The global fertility enigma: Childless versus Childfree

Mamta Gehlawat, Goutham Thumati

Department of Community Medicine, GMC, Mahabubabad, Telangana, India Address for correspondence: Dr. Mamta Gehlawat, Department of Community Medicine, GMC Mahabubabad, Telangana, India 506101

drmamtagehlawat@gmail.com

Abstract:

The absence of children in a person's life can be voluntary or involuntary. Involuntary childlessness or infertility is affecting millions of people in the world, while voluntary childlessness or being childfree is on the rise too. The phenomena of being childless and childfree have different factors leading to them and different consequences to once future life. One fact common to both of these is that lesser and lesser people are becoming parents now. Consequently, many countries in the world are now at a replacement level or even lower level of fertility which can mean a near future consisting of aged population with lesser hands to earn and more mouths to feed. This has attracted global attention and debates as to what should be done to stabilize a country's population. This article looks at various aspects of childlessness and its implications on the future of the globe.

Keywords: Infertility, voluntary childlessness, population dynamics, birth rate, parenting

Main article:

Background:

Childlessness is the absence of children in an individual's life.¹ It can be involuntary (due to medical reasons) or circumstantial when first pregnancy is delayed and, ultimately, the person is left childless for social or physiological reasons.² Childlessness can also be voluntary, when a person chooses not to have children and thus stays "childfree by choice".³

Involuntary childlessness or Infertility:

Globally, around 1 out of every 6 people face the issue of inability to have a child in their lifetime.⁴ As per the World Health Organisation (WHO), "Infertility is a disease of the male or female reproductive system defined by the failure to achieve a pregnancy after 12 months or more of regular unprotected sexual intercourse".⁵ As fertility decreases with age, Women over 35 years of age can shorten the above said period to 6 months.⁶

The three primary factors causing infertility are; male factors, female factors, or both. Both Male and female factors are seen in one-third of the couples. Male infertility can be due to testicular abnormalities, ejaculatory dysfunction, hormonal disturbances or genetic disorders, while female infertility can be caused by ovarian dysfunction, tubal obstruction or an abnormal uterine structure. Research shows that low fertility knowledge among men and women can also lead to infertility. Modern day environment hazards like microplastics are also known to affect semen quality and diminish male fertility. The anxiety of infertility can itself become a psychological cause, by decreasing libido and causing sexual and erectile dysfunction. These issues also warrant for regular couple counselling.

The diagnosis of infertility is constantly on the rise, as more and more financially capable people decide to find the reason for their inability to conceive and then try to conceive with the help of medical advances. According to a 2019 survey by the Centre for Disease Control (CDC), 13% of women of reproductive age group utilised infertility services out of which 9.5% sought medical help to become pregnant. The specific causes of infertility in a particular couple, many-a-times cannot be identified. Among females, infertility can also be associated with menstrual disorder, obesity, hypertrichosis, and seborrheic alopecia, affecting their quality of life and even alter physical appearance. The feelings of anxiety, depression, low self-esteem pushes one into self-isolation. The conglomerate of these negative emotions deteriorates one's quality of life and may break their neuroendocrine balance. According to research, infertility can lead to psychological stress on par with cancer or heart disease. 11

The current treatment methods for infertility can be categorized into three groups, i.e., pharmacological, surgical, and Assisted Reproductive Techniques which include invitro fertilization (IVF), intrauterine insemination (IUI), assisted hatching, gamete intrafallopian transfer (GIFT) and surrogacy. The new medical technologies in infertility treatment tend to increase the treatment confidence of patients and give them a stronger hope of giving birth, which in turn further aggravates the mental pressure to conceive. The partial understanding of assisted reproductive technology and the number of failed attempts at conceiving gives rise to negative emotions among patients. This kind of psychological stress and infertility can affect both partners and eventually form a vicious cycle which includes feelings of guilt, emptiness, anxiety, and depression. Although both men and women can contribute to infertility, in developing countries like India, women are exclusively held responsible, leading to more significant stress while undergoing treatment. On the other hand, involuntarily childless men report a lack of emotional support from others when seeking fertility treatment and even registered that their feelings (vs. women) were ignored, as if men are not supposed to be upset by infertility.

