

Characteristics of Adolescent Mothers Paired with Older Partners

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Purpose: Many fathers of infants born to adolescent mothers are adults, even older adults. The purpose of this study is to determine the characteristics and differences in sociodemography and relationship between adolescent mothers paired with older partners and those paired with younger partners.

Methods: In this cross-sectional survey, all 162 first-born adolescent mothers (≤ 19 years) in Taichung City in 1997 were divided into 2 groups: those paired with older partners (> 24 years) and those with younger partners (≤ 24 years). The subjects filled out a self-administered structured questionnaire designed to obtain sociodemographic and relationship information about adolescent mothers and their partners. Adjusted odds ratios with 95% C.I. of individual variable for being adolescent mother-older partner pair were obtained by multiple logistic regression analysis.

Results: One hundred fifty-eight subjects completed the questionnaire with a response rate of 97.5%. The average age of adolescent mothers with older ($n=71$) and younger ($n=87$) partners was 18.4 ± 1.2 and 17.6 ± 1.6 years, respectively, whereas the average age of the male partners was 27.2 ± 2.3 and 20.6 ± 2.3 years, respectively. Multiple logistic regression revealed that a lack of appropriate education of male partners, dysfunction in family of origin of adolescent mothers, becoming acquainted at work, and the desire to get married were risk factors for adolescent mothers paired with older partners.

Conclusions: The risk factors and type of support help for adolescent mothers paired with older partners could be different from those needed by those paired with younger male partners.

Key words: characteristics, adolescent mothers, older partners, Taiwan

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Introduction

The age-specific birth rate for adolescent women aged 15-19 years old in Taiwan in the past ten years has remained at about 17 per 1,000^[1], which is the highest among developed countries in Asia^[2]. It has been well accepted that effective programs for prevention of adolescent pregnancy should involve both adolescent women and their partners^[3,4]. Previous studies^[5,6] undertaken in the United States have found that many of the fathers of infants born to adolescent mothers are adults, and this pattern seems more prominent in Taiwan. One of our previous studies^[7] found that about two thirds of the fathers of infants born to adolescent women aged 16-19 years were more than 20 years of age. Moreover, quite a few of those adult fathers were even older (e.g. aged >24 years old). While some studies^[3,6,8] have indicated that a large age difference between the adolescent mothers and their partners is probably due to rape or sexual abuse and others have shown a greater risk for sexually transmitted infections when an adolescent girl is involved with an adult partner^[3,9]. Most studies^[6-7,10-12] concerned with this population have included only basic demographic information (e.g. age, residence, education) about the fathers and have not relied on population-based data. This has made it difficult to draw conclusions about the complete sociodemographic characteristics or risk factors associated with this group of people.

The purpose of this community-based study was to determine the sociodemographic characteristics and differences between adolescent mothers with older partners and those with younger ones.

Methods

Study subjects

Because Taiwan has one of the most complete household registration systems in the world, every newborn is registered at the local household registration authority with a certificate of live birth in which parental name, birthday, and residence are recorded. According to the certificates of live birth from all recorded residence births in Taichung City in 1997, there were 162 first-order live births born to adolescent mothers aged ≤ 19 years. Seventy-three of those adolescent mothers were categorized into a study group of adolescent mothers whose partners (fathers of infants) were more than 24 years old (at least 5 years older than adolescent mothers). This group was defined as the one having older partners. The comparison group was composed of the remaining adolescent mothers (n=89) whose partners were 24 years old or younger. This group was defined as the one having younger partners. This study was approved by Chung Shan Medical and Dental College's Review Committee on the study of Human Subjects.

Instruments

This study was part of a larger project studying general adolescent health. After explaining the purpose of this study by a public health nurse during a home visit, informed consent was obtained from each adolescent. Between July and September, 1988, all 73 adolescent mothers paired with older partners and remaining 89 adolescent mothers paired with younger partners were surveyed with a self-administered structured questionnaire. The development of the questionnaire was based on the review of the literature and the author's experience. In addition, a panel of experts reviewed the questionnaire and suggested some modifications on the sensitive or confusing questions. After a pilot study, some revision of wording was done for clarification. The questionnaire, administered to both groups, collected complete sociodemographic

characteristics of the adolescent mothers and their partners as well as information about the relationship between them. Test-retest reliability (r) for the sociodemographic items of the questionnaire ranged from 0.72-0.80, based on 20 subjects' responses at a two-week interval. In this study, education level was defined by the total years of education completed and then classified as appropriate and inappropriate for age. In this study, older partners were considered to have an age-appropriate educational level if they had completed at least 12 years of education (high school) whereas adolescent women or younger male partners were considered to have age-appropriate educational levels if they had completed the minimal number of grades for their age.

