

Romantic performance in adults born preterm; A short communication

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Abstract

Preterm birth with a high prevalence is responsible for long-term morbidities. It was reported that preterm birth can adversely affect romantic relationships in adulthood. In the present study, we aimed to assess the most important factors involved in the challenges related to romantic relationships among young adults born preterm. A short communication study was carried out to review evidence finding important contributors. The results have shown that several reasons are involved in the challenges related to romantic performances among young adults born preterm. As all body organs form, grow, or develop during the second and third trimesters of gestation, preterm birth may cause a mild to severe range of postnatal structural and functional immaturities. Moreover, individuals born preterm are prone to main risks related to brain hypoxic-ischemic injuries. Impaired cognitive domain, psychiatric disease, emotional and behavioral problems may also affect learning abilities, educational and job opportunities. All these involving factors may influence peer relationships, social interactions, sexual intercourse, romantic partnership or becoming parents. In the present study, we reviewed evidence to show the negative influence of preterm birth on the establishment of a romantic relationship in adulthood. This challenge may correlate to physical, emotional, and mental health statuses as well as educational and socioeconomic characteristics of adults born preterm. Devoting all efforts to prevent preterm birth, long-term follow-up, and providing additional supports should be considered for such a high-risk group.

Keywords: Preterm; Neonate, Adult; Romantic relationship

1. Background

Preterm birth with a high prevalence (10%) defines as birth before 37 weeks of gestation and is responsible for long-term morbidities [1]. Critical alterations in the intrauterine and early postnatal growth/development related to preterm birth may affect personal and social life [2]. Previous studies investigating the social outcome of young adults born preterm have shown fewer successes in a romantic relationship, educational opportunities, and job positions in this group [3, 4]. It was noted that regardless of 10–15% of a major neuro disability among preterm birth survivors, minor behavioral difficulties may also influence forming relationships in adolescence or adulthood periods [5]. A Meta-analysis illustrated that antisocial personality resulting in fewer romantic relationships was more frequent in adults born preterm with very low birth weight (VLBW) than term control subjects [6]. A study has indicated the positive effects of extremely low birth weight on the disinclination toward marriage, cohabitation, or being parents in adulthood [7]. Another investigation demonstrated that even healthy young adults, who were born with complications causing VLBW, prefer to postpone leaving the parental home, starting partnerships, sexual relationships, and establishing family [8]. These behavioral phenotypes and personality profiles in individuals born premature or low birth weight may correlate some characteristics toward risk-taking or fun-seeking those cause difficulties in establishing romantic relationships [9].

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Objectives

It seems several reasons are involved in the challenges related to romantic relationships among young adults born preterm that the most important contributors are described in the present study.

2. Methods

A brief report study was carried out in the Maternal, Fetal, and Neonatal Research Center, affiliated with Tehran University of Medical Sciences, Tehran, Iran (2020). Detailed research on MEDLINE, PubMed, and Google Scholar databases was performed (up to June 2020). English articles were included and the search process was performed using the following keywords: “Romantic relationship”, “Adult”, “Preterm”, “Prematurity”, “partnerships”, “social life”, and “social interactions”.

3. Results and discussion

Reviewing included studies showed several important contributors that involved in the challenges related to romantic relationships among young adults born preterm as follows;

3.1. Physical health status

All body organs form, grow, or develop during the second and third trimesters of gestation.

Preterm birth causes a mild to severe range of postnatal structural and functional immaturities resulting in an increased risk of intraventricular hemorrhage, brain white matter injury, pulmonary, renal, hepatic, and cardiovascular complications, metabolic, thromboembolic events, etc. [5]. These adverse outcomes can influence the quality of early and late postnatal life which persists to adulthood. Lower physical functioning and general health perception scores as well as receiving regularly prescribed medications in preterm adult groups have been more prevalent than in term controls. It was reported that even adults who were born preterm with no major disabilities, may suffer from several physical problems. It is clear that the physical adverse outcomes impact risk-taking behavior, socially avoidant personality traits, and quality of adulthood romance life [2, 5, 6]. Regardless of health status, physical characteristics also influence sexual attractiveness and activity; adults born preterm are underweight, short, less muscular, and perceive themselves as less attractive compared to those born terms. These physical characteristics are important factors that affect self-perceived body image, less satisfaction with their appearance, and romantic confidence causing less desire for having cohabited and sexual relationships [5, 9, 10].

