Supplementary material

Australians’ understanding of the decline in fertility with increasing age and attitudes towards ovarian reserve screening

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Dear Participant,

You are invited to participate in an online research study conducted by [REDACTED]. The study is entitled, 'Australians’ perceptions of fertility and attitudes towards ovarian reserve testing' and will lead to a published paper. The objectives of the research study are to:

1. Determine Australian men and women’s understanding of the natural change in fertility potential with increasing age. Specifically, we are targeting responses from people of reproductive age (18–45 years) who do not have children.

2. Determine what factors influence both women and men’s decision regarding when to start a family.

3. Determine both women and men’s views regarding the potential benefits and risks of ovarian reserve testing for “reproductive life planning”. Ovarian reserve testing refers to medical assessments which may identify those women experiencing premature “aging” of their ovaries.

You will be asked to complete a voluntary, anonymous 15 minute online survey. Survey questions focus on knowledge of fertility, personal family plans and ovarian reserve testing. If you do not wish to answer any questions, please leave them blank. You are free to withdraw at any time by not submitting your responses.

The data collected from this study will be anonymously stored on a password-protected computer database in the Flinders University computer server. Survey data will be electronically stored for five years after the study is concluded and then erased. Survey results will be confidential.

Please contact [REDACTED] with any enquiries or if you would like follow up information upon completion of the study.

There are minimal risks associated with this study, however, if you experience emotional discomfort, please contact Lifeline on 131114, BeyondBlue on 1300 224 636 or [REDACTED].

This project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 7137). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 8201-3116 or by fax on 8201-2035 or email human.researchethics@flinders.edu.au.

Thank you for considering participation in this study. Please begin the survey to demonstrate your consent.

Yours sincerely,

[REDACTED]
Demographic questions

1. What is your gender?
   - Female
   - Male

2. What is your age?
   - 18–24
   - 25–34
   - 35–45
   - >45

3. Which of the following best describes your current relationship status?
   - Married
   - Widowed
   - Divorced
   - Separated
   - In a domestic partnership or civil union
   - Single, but cohabiting with a significant other, single, never married

4. If you are married or in a relationship, how long has this relationship lasted for?
   - Less than 1 year
   - 1–3 years
   - 3–6 years
   - 6–10 years
   - Greater than 10 years

5. Do you identify with a specific culture? Please explain

6. What is your occupation?

7. What is the highest level of education you have completed?

8. How many biological children do you currently have?
   - None
   - 1 or more

9. If you are religious, which religion do you identify with?

10. What is your Australian post code?

11. Have you experienced a known decline in fertility?
   - Yes
   - No
   - Unsure
12. Have you had family history of premature decline in fertility?
   - Yes
   - No
   - Unsure

**Background fertility knowledge**

In relation to female fertility, please answer the following questions:

13. At what age do you think female fertility starts to decline?

14. Can you describe why female fertility declines with increasing age?

15. What is your best guess of the chances (%) of miscarriage of a pregnancy at 40 years of age?

16. What do you believe is a woman’s chance of natural conception per month resulting in the birth of a live baby at the following age intervals? (please give an approximate percentage)
   - 18–24 years
   - 25–30 years
   - 31–35 years
   - 36–40 years
   - Above 40 years

17. What do you believe is a woman’s chance of becoming pregnant and delivering a healthy baby (per cycle of IVF) at the following age intervals? (please give an approximate percentage)
   - 18–24 years
   - 25–30 years
   - 31–35 years
   - 36–40 years
   - Above 40 years

18. Are you aware of any factors or “health events” that can speed up decline in female fertility?

19. Are you aware of any factors that can slow the rate of age related decline in female fertility?

20. Are you aware of any treatments for reversing decline in female fertility?
**Factors that influence when to start family**

21. On a scale of 1–10, how important is having children to you (one being of little importance and 10 being of great importance)?

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<th>Please indicate a number on the scale</th>
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22. If intending to have children, what is the number one reason you have not had a child yet?

23. If intending to have children, at what age do you anticipate or plan to have your first child?

24. Please list in decreasing order of importance (1 being the most important) your 3 key prerequisites for starting a family:
   - Stable relationship established
   - Completed professional education (university degree or professional qualification for “job of choice”)
   - Established myself in career
   - Purchased own home
   - Partner’s career is well established
   - Completed my travel wishes (“seen the world”)
   - Good childcare options available
   - Family support
   - Job security with paid leave and return to work after having child
   - Other – describe

**Ovarian reserve testing and reproductive planning**

25. Are you aware of any tests that can tell if a woman has fewer eggs remaining in her ovaries than average for her age? If yes, please describe.

A specific blood test called AMH is able to determine the number of eggs left within a woman’s ovaries, allowing doctors to give individuals an idea of whether they have fewer eggs than would be expected at their age (often called “diminished ovarian reserve”). Women with low AMH are more likely to experience menopause at an earlier age than average and are less likely to have a successful pregnancy during IVF treatment (if needed) compared with women with normal AMH results.

26. Given this background information regarding AMH testing, if you or your partner (male respondents) received an AMH result suggesting that egg reserves were low (i.e. the results suggest that 90% of the population at this age would have higher number of eggs than you or your partner’s result), do you think that this test would influence your decision on when to start a family?
   - Yes
   - No
   - Unsure
27. If your answer to the previous question was yes, what would your most preferred responses be to this low AMH test result (number 1 for most preferred response, to 3 for least attractive. Please indicate at least 3 options):
   o Start trying for a family immediately
   o Consider preserving eggs for later use
   o Undergo immediate IVF treatment
   o Greater effort looking for a partner to have children (non-partnered female only)
   o See a gynaecologist with view to starting donor sperm insemination (non-partnered female only)
   o Alter your career plans
   o Consider adopting children
   o “Watch and wait” and have repeat AMH testing in 1 year to see how quickly my (or partner’s) ovarian reserve is declining
   o Other

28. Are there any other comments that you would like to make regarding age, fertility and ovarian reserve (AMH) testing?

Thank you very much for your participation in this survey. Your time and effort is much appreciated.