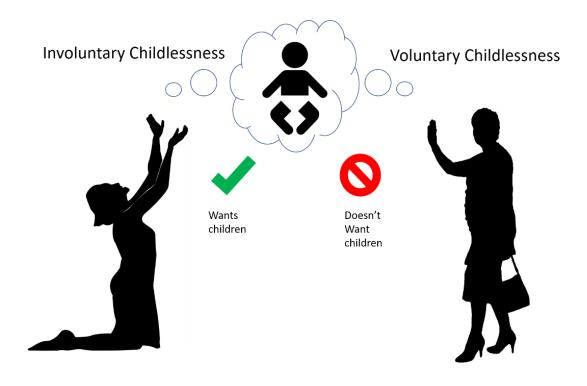


Figure 1: Image depicting Childless vs childfree people

Voluntarily childless or 'childfree' persons:

The term childfree got popular back in the 1970s among academics and voluntarily childless individuals, and today the use of terms like voluntarily childless, childfree, and childless by choice are common to identify a person who makes a conscious choice not to procreate.¹⁷

This school of thought sometimes relates to the much-debated argument of antinatalism by the South African philosopher David Benatar in 1997 that "being brought into existence is not a benefit but always a harm". ¹⁸ In the recent years, the deterioration of environmental conditions, social difficulties, global worsening of people's mental health, and pandemics have fuelled ripples of discussion about antinatalism.

Whatever the cause behind being childfree, more and more people around the world are choosing it, hence contributing in the globally declining fertility rates. *Childfree* individuals ¹⁹ are quite different from individuals who also do not have children but are *not-yet-parents* or *childless*.

Table1: Different aspects of Childless vs Childfree people

	Childless person	Childfree person
	(Involuntary childlessness/	(Voluntary childlessness)
	Infertility)	
Mental health	Depression and vicious cycle of being hopeful and hopeless with each failed infertility treatment	Freedom to pursue dreams, gives positivity in life
Physical health	Underlying issues leading to infertility or side effects of infertility treatment on body	-
Financial aspects	May undergo expensive fertility treatment	No fertility related expense except for contraception methods
Family support	Met with support from family	Met with constant arguments and advices to change own mind and to conceive
Society's stance	Seen with empathy or pity	Seen as cold hearted and selfish beings
Marital/ relationship harmony	Mostly causes strain in relationship or marriage	Struggle to find a childfree partner

Voluntary childlessness is of two types²⁰ namely;

Early articulators (one third of all childfree), who make an early decision of staying childfree, often before marriage or partnership. *Postponers* (major chunk of the childfree) are the ones who decide to be childfree later in life. They may have delayed parenthood to meet other objectives, or were initially undecided or ambivalent about having children and have later decided to be childfree individually or as part of a marriage or partnership.

The reasons for not wanting children may be many; such as eco-anxiety about the climate and environment, global warming, wars, global political situation, autonomy and simply never having the desire.

In the exact words of a childfree individual, "Having children is environmentally irresponsible, you know; the world is really overpopulated already and stuff and I don't think most people are aware of that or that it governs people's choices". The Gen-Z, is consciously choosing to be childfree for numerous reasons where the continuous fear of looming environmental disasters plays a major part. Data from 2006-2010 demonstrated that more than one third of women of reproductive age in the United States did not have children.

According to research, factors discouraging women from becoming mothers were; the fear of child's congenital diseases, pregnancy complications, dissatisfaction with medical services, and fear of exacerbation of maternal chronic diseases.²³ However, better access to medical services and changes in climate politics were not found to encourage them to bear children.²³ According to research, childfree or childless individuals were found to be more educated, unmarried, less religious, financially independent (especially women) and living in urban areas.²⁴ Having children demands dedication of time and money, which may affect life satisfaction and happiness. Few studies claim that childfree women felt higher levels of global well-being when compared with childless women.²⁵ Among childfree individuals, the 'early articulators' were found to be more open to new life experiences.²⁶ More liberal individuals may be more likely to decide to be childfree, while recognizing that choosing not to have children is the single most impactful action that an individual can take to reduce their carbon footprint on Earth.²⁷

Most of the countries in the world still have pronatal norms dominating the society and the decision to be childfree is often stigmatized, leading to out-grouping of childfree individuals, toward whom others feel cold.²⁸ Research finds childfree individuals to be subjects of prejudice as they 'violate' social norms for failing to engage in the normative (pro-natal) behaviour. Even politicians mostly develop policies designed to support parents and children²⁹ and rarely focus on the needs of the increasingly growing population of childfree adults.

