigma and discrimination, 4 (66.7%) of them were satisfied with their ability to cope the problem and only 3 (50%) sought help (Figure 2).

vi. Social impact: financial difficulty Ten adolescents (38.5%) had financial difficulties (Figure 1). Due to the pregnancy, there were demands for them to get married, care for

themselves and the baby, and support their family. Some of them required money for abortion. Only 7 sought financial help, mainly from their parents (Figure 2). They wrote:

"money to get married"

"spent a lot of money to buy medicine to abort this pregnancy"

"not enough money to give to family"

"unable to work for my first child" "not enough money even for myself"

Social impact: poor peer relationship Pregnancy affected friendship in 10 (38.5%) of the adolescents (Figure 1). They believed it was due to their parental control that restricted their time together. Some felt that their friends treated them differently.

"treated differently by friends"

"Cannot go out with friends and do activities that I enjoy."

A half (5/10) of those with the problem sought help (Figure 2). Parents and friends were their main sources of help.

viii. Social impact: dropping out from school Less than three-quarters of them (19/26) were in the secondary school when they discovered their pregnancy. The remaining 6 had already dropped out from school and another one had completed schooling prior to their conception. Out of these 19 adolescents, 12 of them (63.2%) had actually discontinued schooling due to their pregnancy (Figure 1). Among the dropouts, a third (4/12)faced school problems before they stopped schooling, such as limitations in school activities or being discriminated by peers. All of them admitted to have emotional disturbance. Some of their narratives:

> "unable to continue my study, cannot participate in sport and school activities" "has no passion to learn.. feel stress, angry and life has no meaning anymore". "ignored by friends"

Differences in the impacts experienced by the younger (age 12 to 15 years) and older adolescents (16 to 18 years)

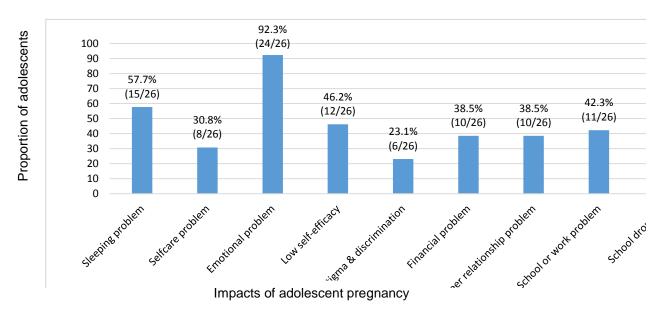
There was a significant difference in self-care problem experienced by these two groups of adolescents (p=0.01) (Table 3). A larger proportion of younger adolescents (71.4%) had problems with self-care compared to that of older group (14.8%). However, no significant difference in the proportions of adolescents who had other problems noted between these two groups.

Coping strategies

Generally, more than half of the adolescents (53.8%) admitted to have ability to cope with their pregnancy. Three coping strategies practiced by the participants were identified.

Firstly, they minimised unfavourable outcomes by initially hiding their pregnancy from their parents. Half of them (14/26) even considered illegal abortion. Among the reasons for this secrecy were fear of repercussion of social stigma against their pregnancy, and fear of negative reactions from their parents.

Figure 1: The proportion of the adolescents who reported the impacts of pregnancy



Secondly, they withdrew from unfavourable environment due to stigma and discrimination by dropping out from school. They also agreed to stay in the shelter home even though majority of them liked to be at home and had good support from their parents and family.

Thirdly, they sought help from significant others for pregnancy-related problems. Parents were their major source of help, followed by friends, their partner and other family members. For emotional support, more adolescents sought help from their peers (68.4%) compared to their parents (57.8%). Only one participant sought help from doctors for her emotional problem.

DISCUSSION

Pregnancy greatly affected not only the physical but also psychosocial wellbeing of the adolescents of this study. This study highlights emotional problem as the most common impact reported by the adolescents and stigma and discrimination as the least common. This study also emphasises the interrelation between the physical and psychosocial impacts.