The function of family of origin was assessed by Family APGAR^[13], a five-item questionnaire designed to detect problems in family adaptation, partnership, growth, affection, and resolve. Each question was scored 2, 1, or 0, depending on whether the answer was 'almost always,' 'some of the time,' or 'hardly ever.' Total scores of 0 to 3 correlate with severe family dysfunction, 4 to 6 with moderate dysfunction, and 7 to 10 with normal function^[13]. The validity and reliability of the Chinese version of Family APGAR have been tested and confirmed in previous studies^[14,15]. Parents with large age differences were defined as those having more than 5 years between them. The overall relationship between teen mothers and their partners prior to pregnancy were rated by the teen mothers, using a scale of good, fair, and poor. The type of sexual relationship prior to marriage was 'yes' (had sex) or 'no' (had no sex), based on the subjects' reports.

Statistical analysis

Frequency distribution and differences in sociodemographic and relationship variables between the study and comparison groups were

calculated and compared by univariate analysis using Chi-square test. To eliminate the potentially confounding effects of covariates, odds ratios with 95% confidence intervals for statistically significant individual variables measured in this study were obtained by a stepwise multiple logistic regression analysis. A p -value of less than 0.05 was defined as statistically significant.

Results

Seventy-one (97.5%) adolescent mothers with older partners and 87 (97.8%) with younger partners completed the questionnaire with a total response rate of 97.5%. The average age of adolescent mothers with older and young partners 18.4 ± 1.2 years and 17.6 ± 1.6 years, respectively, while the average age of male partners of the two groups was 27.2 ± 2.3 years and 20.6 ± 2.3 years, respectively. The age differences between adolescent mothers and their partners of the two groups reached a statistically significant difference ($p < 0.05$). Adolescent mothers with older partners had a significantly lower educational level prior to pregnancy than their counterparts. A significantly lower education level and higher employment rate were also found in older partners paired with adolescent mothers.

The distribution of schooling at the time of pregnancy was significantly different in that only 7.0% of adolescent mothers paired with older partners were in school at the time of pregnancy and 26.4% of those paired with younger partners were in school. However, no difference could be found with respect to where and with whom they were living at the time of pregnancy. The original family profiles of the adolescent mothers of the two groups are also shown in Table 1. There was no significant difference could be found in the proportion of single-parent families between the two groups. However, 79.3% of the original families of adolescent mothers paired

Table 1 Sociodemography of Subjects

Variables	Adolescent mothers with older partners		Adolescent mothers with young partners		p value*
	N=71	%	N=87	%	
Education					0.01
Age-appropriate	34	47.9	59	67.8	
Age-inappropriate	37	52.1	28	32.2	
Schooling					0.002
In school	5	7.0	23	26.4	
Not school	66	93.0	64	73.6	
Living status					0.91
At home	41	57.8	51	58.6	
Outside home	30	42.2	36	41.4	
Partner's education					0.001
Age-appropriate	4	5.9	28	32.2	
Age-inappropriate	67	94.1	59	67.8	
Partner's working status					0.001
Employed	68	95.8	66	75.9	
Unemployed	3	4.2	21	24.1	
Single-parent family of origin					0.62
No	54	76.1	69	79.3	
Yes	17	23.9	18	20.7	
Function of family of origin					0.01
Normal	14	19.7	37	42.5	
Moderate/ Severe dysfunction	57	80.3	50	57.5	
Parents with large age difference					0.51
No	36	50.7	49	56.3	
Yes	35	49.3	38	43.7	

*Using Chi-square test

with older partners were classified as dysfunctional while only 58.6% the original family of adolescent mothers with younger partners could be classified as such, and a statistically significant difference existed. No significant difference

could be found in the proportion of those having parents with large age differences (>5 years) between the two groups of adolescent mothers.

The relationship between adolescent mothers and their partners are shown in Table 2. There

Table 2 Relationship between Adolescent Mothers and their Partners

Variables	Adolescent mothers with older partners		Adolescent mothers with young partners		p value*
	N=71	%	N=87	%	
How to know each other					0.01
Through schooling	4	5.6	26	29.8	
Through working	28	39.5	10	11.6	
Others	39	54.9	51	58.6	
Duration from knowing each other to have sex					0.11
≤ 6 Ms	51	71.8	51	58.6	
> 6 Ms	20	28.2	36	41.4	
Duration from knowing each other to being pregnant					0.30
≤ 18 Ms	45	63.4	48	55.2	
> 18 Ms	26	36.6	39	44.8	
Duration from knowing each other to getting marries					0.38
≤ 24 Ms	43	60.6	46	52.9	
> 24 Ms	28	39.4	41	47.1	
Sexual assault					0.15
No	66	93.0	85	97.7	
Yes	5	7.0	2	2.3	
Relationship between adolescent mothers and partners prior to pregnancy					0.74
Good	36	50.7	39	44.8	
Fair	28	39.4	40	46.0	
Poor	7	9.9	8	9.2	
Marital status					0.26
Married	69	97.1	82	94.3	
Unmarried	2	2.9	5	5.7	
Main reason to get married					0.01
Pregnancy	51	71.8	83	95.4	
Wanted married	20	28.2	4	4.6	
Decision maker for keeping pregnancy					0.16
Couple	68	95.8	73	83.9	
Parents	3	4.2	14	16.1	
Source of family expenses					0.03
from partner	57	80.3	53	60.9	
from adolescent mother	8	11.3	15	17.3	
from parents	6	8.4	19	21.8	

