

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

ALISHA THOMPSON

PROFESSOR KELTON TREMELLEN

PROFESSOR SHERYL DE LACEY

All authors would like to declare no conflict of interest



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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?

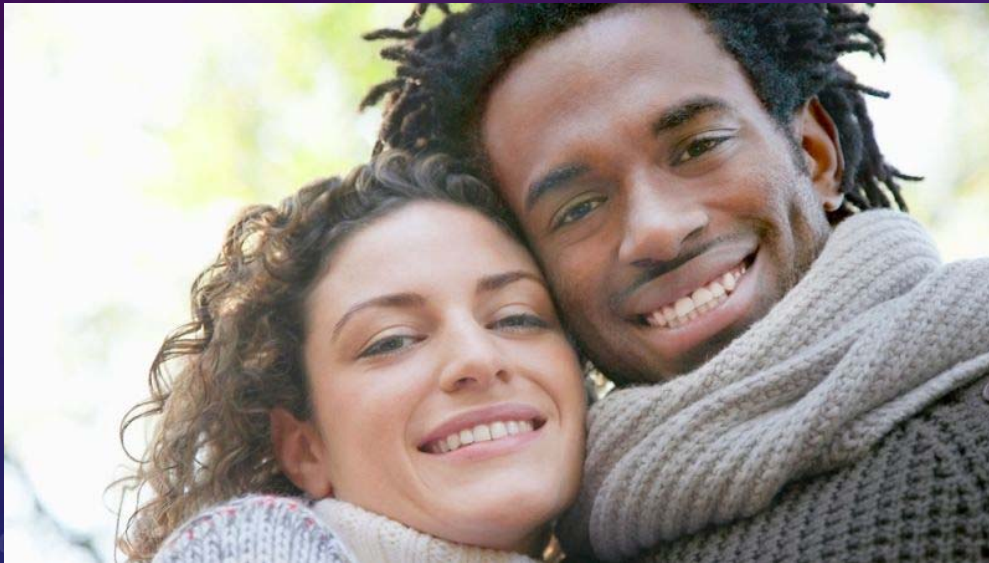
Could we offer Australian women and couples a screening test for ovarian reserve?

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

STUDY POPULATION

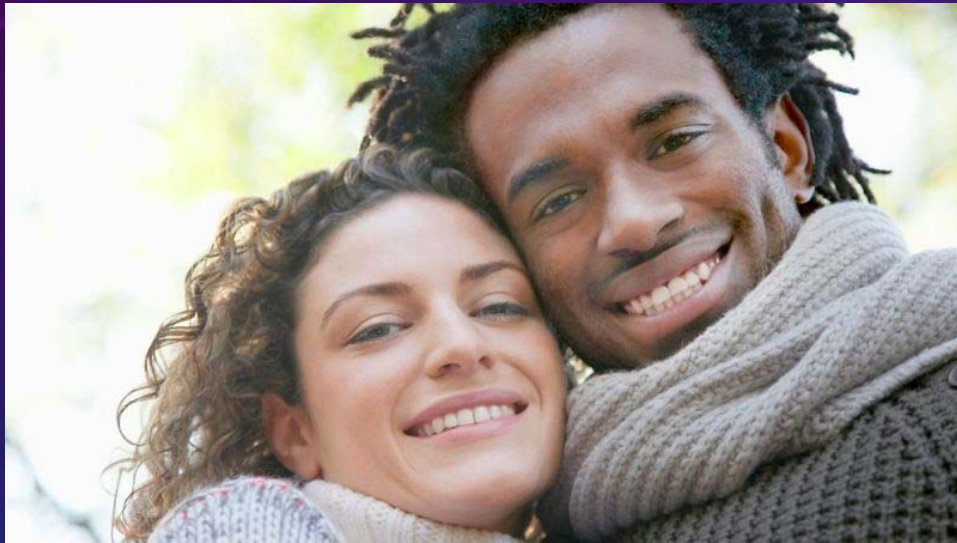
147 women

Majority 18-24 years
55.1% married or in a stable
relationship
Recruited voluntarily

