Factors Influencing Childlessness and Single-Child Families in Isfahan Province: A Population-Based Study

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ABSTRACT

Introduction: Population dynamics are complex phenomena influenced by economic, social, cultural, and political factors. In Iran, declining fertility rates have led to an increase in childless and single-child families. This study aimed to model the factors associated with these family structures in Isfahan Province.

Methods and Materials: This retrospective cross-sectional study was conducted in Isfahan province in 2024. Our target population consisted of women of reproductive age (10 to 53 years) residing in Isfahan. We employed a multi-stage cluster sampling approach, interviewing 2700 women. To investigate factors related to childlessness and single child, we used chi-square tests. Multiple logistic regression was also used to model and estimate the odds ratio and its 95% confidence interval.

Results: There were 409 (15.1%) families without children and 1116 (41.2%) single-child families. The mean age of participating women was 31.8 (8.38), and the average age of marriage was 20.85 (6.35). Women's highest level of education was a diploma (38.6%), and postgraduate to bachelor's degree (35%). Most women's jobs were housewives (80.7%) and employees (11.0%). The socio-economic status of the majority of the families was low (57.3%), and 23.6% of women had reported a history of abortion (18.9% spontaneous abortion and 3.9% induced abortion). The results of the chi-square test showed a significant relationship between childlessness and single-child families and employment, marriage age, education, socioeconomic status, and the number of abortions (p = 0.05). The results of the test in the logistic regression model indicated that with increasing the age of marriage (OR = 1.02; 95% CI: 1.00-1.04), increasing education (OR = 1.28; 95% CI: 1.35-1.19), being collegian (OR = 4.28; 95% CI: 1.80-10.18) the odds of having no children and having only one child raised. Also, women's employment in the public sector (OR = 0.63; 95% CI: 0.47-0.86) and having an abortion (OR = 0.59; 95% CI: 0.46-0.66) contributed to a decrease in childlessness and the prevalence of single-child families.

Conclusion and Discussion: Addressing socio-economic factors and educational interventions, especially for female college graduates, may help reduce childlessness and single-child families. Additionally, understanding abortion-related factors is crucial for family planning programs.

Keywords: Economic factors, Iran, Social factors

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