AUSTRALIANS’ UNDERSTANDING OF THE DECLINE IN FERTILITY WITH INCREASING AGE AND ATTITUDES TOWARDS OVARIAN RESERVE SCREENING

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All authors would like to declare no conflict of interest
INTRODUCTION

• Why did we do this study?
• Our objectives:
  • Determine Australians’ understanding of fertility decline.
  • Understand their pre-requisites for starting a family.
  • Gauge their attitudes towards ovarian reserve screening.
Can we reduce the age of first time mothers?

Could we offer Australian women and couples a screening test for ovarian reserve?
WHAT IS OVARIAN RESERVE SCREENING?

- What is Anti Mullerian Hormone?
- How does it reflect ovarian reserve?
KATRINA & JAKE— 29YO LAWYER & 30YO ENGINEER

- In a stable relationship
- Want to have 3 children
- Katrina intends to have first child at 31yo
METHODS

• Online survey

• Inclusion criteria 18-45 years, childless
<table>
<thead>
<tr>
<th></th>
<th>147 women</th>
<th>200 men</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Majority 18-24 years</td>
<td>Majority 35-45 years</td>
</tr>
<tr>
<td></td>
<td>55.1% married or in a stable relationship</td>
<td>28% married or in a stable relationship</td>
</tr>
<tr>
<td></td>
<td>Recruited voluntarily</td>
<td>Q&amp;A Market Research Sydney</td>
</tr>
</tbody>
</table>
KATRINA & JAKE – 29YO LAWYER & 30YO ENGINEER

- Main pre-requisites for starting a family are having a stable relationship and reaching career goals.
- Believe that IVF allows them to maintain fertility potential after 40yo.
RESULTS

The graph shows the probability of natural conception leading to live birth per cycle (%) at different age ranges for females. The lines represent different data sources:

- Perceived fertility (male respondents)
- Perceived fertility (female respondents)
- Published natural fertility rate

The age ranges are as follows:

- 18-24
- 25-30
- 31-35
- 36-40
- 41-45

As the female age increases, the probability of natural conception decreases significantly for all sources.
Primary prerequisite for starting a family

- Other
- Accessible childcare and leave
- Family support
- Complete travel wishes
- Partner’s career
- Owning own home
- Completed own education
- Job security
- Own career established
- Stable relationship

Preferred response (% total responses)

Female responses
Male responses
KATRINA & JAKE—29YO LAWYER & 30YO ENGINEER

- Have never heard of ovarian reserve screening
- Would consider having a child now if they found out that they had low ovarian reserve
RESULTS

• No men and only 15% of women had knowledge of ovarian reserve screening.
• 74.1% of women would change their family planning based on a poor ovarian reserve result
Prefered response for women faced with a poor ovarian reserve (AMH) test result

- Immediate IVF
- Alter career plans
- Adopt if needed
- Seriously seek a partner
- Watch and wait (nil immediate action)
- Start trying for natural conception
- Oocyte cryopreservation

Preferred response (% total responses)
Katrina and Jake get an ovarian reserve screening which shows that Katrina has diminished ovarian reserve.
They decide to try to conceive this year instead of waiting until Katrina finishes her training.
DISCUSSION

40 is the new 30
Unless you want to have children

We live longer, healthier lives these days, so we can falsely believe that good health invariably means good fertility. The truth is, the longer we leave it, the harder it can be to get pregnant. Age is the single most important factor affecting your fertility. As you age, your eggs decrease in quality and number. At 30, you have about a 20% chance of becoming pregnant naturally in any month. After 35 your chances of becoming pregnant start to drop dramatically. At 40, you have a 5% chance. So how do you improve the chances? If your relationship is ready, start the conversation earlier about starting a family. For information visit yourfertility.org.au because fertility is ageist.

DISCUSSION

Israel

New Zealand

America

Australia


LIMITATIONS OF STUDY

• Small population size
• Different ages of male and female cohort
AFPHM COMPETENCY ELEMENTS & REFLECTION

• 1.1.6 Recognise and work within limits of professional competence
• 1.2.2 Lead and influence effectively
• 1.2.9 Communicate effectively through oral discussions and presentations
WHERE TO FROM NOW?

- Further discussions into efficacy of AMH testing
- Trial of benefits and risks in general practice
- Consideration of ethical challenges involved
CONCLUSION

• We aim to have less couples devastated by unwanted age-related fertility.
ACKNOWLEDGEMENTS

This study is currently being considered for publication in the Australian Journal of Primary Health

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• SHine SA
• Australian Women’s Health Network
• Men’s Health Australia
• TopBlokes
• Andrology Australia
• Q&A Market Research Sydney
• Study participants
THANK YOU!

• Questions?
Table 1:
Demographics of survey population

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Women n=147</th>
<th>Men n=200</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-24 years</td>
<td>51.0%</td>
<td>26.5%</td>
</tr>
<tr>
<td>25-34</td>
<td>36.1%</td>
<td>31.0%</td>
</tr>
<tr>
<td>35-45</td>
<td>12.9%</td>
<td>42.5%</td>
</tr>
<tr>
<td><strong>Relationship status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>15.0%</td>
<td>13.5%</td>
</tr>
<tr>
<td>In a relationship, unmarried</td>
<td>40.1%</td>
<td>14.5%</td>
</tr>
<tr>
<td>Not partnered</td>
<td>44.9%</td>
<td>72.0%</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professionals</td>
<td>33.3%</td>
<td>28.7%</td>
</tr>
<tr>
<td>Students</td>
<td>40.1%</td>
<td>18.0%</td>
</tr>
<tr>
<td>Not employed</td>
<td>0.8%</td>
<td>13.8%</td>
</tr>
<tr>
<td><strong>Highest level of education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor/ undergraduate degree</td>
<td>55.8%</td>
<td>42.0%</td>
</tr>
<tr>
<td>Postgraduate degree</td>
<td>17.7%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Higher</td>
<td>2.0%</td>
<td>2.5%</td>
</tr>
<tr>
<td><strong>Desire to have children</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>low = 0-3/10</td>
<td>21.2%</td>
<td>25.0%</td>
</tr>
<tr>
<td>medium = 4-7/10</td>
<td>25.0%</td>
<td>46.0%</td>
</tr>
<tr>
<td>high = 8-10/10</td>
<td>53.8%</td>
<td>29.0%</td>
</tr>
</tbody>
</table>
Conclusions: AMH fares better than age and FSH in predicting the overall ovarian response and poor response, though it cannot be the absolute predictor of non-responder status. A level of 2 pmol/l is discriminatory for poor response.

Directory of Open Access Journals (DOAJ)
Non-Medical Reasons


The recent introduction of oocyte vitrification has significantly advanced the outcome of oocyte cryopreservation, leading to clinical results comparable to those achieved in IVF using fresh oocytes, as reported by experienced centres. This has led to new debate, both in the professional community and in society at large, about the acceptability of offering this technology to reproductively healthy women who want to cryopreserve their oocytes against the threat of time. Given the many demands calling for simultaneous realization in a relatively short period of their lives, many women who want to have children feel to be under considerable pressure. The option of oocyte cryopreservation may in fact give them more breathing space. In this document, it is concluded that the arguments against allowing this application of the technology are not convincing. The