200 men

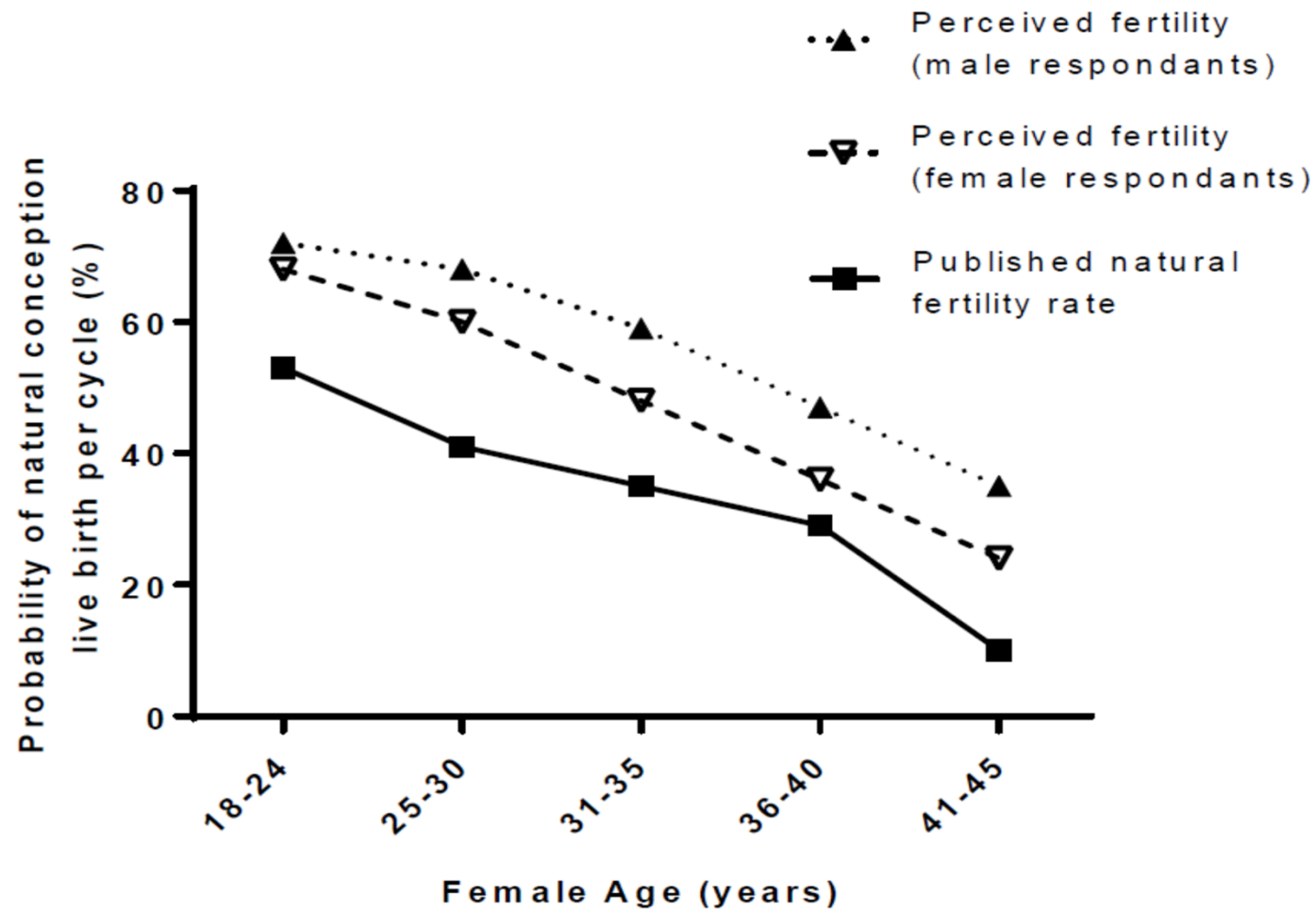
Majority 35-45 years
28% married or in a stable relationship
Q&A Market Research Sydney