*Using Chi-square test

was a significant difference between adolescent mothers of two groups in the distribution of how they got acquainted with their partners. Thirty

nine and a half percent of those with older partners met their partners through work in contrast to only 11.6% of their counterparts met

their partners in the same way. Adolescent mothers with older partners took a shorter time than did their counterparts to begin sexual intercourse, to become pregnant, and to get married. However, none of the differences were statistically significant. In addition, adolescent mothers with older partners reported more (7.0%; not statistically significant) sexual assault by their partners than did their counterparts (2.3%). There was no difference in adolescent mothers' perceived intimacy prior to pregnancy with their partners between two groups. Regarding marriage, 97.1% the adolescent mothers paired with older partners were married to the infants' fathers, compared to the 94.3% in the comparison group. There was no significant difference in who decided the impregnated adolescent would remain and deliver her child between adolescent mothers of two groups. There was a significant difference found in those who used their pregnancies as the main reason to get married; those with older partners (71.8%) was significantly lower than those with younger partners (95.4%). Regarding family expenses, most (80.3%) of study group were supported by their partners, while 60.9% and 21.8% of the comparison group were supported by their partners and their relatives, respectively.

When the most noticeable variables from the univariate analysis were analyzed by multiple logistic regression, significant differences were found in the two group's inappropriate education in adolescent mothers, family of origin dysfunction, getting acquainted at the workplace, and the desire to get married.

Discussion

Since the associated adverse medical and social outcomes for adolescent mothers and babies are much greater^[16-18], adolescent pregnancy and parenting present an important public health challenge. Adult paternity occurs in about two-thirds of births to adolescents of all ages^[5-7]. Moreover, previous studies^[3,6,8] have indicated that a large age discrepancy between the age of adolescent mothers and of their partners may be due to sexual assault. In our series, 45.1% of fathers of infants born to adolescent mothers were older partners (age >24 years) and 67.1% of fathers were adult (>20years), which is comparable to the data reported in the U.S.A.^[6]. The older fathers in our series were at least 5 years older than the mothers on average 8.8 year older. The age difference between these couples is considerable and could be troublesome when one considers the

Table 3 Logistic Regression Analysis for Independent Variables Associated with Older Paternity

	Adolescent mothers with older partners	VS.	Adolescent mothers with young partners
	Adjusted OR		95 % C.I.
Inappropriate education of male partners	2.2		1.1-4.5
Family dysfunction of adolescent mother	3.2		1.5-6.9
Knowing each other through working	5.1		1.2-21.6
Wanted marriage	3.7		1.2-11.3

Adjusted OR: Adjusted odds ratio; 95% C.I.: 95% confidence interval.

Note: Inappropriate education of male partners: 1. no, 2. yes; Family dysfunction of adolescent mother: 1. no, 2. yes;

knowing each other through working: 1. no, 2. yes; Wanted marriage: 1. no, 2. yes.

psychosocial differences between these partners, an area which deserves further investigation. Although there have been a few studies focusing on the characteristics and risk factors for adult paternity^[6-7,10-12,19] (>20 years), we did not find any study involving comprehensive sociodemography, marital status and relations of adolescent mothers and their older partners aged greater than 24 years (age difference >5 years).

Consistent with other studies in the U.S.A., adolescent mothers with older partners were more likely to have a significant inadequacies in education than their adolescent counterparts. Similarly, there is a significant difference in educational level between male partners of two groups by univariate analysis, and this was also found to be a risk factor through the multiple logistic regression analysis compatible with the finding in another study in the U.S.A.^[19]. Inadequate paternal education was found to be the most pronounced risk factor for adult paternity. The inappropriate educational level for adolescent mothers with older partners was mostly due to dropping out of school, (only 7.0% of them were in school prior to pregnancy), which should be taken into account when preventive strategies are developed in the future. In addition, dysfunction in family-of-origin was more likely to occur for the group with older partners than with their counterparts, which might be related to the higher rate of school dropout and inappropriate education in adolescent mothers with older partners^[20]. It is suggested that for adolescents with family dysfunction (easily screened by the family APGAR^[13] as utilized in this study) referrals should be made to appropriate private or public organizations so that they can receive appropriate counseling, family therapy and regular follow-up. Besides, adolescent mothers paired with older partners were much more likely than their counterparts ($p < 0.05$) to become acquainted with their partners through work, indicating that adolescent

females who are working either a part-time or full time job have more opportunities to meet and interact with older men. This situation calls for efforts in improving or creating educational and vocational opportunities and environment for adolescent girls, especially for those who have dropped out of school.