Annual old-age dependency ratio [65+ / 20-64] (%)

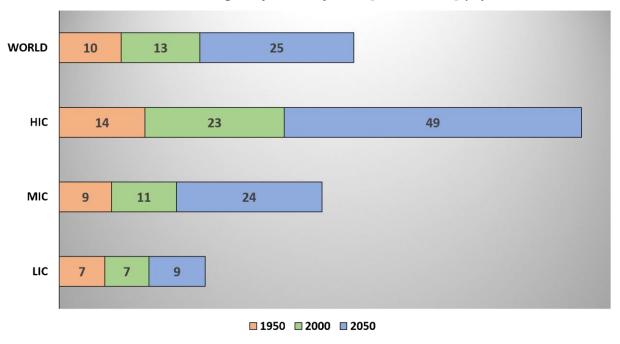


Figure 2: Demographic burden among different country groups (Source: World Bank) World Bank income groups: HIC: High-income countries (e.g., Australia, Japan, USA, UK etc.), MIC:Middle-income countries (e.g., India, Bhutan, China, Iraq etc.), LIC:Low-income countries (e.g., Afghanistan, Uganda etc.)

Overall effects of low birth rate on the world:

Whatever the cause of childlessness may be, one phenomenon it surely gives rise to is-decline in birth rates due to lesser number of child births. Now the question which you may be asking is, So what? What can go wrong due to some decrease in the number of new-borns in the world. Well, decline in the new births will ultimately mean decline of total world population. Though lesser population will mean well for the climate, but the economic consequences may be severe. As per statistics, in the 1960s, there were six people of working age for every retired person. Today, the ratio is three-to-one and by 2035, it will be two-to-one. As seen in Figure 2, except for the low-income countries group, the old age dependency ratio is predicted to be more than double of the past century from 10% in 1950 to 25% (projected) in 2050. The high-income countries group currently have the highest old-age dependency ratio and are predicted to continue the same trend. There are a number of possible consequences due to declining population and resultant increase in ageing population.

Concern 1: Finances

The demographic burden of non-earning population on the earning population will increase as the population ages. Countries like Germany and Japan already had the old-age dependency ratio at 33 and 48 respectively in the year 2020.³³ Although both of these countries remain economic powerhouses and the balance of workers to the elderly has not yet affected the country's debt-to-GDP ratio; nevertheless, the worry for future effects of the population imbalance looms. This will depend on the finances and the ability of country governments to meet people's needs.

Concern 2: Labour shortages

To counter the labour shortages, Government of Japan has attempted to find solutions in immigration, increase in number of working women, and a change in work culture. Japan is also the pioneer in increasing automation/robotics to solve labour shortage in construction as well as in medical care.

Some countries look at cheaper labour from immigrants as the solution. But at the same time, there is no shortage of predictions of worker displacement due to automation, such as the 2019 Brookings forecast which stated that a quarter of the United States workforce could be displaced by automation.³⁴

Concern 3: Country's vitality and prosperity

Expressing his concerns at the absolute population decline, Hisakazu Kato from The Japan Times, ³⁵ has posed few hypotheses. According to him, 'economic growth will stagnate as the population declines' as society gradually loses the creativity and aggressiveness which younger people bring to the table. Secondly, there is the "low-fertility trap hypothesis," that after reaching a particular low level of fertility, countries won't be able to bounce back with "replacement fertility." As of today, very few countries have actually "recovered" their fertility after hitting a low fertility mark and the "recovery" may not last long (e.g., Sweden) or the recovery itself may be due to immigration from high-fertility countries (e.g., Germany).

The last aspect is about preserving the culture and values of different countries and societies which are feared to be gradually lost due to population decline. For e.g., the Confucian values system which many East Asian countries are based on, which emphasizes respect for elders; may become unpredictable when being old becomes very common in the overall ageing populations. On the other hand, in countries like the United States, the image of being "child-friendly" may still remain if most people keep becoming parents, even to fewer children.