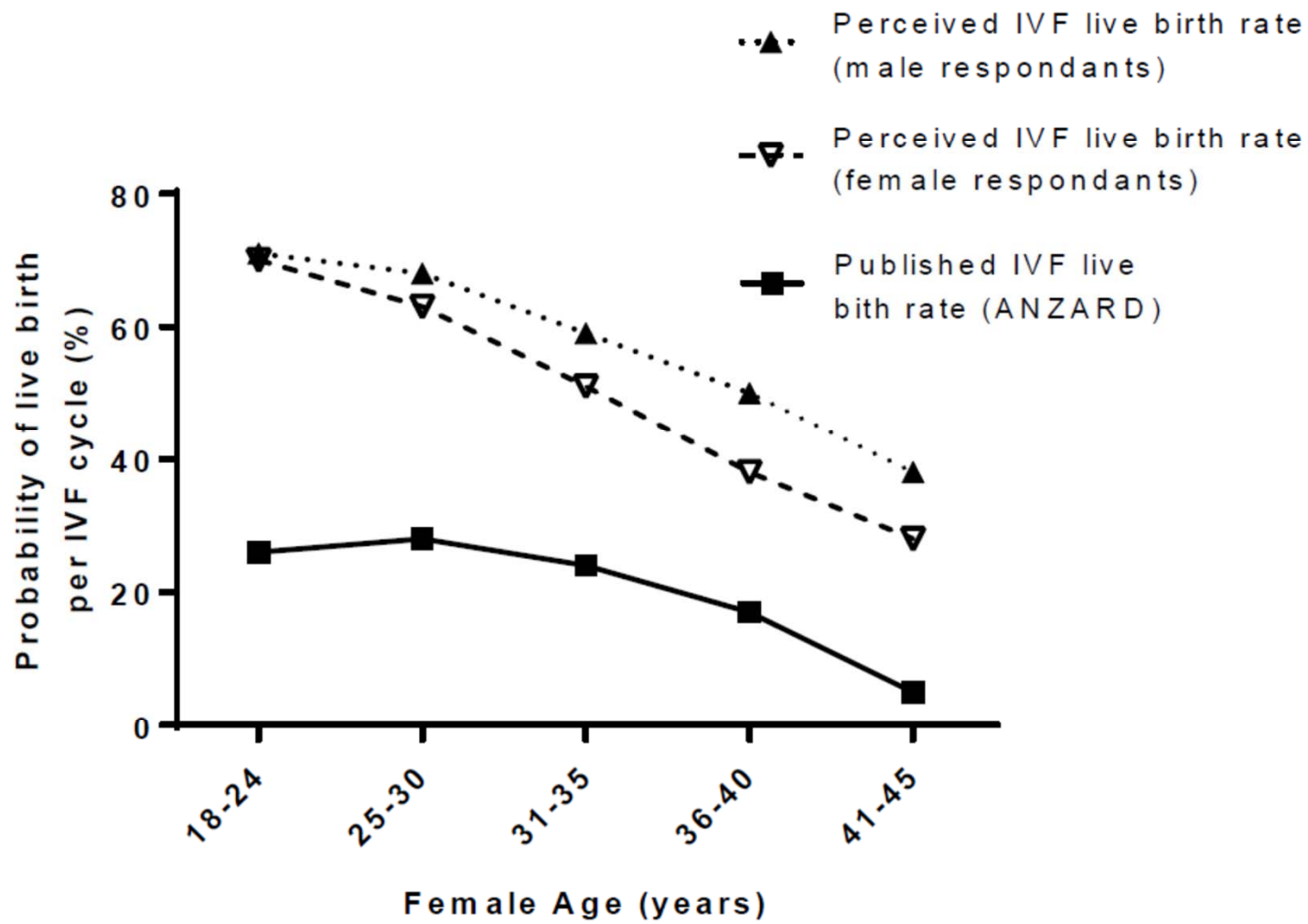
KATRINA & JAKE— 29YO LAWYER & 30YO ENGINEER



