

Medical Aspects in Tackling Fertility Decline among Japanese

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ABSTRACT

Objective: We highlight the medical aspects in tackling fertility decline among Japanese. The central issues of concern are, what health-related factors contribute against (1) initiation of pregnancy and (2) completion of pregnancy.

Methods: Published medical literatures which are directly and/or indirectly linked to fertility decline on Japanese men and women were searched.

Results: We have tentatively identified 9 factors. Those which contribute against initiation of pregnancy include, sexual health of men, sexual health of women, smoking and alcohol use, intimate partner violence, cultural practices (balneotherapy) and current social trends (gamophobia and delayed child rearing). Those which contribute against completion of pregnancy include, induced abortion, spontaneous abortion, and gynecological diseases, including tocophobia.

Conclusion: Effective education on sexuality, contraception use and fertility promoting behavior is a high priority item for teenagers, college students and youths in Japan to check mate the problem of fertility decline.

KEY WORDS

abortion, balneotherapy, gamophobia, pedophobia, sexuality, tocophobia

INTRODUCTION

Fertility decline in Japan in tandem with aging population has become a serious socio-medical issue which deserves immediate attention and solution¹⁻⁴⁾. Though this issue receives occasional highlight in newspaper editorials⁵⁻⁹⁾, solutions suggested by journalists and sociologists focus more on child rearing expenses, day care centers and pre-school education. We believe that this type of 'placing the cart before the horse' solutions are simply out of focus from the real issue faced by Japan. In this editorial, we wish to highlight the medical aspects in tackling fertility decline among Japanese. The central issues of concern are what health-related factors contribute against (1) initiation of pregnancy and (2) completion of pregnancy.

METHODS

Published medical literatures which are directly and/or indirectly linked to fertility decline on Japanese men and women were searched in appropriate databases such as PubMed and Web of Science.

RESULTS

We have tentatively identified 9 factors, which can be grouped into two categories; namely, (A) Factors contributing against initiation of pregnancy, and (B) Factors contributing against completion of pregnancy. Available relevant literature on Japanese men and women, describing each of these 9 factors are indicated below. In the absence of pertinent literature on Japanese population due to lack of reported studies, relevant literature in medical journals from other countries are included.

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(A) Factors contributing against initiation of pregnancy

- (1) Sexual health of men affecting spermatogenesis and semen quality, erectile dysfunction¹⁰⁻¹³⁾
- (2) Sexual health of women in reproductive phase (aged 15-49)^{14,15)}
- (3) Smoking and alcohol use in men and women, and their detrimental effects such as alcoholic impotence and related testicular malfunction in men¹⁶⁻²⁰⁾
- (4) Intimate partner violence (IPV)^{21,22)}
- (5) Cultural practices (such as balneotherapy/hot spring therapy)²³⁾,
- (6) Current social trends: gamophobia^{24,25)}, delayed child bearing²⁶⁾

(B) Factors contributing against completion of pregnancy

- (1) Abortion by choice (induced abortion)²⁹⁻³¹⁾
- (2) Spontaneous abortion³²⁻³⁴⁾
- (3) Gynecological diseases,^{14,15)} including fear of childbirth (FOC or tocophobia) and pedophobia³⁵⁾

DISCUSSION

Three phobias (namely, gamophobia, tocophobia and pedophobia) were indicated in the Results section. These are explained as follows:

Gamophobia: morbid fear of marriage³⁶⁾. Though prevalence of gamophobia has not been reported in scientific or medical literature for other cultures, brief news features in Japan's popular press^{24, 25)} do offer some glimpses on this disorder among Japanese. In 1993, a public opinion survey conducted by the Prime Minister's Office showed that 54% of young women preferred to stay single and only 13% thought that

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marriage offer happiness.²⁴⁾ Unfortunately, sample size of the survey was not indicated. Poor communication of young women with their fathers who are thought to harbor 'old-fashioned ideas' is also noted as a factor in gamophobia²⁵⁾.

Tocophobia: a severe fear of pregnancy and childbirth^{37,38)}. According to O'Connell *et al*³⁸⁾, "There is no general consensus as to the precise definition of tocophobia and therefore prevalence estimates vary widely. Since 1997, tocophobia was included under ICD-10 Code 099.80 Other specified diseases in pregnancy." Though literature exists on the prevalence of tocophobia in European countries, as of now, this disorder has not been studied or reported in Japan.

Pedophobia: morbid fear or strong dislike for children³⁶⁾. Though not reported in scientific or medical literature for other cultures, brief news snippets in Japan's popular press³⁵⁾ do offer some data on pedophobia. A Cabinet Office survey conducted in 2009, with a sample size of 5,000 men and women aged 20 and older (with 64.8% response rate), revealed that over 40 percent of the sample did not feel the need to have children, even if they get married. The percentages were higher for women; 68% in their 20s and 61% in their 30s opted for 'no-kid' view. Relatively, 56% of men in their 20s and 30s held the same view.

Why gamophobia and pedophobia prevail among Japan's younger population, and are they mild or serious, deserves in-depth study. Could it be due to either flaws in sex-education policy adopted in the post-War period, or mental immaturity of young adults also needs some attention.

Balneotherapy (Hot Spring therapy/ Spa therapy/Osen therapy): That Japan has a long history on the perceived health benefits of balneotherapy cannot be denied^{23,39,40)}. Such benefits are attributed to relief from dermatological conditions, rheumatism, arthritis, pain, diabetes complications, chronic heart disease and stress⁴¹⁻⁴⁴⁾. Random reports (in Japanese language), though dated, on the beneficial effects of hot spring baths on sexual function in pubertal and post-menopausal women do exist⁴⁵⁻⁴⁸⁾. Critical studies by Japanese physicians on the ill effects of scrotal heating at temperatures above 43°C for long period on human spermatogenesis are meagre; but, researchers from Europe had reported on the ill effects of sauna exposure (80-90°C for 15 min, 2 days per week for 3 months) on strong impairment of sperm count and motility⁴⁹⁾. Commenting on this finding, Niederberger⁵⁰⁾ had inferred that 'men who are trying to impregnate their partners should stay away from the sauna'. Though openly unacknowledged, it is tempting to postulate that in the past (before the introduction of condom), hot spring bathing with its associated scrotal heating was used for contraceptive purposes by married couples in Japan. Evidence for this practice in India has been reported⁵¹⁾.

A depressing, humorous news item about young Japanese appeared in 2014, with the caption, 'Non regular male workers likelier to lack girl friends.' The first half offered the following statistics:

'Only 18.7 percent of single, non regular male workers in their 20s had girl friends in 2012, compared to 30.7 percent of regular male workers, a government survey has revealed. The Health, Labor and Welfare Ministry conducted the survey in November 2012 among about 20,000 single adults in their 20s, as a measure for dealing with the country's low birth rate. The percentage of all men in their 20s who had girl friends was 25.5 percent, below 37.2 percent for women with boy friends⁵²⁾.

There is no dearth for this sort of routine surveys in Japan. These can be tagged as bureaucratic chicanery. More efficient action is the need of these times. That the induced abortion statistics maintained by the Ministry of Health and Welfare are incomplete and concocted had been criticized by many specialists^{27-30,53)}. Bureaucrats should do the utmost to rectify the discrepancy in the reported induced abortion statistics.

CONCLUSION

In conclusion, we believe that effective education on sexuality, contraception use and fertility promoting behavior is a high priority item for teenagers, college students and youths in Japan⁵⁴⁻⁵⁸⁾ to check mate the problem of fertility decline.

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