Concern 4: Problems of the precious new progeny³⁶

Little emperor syndrome: When most people have a single child (without siblings), the child may never learn sharing and compassion while receiving all the love and attention of parents. Such children grow up with 'Little Emperor Syndrome'. In future, divorce rates may rise due to the clash of ego, self-interest and personality between two married 'little emperors'.

4:2:1 syndrome: There is more and more subsequent possibility of only one child for the care of two parents and four grandparents as they age. When the two only children marry, they will be responsible for four parents and eight grandparents. This phenomenon may create high levels of physical, mental and financial strain on the young couple.

Limitations

This discussion has many limitations because of the following reasons:

- 1. Geriatric people may not always be dependent on others. They may be earning while many of the younger generation individuals may stay unemployed as competition increases and job opportunities shrink.
- 2. Is the young generation really healthy and independent? It is not difficult to notice the day-by-day increasing childhood morbidities and disease burden among youth.
- 3. More research on childfree population is needed. Childfree people haven't been given a standard definition yet which creates conflict in comparison between different studies and across different countries.

Conclusion:

Childlessness of any form needs to be destignatized for once and for all. The resultant effects of declining population are yet to be experienced by most of the world. Many of the theories around consequences of an ageing population haven't been proven yet. The future can never be predicted with certainty. What if lesser population proves to be more sustainable, and succeeds in slowing down the climate change? This phenomenon may ultimately become the saviour of humanity rather than the destroyer. Childlessness is an undeniable phenomenon and with many unseen implications. But one thing is for sure that, the birth rates will keep falling for at least few years to come. Governments better prepare for a more ripened overall population and work towards strong and stable economies which can care for the population, independent of the shape the population pyramids will take in future.

References:

- 1. Miettinen A, Rotkirch A, Szalma I, Donno A, Tanturri ML. Increasing childlessness in Europe: Time trends and country differences. Families and Societies. Working paper series. 2015;3.
- 2. Buhr P, Huinink J. Why childless men and women give up on having children. European Journal of Population. 2017 Oct;33:585-606.
- 3. Gouni O, Jarašiūnaitė-Fedosejeva G, Kömürcü Akik B, Holopainen A, Calleja-Agius J. Childlessness: Concept Analysis. International Journal of Environmental Research and Public Health. 2022 Jan 27;19(3):1464.
- 4. World Health Organization. Infertility prevalence estimates: 1990–2021.
- 5. Infertility [Internet]. Who.int. [cited 2023 Dec 5]. Available from: https://www.who.int/news-room/fact-sheets/detail/infertility
- 6. Definitions of infertility and recurrent pregnancy loss. Fertil Steril [Internet]. 2008;90(5):S60. Available from: http://dx.doi.org/10.1016/j.fertnstert.2008.08.065
- 7. NSFG listing I key Statistics from the National Survey of family growth [Internet]. Cdc.gov. 2019 [cited 2023 Dec 5]. Available from: https://www.cdc.gov/nchs/nsfg/key_statistics/i.htm
- 8. Delbaere I, Verbiest S, Tydén T. Knowledge about the impact of age on fertility: a brief review. Upsala journal of medical sciences. 2020 Apr 2;125(2):167-74.
- 9. Zhang C, Chen J, Ma S, Sun Z, Wang Z. Microplastics may be a significant cause of male infertility. American Journal of Men's Health. 2022 May;16(3):15579883221096549.
- 10. Fertility: Assessment and treatment for people with fertility problems. 2013 [cited 2023 Dec 5]; Available from: https://pubmed.ncbi.nlm.nih.gov/25340218
- 11. Matthiesen SM, Frederiksen Y, Ingerslev HJ, Zachariae R. Stress, distress and outcome of assisted reproductive technology (ART): a meta-analysis. Human reproduction. 2011 Oct 1;26(10):2763-76.
- 12. Langher V, Fedele F, Caputo A, Marchini F, Aragona C. Extreme desire for motherhood: Analysis of narratives from women undergoing Assisted Reproductive Technology (ART). Europe's journal of psychology. 2019 Jun;15(2):292.
- 13. Farquhar C, Marjoribanks J. Assisted reproductive technology: an overview of Cochrane Reviews. Cochrane Database of Systematic Reviews. 2018(8).
- 14. Purewal S, Chapman SC, van den Akker OB. Depression and state anxiety scores during assisted reproductive treatment are associated with outcome: a meta-analysis. Reproductive biomedicine online. 2018 Jun 1;36(6):646-57.
- 15. Sharma A, Shrivastava D (2022) Psychological problems related to infertility. Cureus 14:e30320. https://doi.org/10.7759/cureus.30320
- 16. Berney TP. Childless: No Choice-The Experience of Involuntary Childlessness. By James H. Monach London: Routledge. 1993. 274 pp.£ 40.00. The British Journal of Psychiatry. 1994 Jul;165(1):141-.
- 17. Eke NP. Çocuksuzluk Tercihinin Söylemsel İnşası.