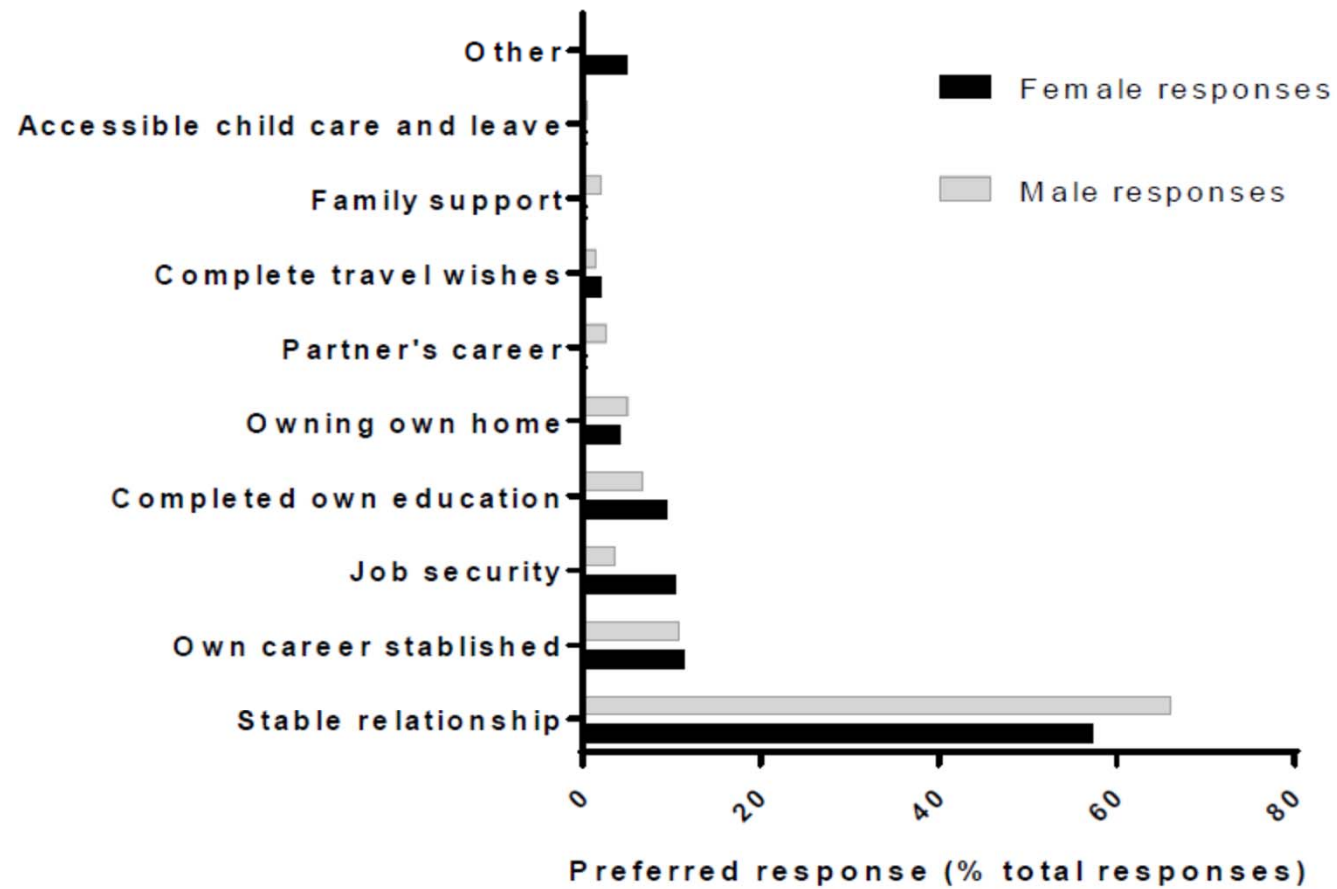
- Main pre-requisites for starting a family are having a stable relationship and reaching career goals.
- Believe that IVF allows them to maintain fertility potential after 40yo.