The various emotional disturbances described by the adolescents in this study were similar with those reported by previous studies¹⁴⁻¹⁶. However, this impact may not be as great as once believed¹⁰, ¹⁷. According to Molborn and Morningstar (2009), high level of stress among pregnant adolescents might not just be caused by childbearing since they already suffered from the stress even before their pregnancy¹⁸.

This emotional problem is thought to be associated with unwanted pregnancy, unpreparedness to parenting, family disapproval and disappointment, and belief that the pregnancy is their biggest mistake¹⁹. Adolescents who are pregnant are considered under a crisis²⁰. Low resiliency in coping with this crisis is believed to be responsible for this emotional problem²¹. However, a recent study had failed to confirm the significance of this association²². As a majority of the adolescents in this study admitted to have the ability to cope with their pregnancy yet they still had substantial emotional problem, low coping ability was not the most important cause for their emotional problem. Poor support received by them plays a role as well²³. Since many of the adolescents admitted to receive good level of support from their family, their emotional problem could not simply be explained by the quantity of the support. Perhaps, the type of support is also crucial. It appears that good level of physical and financial support from

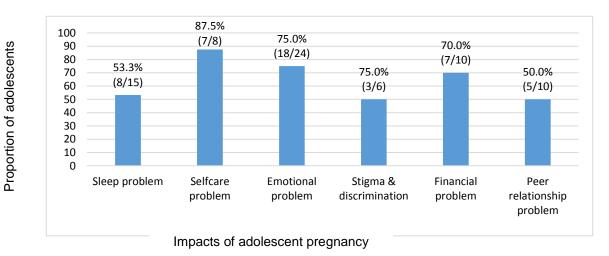
[&]quot;afraid my family will be humiliated"

[&]quot;fear of being scolded by parents"

[&]quot;afraid that I will be sent straight to shelter home"

their parents was not sufficient to relieve their emotional difficulty. Therefore, parents must realise their critical role in supporting their daughters physically, financially, and emotionally. With good parental support many of these adolescents will have better pregnancy outcomes and quality of life^{10, 24}.

Figure 2: The proportion of the adolescents who received support for the problems faced during pregnancy



As a consequence of emotional disturbances, some of the adolescents in this study suffered from sleep problem, known as adjustment sleep disorder that p

can result in chronic sleep deprivation²⁵. The latter may subsequently affect their emotional adjustment leading to a vicious cycle²⁶. In addition, it impairs their cognitive functions and academic performance²⁵. So, these problems might cause them to lose their interest in academic and

lead to their dropouts.

In this study, younger adolescents aged less than 16 years old were significantly associated with poor self-care compared to older adolescents. However there was no significant difference in emotional disturbance or other difficulties between the two age groups. It appears that their poor self-care was because they were just too young to take care of themselves and at the same time faced similar emotional disturbances as older adolescents. Thus, extra attention may be needed in these young mothers as emotional problem may itself cause poor self-care among them 10.

Table 3: The difference in impacts of pregnancy between the younger and older adolescent groups

Impacts of pregnancy	Younger adolescent group (12 to 15 years) (N=7) n (%)	Older adolescent group (16 to 18 years) (N=19) n (%)	p-value*
Sleep problem	6 (85.7)	9 (47.4)	0.18
Self-care problem	5 (71.4)	3 (14.8)	0.01
Financial problem	3 (42.9)	7 (36.8)	1.00
Emotional problem	7 (100.0)	17 (89.5)	1.00
Peer relationship problem	2 (28.6)	8 (42.1)	0.67
School or work problem	3 (42.9)	8 (42.1)	1.00
Stigma & discrimination	2 (28.6)	4 (21.1)	1.00
Low self-efficacy	2 (28.6)	12 (63.2)	0.19

^{*}Fisher-exact test; Significant p<0.05

The least most common impact of pregnancy on the adolescents in our study was stigma and discrimination. More than a fifth of them had problems related to it. This is lower than Wiemann et al (2005) that reported 39.1% of their American adolescents felt stigmatised by their pregnancy. This is unexpected as our community is more traditional in upholding our cultural and religious values than those in the developed countries. Our community considers teenage pregnancy as deviant and a consequence of morally unacceptable and irresponsible behaviour²⁷.

