

JOURNAL OF
ADOLESCENT
HEALTH

www.jahonline.org

Original article

## Social and Emotional Adjustment Following Early Pregnancy in Young Australian Women: A Comparison of Those Who Terminate, Miscarry, or Complete Pregnancy



Craig A. Olsson, Ph.D. <sup>a,b,c,\*</sup>, Emily Horwill, DPsych (Clinical) <sup>a</sup>, Elya Moore, Ph.D. <sup>b</sup>, Marla E. Eisenberg, Ph.D. <sup>d</sup>, Alison Venn, Ph.D. <sup>e</sup>, Christina O'Loughlin, Ph.D. <sup>b</sup>, and George C. Patton, M.D. <sup>b,c</sup>

- <sup>a</sup> School of Psychology, Centre for Mental Health and Wellbeing, Faculty of Health, Deakin University, Geelong, Victoria, Australia
- <sup>b</sup> Murdoch Childrens Research Institute, Royal Children's Hospital, Parkville, Victoria, Australia
- <sup>c</sup> Department of Paediatrics, Faculty of Medicine, Dentistry and Health Sciences, University of Melbourne, Parkville, Victoria, Australia
- <sup>d</sup> Division of General Pediatrics and Adolescent Health, University of Minnesota, Minneapolis, Minnesota

Article history: Received May 24, 2013; Accepted October 25, 2013

Keywords: Pregnancy; Termination; Miscarriage; Depression; Psychosocial well-being; Education; Substance use

#### ABSTRACT

**Purpose:** To compare social and emotional adjustment including educational attainment and substance use in women who had a child, pregnancy termination, or miscarriage by young adulthood.

**Methods:** Data were from a population-based longitudinal study of the health and well-being of 1,943 young Australians (Victorian Adolescent Health Cohort Study) followed from 15 to 24 years of age. The sample was restricted to female participants and based on pregnancies reported by age 24 years. Analyses were adjusted for early teenage depressive symptoms, cigarette smoking, alcohol use, cannabis use, and parent socioeconomic context.

**Results:** A total of 208 pregnancies (in 170 women) were reported from a sample of 824 young women by 24 years of age. Compared with those who had never been pregnant, those who had a child had lower tertiary education completion and a higher risk of nicotine dependence; those who terminated a pregnancy were more commonly single and had a higher risk of smoking and alcohol use as well as nicotine and alcohol dependence; and those who had a miscarriage had a higher risk of depressive symptomatology and binge drinking as well as nicotine and cannabis dependence.

**Conclusions:** Young women who have been pregnant by their mid-twenties report a range of difficulties in social and emotional adjustment that vary across the different pregnancy outcomes. Broad-based psychosocial health care is essential not only for young women whose pregnancies proceed to live birth, but also for those whose pregnancies end with miscarriage or induced abortion.

© 2014 Society for Adolescent Health and Medicine. All rights reserved.

## IMPLICATIONS AND CONTRIBUTION

Findings from this study suggest that broad-based psychosocial health care is essential not only for young women whose pregnancies proceed to live birth, but also for those whose pregnancies end with miscarriage or induced abortion. This necessitates collaboration across clinical specialties and integration of services, from health to education.

E-mail address: craig.olsson@rch.org.au (C.A. Olsson).

Maternal age at childbirth and age of marriage have extended upward around the globe following economic development, longer education, and the availability of effective contraception. This is particularly so in high-income countries. In Australia, the

<sup>&</sup>lt;sup>e</sup> Menzies Research Institute, University of Tasmania, Hobart, Tasmania, Australia

<sup>\*</sup> Address correspondence to: Craig A. Olsson, Ph.D., Deakin Centre for Mental Health and Wellbeing and Murdoch Childrens Research Institute, Parkville, 3052 Victoria. Australia.

mean age of women at the birth of the first child is around 28 years [1]. In other OECD (Organisation of Economic Cooperation and Development) countries, the mean age of first-time mothers varies from 25 years in the United States [2] to 28 years in the United Kingdom [3]. Benefits in economic development and in allowing women better chances for education and employment are clear. However, the consequences for sexual and reproductive health have been profound, with changing patterns of sexually transmitted infection risk and high rates of pregnancies (teen and young adult) that are unplanned and outside of marriage [4].

Adolescent parenthood has been linked to poor educational attainment [5], low socioeconomic capacity [6], and a higher prevalence of mental disorder [7]. Because of the extended duration of education for young people in many countries, first parenthood by young adulthood may effect both educational achievement and economic independence. Results from the Christchurch Health and Development Study (New Zealand), a population-based birth cohort now spanning 3 decades, suggest that young mothers (up to 21 years of age) have lower educational attainment compared with those never pregnant. They also report higher welfare dependence, lower workforce participation, and lower income [8].