RESULTS

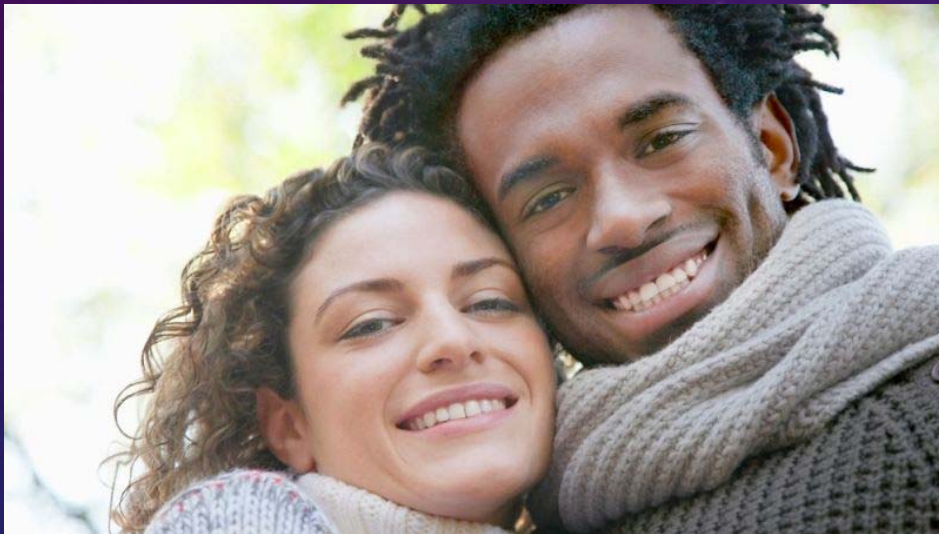




Primary prerequisite for starting a family



KATRINA & JAKE– 29YO LAWYER & 30YO ENGINEER

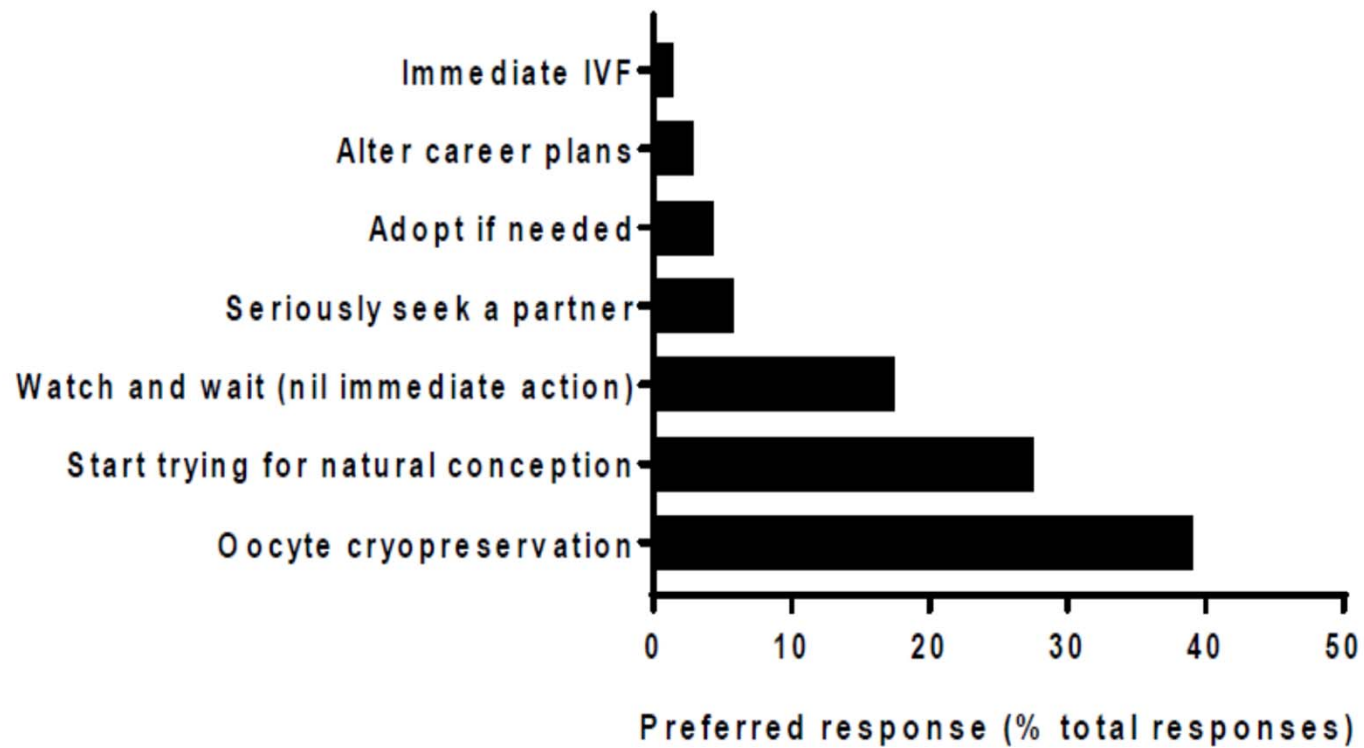


- Have never heard of ovarian reserve screening
- Would consider having a child now if they found out that they had low ovarian reserve

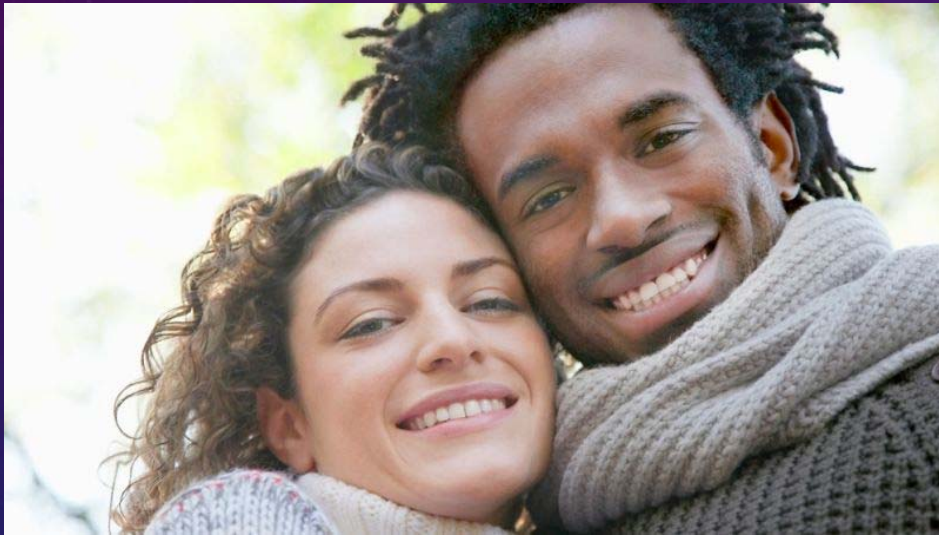
RESULTS

- 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

Preferred response for women faced with
a poor ovarian reserve (AMH) test result



KATRINA & JAKE– 29YO LAWYER & 30YO ENGINEER



- 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. 🐦

Your Fertility is funded by the Australian Government Department of Health. Source: Dr Karen Hammarberg Age and fertility: Time for a reality check. Medical Observer, March 2014.