3.2. Emotional and mental health status

Individuals born preterm are prone to main risks related to brain hypoxic-ischemic injuries, periventricular leukomalacia, periventricular or parenchymal hemorrhage, white or gray matter injuries. These complications are the main causes of long-term neurodevelopmental impairments resulting in neuropsychiatric, speech, cognitive, and mood disorders [2, 11]. Studies have shown that the scores related to anxiety/depression, attention problems (attention-deficit/hyperactivity disorder), aggressive behavior, internalizing problems, and thought problems were significantly higher in adults born preterm with low birth weight in comparison with the controls'. These behavioral complications may significantly affect social skills and relations [12, 13]. An investigation confirmed that Self-reported mental health problems like internalizing, intrusive behavior, and antisocial personality problems among adults born preterm were more prevalent compared to the controls. This universal phenotype of mental health disorders among young adults born preterm may impose them at greater risks for social problems and fewer romantic partners [6].

3.3. Educational status

Individuals who were born preterm are at greater risks for cognitive impairment, psychiatric disease, emotional and behavioral problems that may also impair learning abilities as well as educational attainment. These learning difficulties in adulthood may result in several challenges in the subject's identity, independence, emotional maturation, and social domains like marriage or establishing a romantic relationship [2, 10]. It was reported that adults born preterm with low birth weight had lower intelligence quotient (IQ) scores in comparison with control participants. Impaired school competence and its associated abilities including deficits in verbal fluency, working memory, and cognitive flexibility adversely influence social relations [12, 14]. A study demonstrated poor cognitive domain of verbal learning, school performance, and basic educational level during adolescence and adulthood in individuals born preterm. These long-term adverse effects of preterm birth can influence individual and social life [11]. It was indicated that delays in leaving the parental home, starting sexual activity, and partnerships were more prevalent in adult subjects with a history of

very low birth weight when compared with the controls with a history of term birth. The frequencies of academic education between these groups were also notable (27.3% vs. 43.1%) [8]. The other investigation confirmed that preterm adults were significantly more likely to be living at parental homes and less likely to be living with their peers because of their few opportunities for entering university and poor academic qualifications [5].

3.4. Socioeconomic status

There is also a significant association between the history of preterm birth and future social life. Neurodevelopmental impairment due to preterm birth can affect the social brain resulting in social difficulties. Adults born preterm are timid and less likely to have peer relationships, social interactions, sexual intercourse, and romantic partnership, or to become parents. Interestingly, this social complication is positively associated with the degree of prematurity and lower gestational age [3, 9, 14]. The other study revealed that preterm adults with withdrawn personality indicate being less socially engaged, low in taking risks, poor in communication, and easily worried. These factors may be responsible for social difficulties and unsuccessful peer/partner relationships [15]. The other investigation also illustrated a significant association between preterm birth and relationship status; preterm individuals showed less likely to have intimate relationships in comparison with term subjects. Moreover, this significant association was observed between preterm birth and employment status or job satisfaction that could impact the feeling about various aspects of life and social relationships [3]. A study demonstrated that regarding economic status; the unemployment rate was higher among preterm adults in comparison with their term counterparts. This difference may correlate with their academic achievements [5, 14].

4. Conclusion

In the present study, we reviewed evidence to show the negative influence of preterm birth on the establishment of a romantic relationship in adulthood. This challenge may correlate to physical, emotional, and mental health statuses as well as educational and socioeconomic characteristics of adults born preterm. Devoting all efforts to prevent preterm birth, long-term follow-up, and providing additional supports should be considered for such a high risk group.

Compliance with ethical standards

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Authorship Contributions

Dr. M.R.Z. and Dr. Z. F. carried out the design and coordinated the study and participated in manuscript preparation. The authors have read and approved the content of the manuscript.

Disclosure of conflict of interest

The authors declare that there is no conflict of interest.

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