Even though stigma was the least common problem, a number of the adolescents received significant unjust treatment from their own family. However, their situations usually improve once their families accept their pregnancy²⁸. Fear of rejection and being treated unjustly was the reason for them to initially hide their pregnancy from their family²⁷. This was to avoid negative reactions from their parents, which can be emotionally dramatic^{27, 28}. Due to this, they even considered illegal abortion. A study has shown that stigmatised adolescents had more tendencies to seriously consider abortion and keep their pregnancy from their parents' knowledge⁹.

Apart from being stigmatised by parents and community, the adolescents in this study also faced stigma and discrimination at school, leading them to leave school prematurely. According to Wiemann et al (2005), dropping out from school was found to be a protective factor from stigma⁹. However, this will affect their educational attainment and lead to limited job opportunities⁷.

To protect the adolescent from stigma and discrimination, parents of the adolescents in this study became more controlling over daughters' social life. This affected adolescents' relationship with their friends. The authoritarian attitude could also strain the parentadolescent relationship and increase conflicts²⁹. Being isolated from the outside world, the adolescents in this study were financially dependent on their parents. This financial constraint has been shown to cause emotional stress too³⁰.

Generally, there were three main coping strategies adopted by the pregnant adolescents in this study, including (1) avoidance, (2) withdrawal, and (3) seeking support. Avoidance and withdrawal are commonly used by pregnant adolescents elsewhere^{31, 32}. The effectiveness of these strategies is still unknown and needing further

study. Perhaps these strategies may be protective for the adolescents as they live in a community with significant stigma and discrimination against out-of-wedlock pregnancy. However, the potential harms of these strategies should not be ignored. Healthcare professionals can play a big role here. We can help them to get support from their parents and family by assisting them disclosing their pregnancy, provide options other than abortion and collaborate support from various sources for them. Alternative placement with local school programme could also help them to resume education throughout pregnancy simultaneously protect them from stigma and discrimination.

This study also highlights the source of help that the adolescents sought. Parents and friends were the most important figures for them. Adolescents' mothers in particular have been consistently found as the primary source of support^{33, 34}. Adolescents also rely on infant's fathers, other family members and peers^{33, 34}. In our study, doctors were the least popular source of help. Since individualized care from healthcare professionals could result in positive coping and adjustment among them, community awareness regarding available health services must be increased¹⁰.

This study has a number of limitations. As a descriptive study from a single shelter home that only involved a single ethnic group, direct generalization cannot be made to adolescents especially those from other ethnicity. However, due to similarity between traditional various ethnics cultures of in generalisation may be cautiously considered. Because of the relatively small sample, the data were presented descriptively which would only allow hypotheses generation. Therefore, this study may form the groundwork for larger studies to confirm our findings and suggested hypotheses.

CONCLUSIONS

This study highlights the detrimental impacts of pregnancy to adolescent mothers, particularly emotional problem. In addition, poor self-care was significantly more common in younger compared to older adolescents. The physical and psychosocial impacts were interrelated with each other. To deal with these challenges, the adolescents used avoidance, withdrawal, and help from significant others as their coping strategies. Parents remained as the most popular source of support whereas doctors were the least. Therefore, there is a need for interventions to increase awareness of available support for adolescent mothers, to provide holistic and individualised care, to improve

parenting behaviour and parental support, and to reduce discriminating attitude of our community. These interventions can assist these adolescents to rehabilitate towards a better and promising life.

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