DISCUSSION

Israel

New Zealand



America

Australia

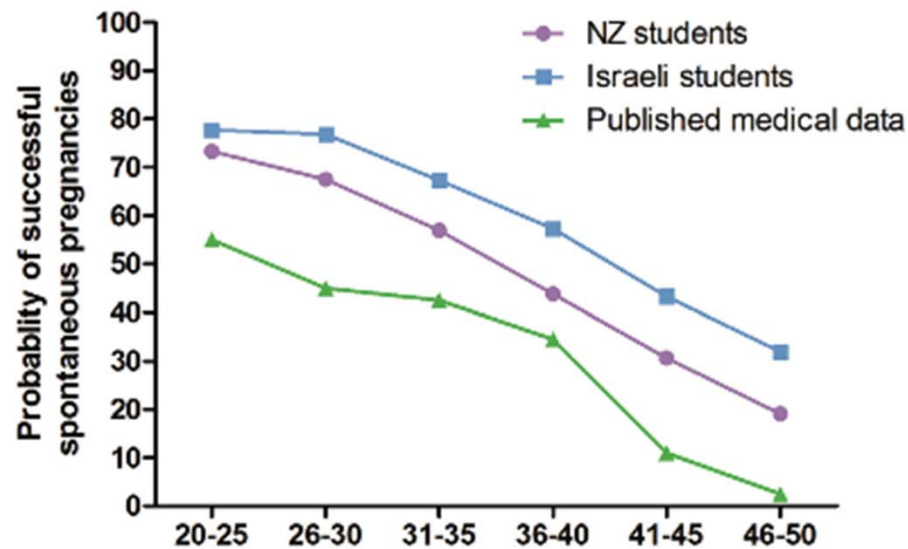


Figure 1. Es
Israeli Univ
Graph depic

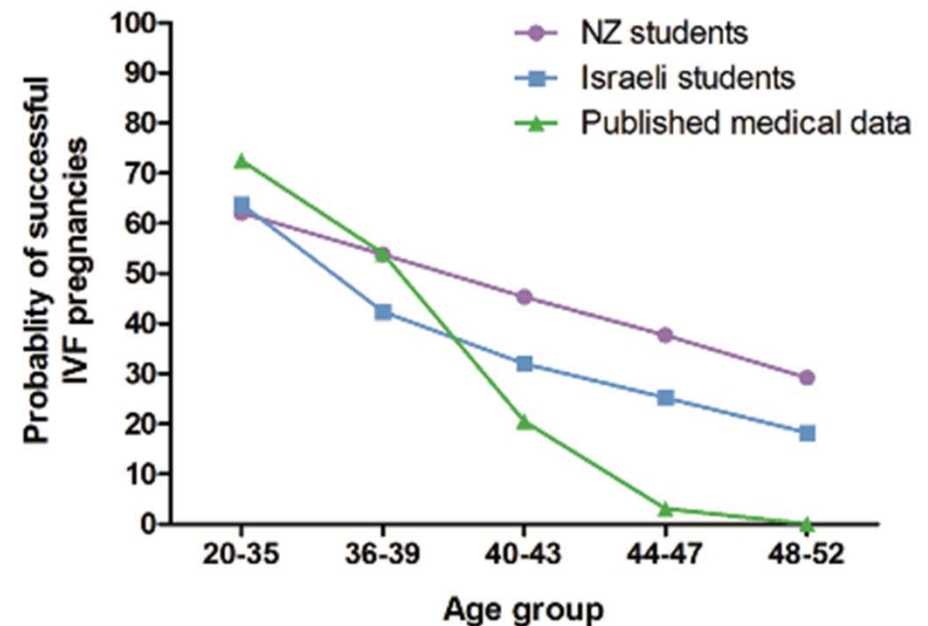
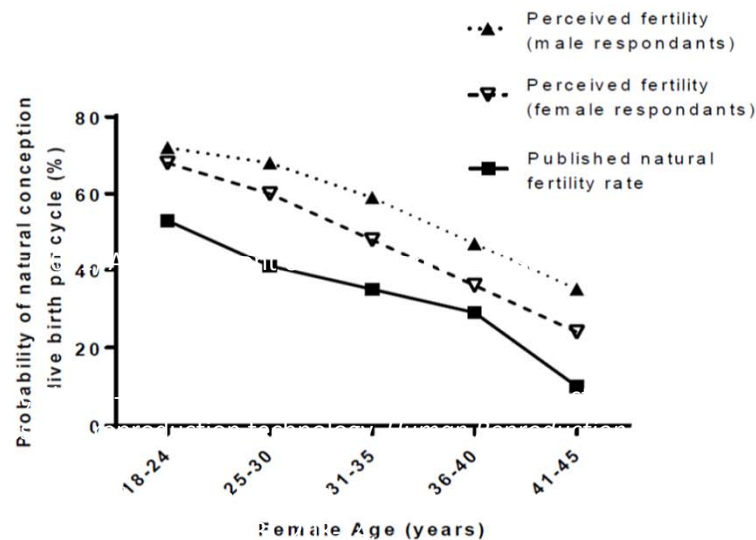