18. Benatar D. Why it is better never to come into existence. American Philosophical Quarterly. 1997 Jul 1;34(3):345-55.

- 19. Blackstone A. Childfree by choice: The movement redefining family and creating a new age of independence. Penguin; 2019 Jun 11.
- 20. Veevers JE. Voluntary childlessness: A review of issues and evidence. Marriage & Family Review. 1979 Dec 12;2(2):1-26.
- 21. Grace B, Shawe JI, Johnson S, Usman NO, Stephenson J. The ABC of reproductive intentions: a mixed-methods study exploring the spectrum of attitudes towards family building. Human Reproduction. 2022 May 1;37(5):988-96.
- 22. Martinez G, Daniels K, Chandra A. Fertility of men and women aged 15-44 years in the United States: National Survey of Family Growth, 2006-2010. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics; 2012.
- 23. Karuga FF, Szmyd B, Petroniec K, Walter A, Pawełczyk A, Sochal M, Białasiewicz P, Strzelecki D, Respondek-Liberska M, Tadros-Zins M, Gabryelska A. The Causes and Role of Antinatalism in Poland in the Context of Climate Change, Obstetric Care, and Mental Health. International Journal of Environmental Research and Public Health. 2022 Oct 20;19(20):13575.
- 24. Watling Neal J, Neal ZP. Prevalence and characteristics of childfree adults in Michigan (USA). Plos one. 2021 Jun 16;16(6):e0252528.
- 25. Callan VJ. The personal and marital adjustment of mothers and of voluntarily and involuntarily childless wives. Journal of Marriage and the Family. 1987 Nov 1:847-56.
- 26. Avison M, Furnham A. Personality and voluntary childlessness. Journal of Population Research. 2015 Mar;32:45-67.
- 27. Wynes S, Nicholas KA. The climate mitigation gap: education and government recommendations miss the most effective individual actions. Environmental Research Letters. 2017 Jul 12;12(7):074024.
- 28. Ganong LH, Coleman M, Mapes D. A meta-analytic review of family structure stereotypes. Journal of Marriage and the Family. 1990 May 1:287-97.
- 29. Bryant C (2021) Democrats and republicans vie to be 'the party of parents'. Christian Science Monitor
- 30. Bricker D. Bye, bye, baby? Birthrates are declining globally–here's why it matters. InWorld Economic Forum 2021 Jun (Vol. 15).
- 31. World bank country and lending groups world bank data help desk [Internet]. Worldbank.org. [cited 2023 Dec 5]. Available from: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups
- 32. World Population Prospects Population Division United Nations [Internet]. Population.un.org. [cited 2023 Dec 5]. Available from: https://population.un.org/wpp/Download/Documentation/Documentation/

33. Bauer E. What are the long-term consequences of our aging population? It's all guesswork. In: Forbes.2021. [cited 2023 Dec 5]. Available from: https://www.forbes.com/sites/ebauer/2021/05/26/what-are-the-long-term-consequences-of-our-aging-population-its-all-guesswork/?sh=518636734818.

- 34. Muro M, Maxim R, Whiton J. Automation and artificial intelligence: How machines are affecting people and places.
- 35. Kato H. We need a sense of crisis over depopulation, Japan Times, 5 September. Online: https://tinyurl.com/ybvyngpm. 2018.
- 36. Jones GW. The changing family. In: Oxford Textbook of Global Public Health. Oxford University Press; 2015. p. 1317–27.