Availability of safe termination procedures in many developed countries means that termination is an option for young women who become pregnant [9]. Australian lifetime rates are high, with at least 30% of women born after 1960 having had a termination [10]. Approximately 84,400 terminations occur annually (women aged 15–44 years), corresponding to 19.7 terminations per 1,000 pregnancies [11]. In the United States, pregnancy termination rates are approximately 21 per 1,000 pregnancies [12], slightly higher than European rates ranging between seven and 19 per 1,000 pregnancies [11]. Most occur before 24 years of age, with 17% occurring before 20 years and 71% by 24 years [13].

Relationships between termination and psychosocial adjustment remain unclear although social and emotional problems are often being cited as a reason for pregnancy termination [14]. Studies in clinical populations suggest that pregnancy termination is an emotionally benign experience for most women [15]. However, population-based prospective studies suggest that although termination may be associated with higher educational achievement compared with those continuing a pregnancy [16], it may also be associated with mental health problems [17].

Relationships between miscarriage and psychosocial adjustment are even less well understood. Miscarriage rates increase with maternal age [18] and have been estimated to occur in 10%—25% of all pregnancies [19]. Data from cross-sectional studies suggest that pregnancy loss is associated with depressive symptoms [20]. A prospective study of miscarriage by 21 years of age in a sample of 1,223 Australian women observed from birth provides further evidence of an association between miscarriage and poor adjustment, with high rates of reported depressive symptoms and substance use disorders (excluding cannabis) [21]. Little is known about other correlates or consequences of miscarriage, such as educational attainment or relationship satisfaction.

This study sought to assess the extent to which pregnancy by age 24 years is associated with different patterns of psychosocial adjustment (mental health, relationship, substance use, and educational outcomes) in a high-income country in which the typical gap between age of onset of sexual activity and first

parenthood is generally well over a decade. Specifically, the aim was to compare psychosocial adjustment in young women who became pregnant and had a child, a termination, or a miscarriage with those never pregnant. Relationships between pregnancy groups were examined over and above systematic adjustment for earlier indicators of adolescent mental health and substance use, as well as parent socioeconomic context.

#### Methods

Sample and procedure

The analysis was based on data over the first 10 years (eight waves) of an Australian population-based longitudinal study of adolescent and young adult development, the Victorian Adolescent Health Cohort Study (VAHCS), established in 1992. The VAHCS was defined in two sampling stages. In the first stage, 44 government, independent, and Catholic schools were chosen to represent each school stratum in the state of Victoria. In the second stage, a single intact Year 9 class (14–15 years of age) was randomly selected from each school to constitute the Wave 1 sample (n = 1,037). School retention rates to Year 9 in 1992 were 98%, ensuring a close to representative sampling frame.

Six months later, when the study population had moved into Year 10 (15–16 years of age), a second intact class from each participating school was selected at random, giving a total sample of 2,032. Thereafter, participants were followed up every 6 months through to the completion of their secondary schooling (Waves 3–6), with two further follow-up waves in young adulthood (average age, 21 years [Wave 7] and 24 years [Wave 8]). Each wave of the study was individually approved by the Melbourne Royal Children's Hospital Ethics in Human Research Committee, Victoria, Australia.

Figure 1 illustrates the VAHCS sampling frame and study design. From the total intended sample of 2,032 students, 898 entered the cohort in Wave 1, 953 in Wave 2, 86 in Wave 3, five in Wave 4, and one in Wave 5, resulting in 1,943 (95.6% of the total intended sample) who participated at least once during the adolescent phase, that is, during the first six waves. A total of 89 invited participants either had parents who refused consent or were not available for interview. Response rates were consistent and high across all six adolescent waves (n = 1,503-1,727;75%-85%). In young adulthood, 1,601 (79%) and 1,520 (75%) participated in Waves 7 and 8, respectively.

We used laptop computers to administer the surveys in Waves 1—6 within school classrooms. Given high mobility in young adulthood, Wave 7 and 8 follow-up surveys were administered using a computer-assisted telephone interview. At each wave, extensive data were collected on key adolescent and young adult mental and behavioral health issues. Data were collected using a range of assessment strategies: Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) diagnostic instruments (e.g., Composite International Diagnostic Instrument [CIDI]), psychometrically validated scales (e.g., 12-item General Health Questionnaire [GHQ-12]), and standard epidemiologic measures (e.g., socioeconomic status).

We assessed pregnancy history at 24 years of age by asking participants, "Have you ever had any children of your own?" "Have you ever had a miscarriage?" and "Have you ever had a termination or abortion?" Possible responses to these questions were "yes" or "no." Four pregnancy groups were defined: ever

### Download English Version:

# https://daneshyari.com/en/article/10511302

Download Persian Version:

https://daneshyari.com/article/10511302

<u>Daneshyari.com</u>