Figure 2. Estimated chance of success with IVF treatment per age group. NZ and Israeli University students compared with published medical data. Graph depicts data from Table IV.

Bavan B, Porzig E, Bak
and Sterility. 96(5), 11

Hashiloni-Dolev Y, Kap
pregnancies in an era

Lucas N, Rosario R, Sh
reproductive technolo

rd screening technologies for ovarian reserve. *Fertility*

regarding age-related fertility decline and late
53.

decline in women via natural pregnancy and assisted

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

- Professor Kelton Tremellen
- Professor Sheryl de Lacey
- Flinders University
- Jean Hailes for Women's Health organisation
- SHine SA
- Australian Women's Health Network
- Men's Health Australia
- TopBlokes
- Andrology Australia
- Q&A Market Research Sydney
- Study participants

THANK YOU!

- Questions?



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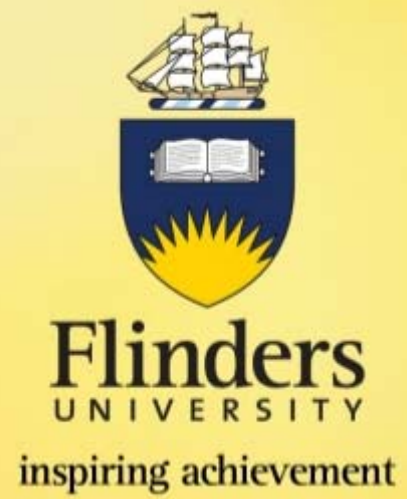


Table 1:
Demographics o
survey population

| Demographic | Women n=147 | Men n=200 |
|--------------------------------|-------------|-----------|
| Age | | |
| 18-24 years | 51.0% | 26.5% |
| 25-34 | 36.1% | 31.0% |
| 35-45 | 12.9% | 42.5% |
| Relationship status | | |
| Married | 15.0% | 13.5% |
| In a relationship, unmarried | 40.1% | 14.5% |
| Not partnered | 44.9% | 72.0% |
| Occupation | | |
| Professionals | 33.3% | 28.7% |
| Students | 40.1% | 18.0% |
| Not employed | 0.8% | 13.8% |
| Highest level of education | | |
| Bachelor/ undergraduate degree | 55.8% | 42.0% |
| Postgraduate degree | 17.7% | 12.5% |
| Higher | 2.0% | 2.5% |
| Desire to have children | | |
| low = 0-3/10 | 21.2% | 25.0% |
| medium = 4-7/10 | 25.0% | 46.0% |
| high = 8-10/10 | 53.8% | 29.0% |



ARTICLE / multiple sources exist. [see all](#)

Anti-mullerian hormone cut-off values for predicting poor ovarian response to exogenous ovarian stimulation in in-vitro fertilization

Ruma Satwik ; Mohinder Kochhar ; Shweta M Gupta ; Abha Majumdar

Journal of Human Reproductive Sciences, 01 January 2012, Vol.5(2), pp.206-212

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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.

English

Directory of Open Access Journals (DOAJ)



ARTICLE / multiple sources exist. [see all](#)

Oocyte cryopreservation for age-related fertility loss

Dondorp, W ; De Wert, G ; Pennings, G ; Shenfield, F ; Devroey, P ; Tarlatzis, B ; Barri, P ;
Diedrich, K

Human Reproduction, 2012, Vol. 27(5), pp.1231-1237

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Non - Medical Reasons >

Human Reproduction, 2012, Vol. 27(5), pp.1231-1237

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 lead 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