What Should Infertility Research Focus on Next?

Priority Setting Partnership for Infertility

Introduction

Unfortunately, despite the escalation in research activity and an exponential rise in published research, many of the fundamental questions about the treatment of infertility remain.

The Priority Setting Partnership for Infertility brought healthcare professionals, people with fertility problems, and others together to set future priorities for infertility research.

Methods

The Priority Setting Partnership for Infertility engaged in an open and transparent process, using formal consensus development methods advocated by the James Lind Alliance.

- > Step 1: Gathering research questions
 An initial survey gathered 423 research questions
 from 179 healthcare professionals, 153 people with
 fertility problems, and 56 others, from 40 countries. A
 further 236 research questions were gathered from 14
 guidelines and 162 Cochrane reviews.
- Step 2: Prioritising research questions
 A rationalised list of 231 research questions was
 developed and entered into an interim prioritisation
 survey which was completed by 143 healthcare
 professionals, 118 people with fertility problems, and
 55 others, from 43 countries.
- > Step 3: Consensus development conference
 Prioritised research questions were entered into a
 consensus development conference. 19 healthcare
 professionals, 14 people with fertility problems, and
 eight others, from 11 countries, prioritised the top ten
 research uncertainties.

Results

The top ten research uncertainties for male infertility (figure 1), female and unexplained infertility, medically assisted reproduction, and ethics, access, and organisation of care are available to download from www.twitter.com/FertilityTop10

Top ten male infertility research questions

- **01.** Are sperm tests other than the World Health Organization parameters useful in evaluating male fertility?
- **02.** What is the emotional and psychological impacts of male infertility? Can addressing them improve outcomes?
- 03. Do environmental factors cause male infertility?
- **04.** Does treating specific causes of male infertility improve outcomes?
- **05.** Can we improve surgical sperm extraction outcomes by using endocrine stimulatory protocols?
- **06.** What modifiable risk factors cause male infertility?
- **07.** Does treating modifiable risk factors improve outcomes?
- 08. What co-morbidities are associated with infertility?
- 09. Does treating co-morbidities improve outcomes?
- **10.** Are nutraceuticals useful in improving male reproductive potential? If so, which?

Discussion

A prioritised list of research uncertainties, developed to specifically highlight the most pressing clinical needs as perceived by healthcare professionals, people with fertility problems, and others should help funding organisations and researchers to set their future research priorities.

Such an approach should ensure future research has the necessary reach and relevance to inform clinical practice and improve patient outcomes.

To continue the conversation, please contact Dr James Duffy

james.duffy@kingsfertility.co.uk @jamesmnduffy

King's Fertility, The Fetal Medicine Research Institute, London SE5 8BB

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