Previous studies in Western societies^[3,6,8] have indicated that the large age difference between adolescent mothers and their partners is possibly due to rape or sexual abuse. However, the results of our study in Taiwan did not share this finding. In Taiwan, cultural factors should be considered. In Asian culture, out-of-wedlock sexual intercourse or pregnancy, even owing to rape or sexual abuse, is embarrassing and considered amoral and unacceptable behavior. Thus, those kinds of situations are mostly resolved by a marriage prior to delivery^[21]. No wonder that more than 90% of the adolescent mothers in our series had been married prior to delivery and that some of those might be unwanted marriages. Although legally in Taiwan, sexual assault, sexual abuse, or prostitution with adolescents is a crime worthy of public prosecution, a more vigorous prosecution of statutory rape laws as suggested by legal professionals could be effective in reducing the problem of adult paternity for adolescent mothers, especially for the very young adolescent girls^[21]. However, cultural acceptance of statutory rape prosecutions still needs to be evaluated in Taiwan or other Asian societies. In this study there is no significant difference either in the sexual chronology from becoming acquainted to having sexual intercourse, and to becoming pregnant, or on the intimacy prior to pregnancy between adolescent couples of the two groups. However, a significant difference did exist in the primary reason to be married between the adolescent girls of the two groups. Adolescent mothers paired with older partners were more likely to get married due to love, while preg-

nancy is the reason for most of their counterparts. Similarly, compared to their counterparts adolescent mothers paired with older partners had a higher proportion of perceived good relationships with their partners. It has even been suggested that adolescent mother-older father pairs may be more likely to compromise and less likely to have marital conflict^[10]. In addition, our results showed that teens with older partners were more apt to report dysfunction of family of origin, which might suggest that older partners might fulfill a father figure role. In contrast, older fathers who choose adolescent women may tend to have developmental arrests. When the adolescent mother becomes a more mature person and recognizes her partner's incompetence, the equanimity of this relationship may be disturbed later. Further study will be required to determine whether the durability of the marital relationship between adolescent mothers and their older partners is related to the father's age and/or to the partners' age differences.

The strength of this study is its population-based analysis that included all first-born adolescent mothers in Taichung City in 1997. This is the first comprehensive study on adolescent pregnancy which includes social-sexual relations and marital status and characteristics of older adult (>24 years) paternity. This study could serve as the basis for further studies or for planning prevention programs. Our study, however, has several limitations. First, recall bias could occur since this was a retrospective study design. In addition, psychological and behavioral factors for adolescent mother-older father combination were not examined in this study, although a previous study^[22] found that adolescent mothers in a group with large age discrepancies reported a significantly greater incidence of risk-taking or antisocial behaviors.

Based on the results of this study, improving educational opportunities and family functioning

for adolescent girls and disadvantaged older males, and increasing understanding of psychological factors predisposing to the adolescent mother-older father combination could help to alleviate some of the problems which we found. On the other hand, for those families of adolescent mother-older father already in existence, the type of supporting help and the most appropriate methods of intervention should be different from those needed by younger couples.

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有高齡男伴之青少年母親的特性

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前言：許多青少年母親的男伴為成人，甚至是較高齡的成人，其特性及成因值得深入研究。

目的：本文之目的在於探討匹配高齡和同年齡層男伴之青少年母親的特性及兩組間的差異。

方法：於此社區為基礎之調查中，以1997年台中市全部162位初產青少年母親為對象，將之分為高齡男伴組（男伴年齡大於24歲）及同齡男伴組（男伴年齡 \leq 24歲），並於1998年7月至9月進行家訪，以結構化自填問卷調查兩組青少年母親及其男伴之人口社會學和彼此間關係的特性。

結果：結果顯示；計有高齡組71位及同齡組87位共158位青少年母親完成問卷調查，總回覆率為97.5%。高齡組及同齡組青少年母親平均年齡分別為 18.4 ± 1.2 及 17.6 ± 1.6 歲，而其男伴平均年齡分別為 27.2 ± 2.3 及 20.6 ± 2.3 歲。經由多重邏輯回歸統計分析顯示；男伴屬低教育程度，青少年原出生家庭之家庭功能障礙，經由工作認識男伴，及計畫性結婚為青少年母親有高齡男伴之顯著相關因素。

結論：本文總結；青少年母親有高齡男伴有其特性和相關因素。吾人在從事該族群之預防策略和照顧上應有別於有同齡男伴之青少年母親。

關鍵詞：青少年母親、高齡男伴、特性

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