JRRM | JOURNAL OF RESTORATIVE REPRODUCTIVE MEDICINE

Definition of Infertility and Indications for Fertility Evaluation: Consensus Document

Monica Minjeur [1], Tracey A. Parnell [1], Joseph B. Stanford [1], Phil A. Boyle [1], José Antonio Arraztoa[1], Zoreslava Horodenchuk [1], Natalia Suszczewicz [1], Kevin McCarthy[1]

[1]International Institute for Restorative Reproductive Medicine, Crawley, United Kingdom

https://doi.org/10.63264/zvpr3e66

Definition: Infertility is a clinical condition that is recognized by the symptom of an inability to conceive through sexual intercourse or to sustain a pregnancy, with that symptom indicating underlying male and/or female pathology.

METHODOLOGY

This definition of infertility was developed through a structured, consensus-informed process involving broad stakeholder engagement. Initially, multiple definitions currently used by various medical professional organizations were reviewed, and a definition document was drafted and submitted to the Board of Directors of the International Institute for Restorative Reproductive Medicine (IIRRM). All IIRRM members were invited to provide feedback on the draft. Approximately 2,500 individuals and 44 organizations from 92 countries were then invited to review the proposed document, representing clinical, scientific, patient, policy, and advocacy perspectives. Submitted comments were reviewed thematically, with suggested revisions evaluated for clarity, clinical relevance, inclusiveness, and consistency with contemporary restorative reproductive medicine. Following this review, 3 substantive changes, 18 minor changes, and 15 citation corrections were incorporated into the final draft which resulted in a revised definition intended to better reflect the medical, social, and practical realities of modern infertility evaluation and care. Final approval by the IIRRM Board of Directors was unanimous.

BACKGROUND

Biologically, human fertility is based on healthy reproductive function in both the female and the male. Historically, reduced fertility has been understood as a manifestation of impaired reproductive function and the inability to become pregnant, arising from underlying pathology, even when that pathology was not clear.[1-3] While multiple terms have been used for reduced fertility, such as subfertility, or impaired fecundity, the term that is most widely used and recognized is infertility.[4-6]

Multiple definitions of infertility are currently in use. The World Health Organization describes infertility as "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."[7] Other definitions are based on longer time periods. Clinical definitions of infertility are designed to guide diagnosis and treatment of individual patients, whereas epidemiologic definitions are designed to estimate the prevalence and population burden of infertility for research and public health.[8-10]

In 2023, the American Society for Reproductive Medicine (ASRM) proposed a definition that included any circumstance in which pregnancy cannot be attained without technological intervention.[11] This was a departure from their previous definition, which was based primarily on reproductive dysfunction.[12-14] This framework risks confusing reproductive dysfunction with desire for the provision of reproductive services. Our definition, described below, focuses on indicators of reproductive dysfunction.

From a clinical perspective, infertility is understood as impaired reproductive function resulting from abnormalities affecting ovulation, sperm production or function, tubal patency, endometrial receptivity, implantation, endocrine regulation, sexual function, or other components of human reproduction. Such an approach aligns with other areas of medicine, where disease is generally defined by pathophysiology rather than only by failure to achieve a desired outcome within a specified time, such as 12 months.

Human fecundability (the probability of clinical conception

Received: July 9, 2026; Accepted: July 10, 2026
© The Author(s) 2026. Published by The Journal of Restorative Reproductive Medicine. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted reuse, distribution, and reproduction in any medium, provided the original work is properly cited.

in one ovulation/menstrual cycle) is highly dependent on timing of intercourse within the cycle.[15] Landmark research by Wilcox and colleagues demonstrated that the probability of clinical conception is largely restricted to a six-day fertile window ending on the day of ovulation; many additional studies confirm this general finding, with some variability in the exact duration of the fertile window.[16-20] Furthermore, there is substantial normal variability in the timing of the fertile window, which means that simple calendar algorithms (such as are used in most mobile cycle apps) are of limited value to identify the fertile window.[21-24] Intercourse occurring outside this window contributes little to the probability of conception.[25]

In recent years, there has been an increased awareness of the value of identifying ovulation and the fertile window.[26-30] Most couples now have access to cycle charting and femtech tools or apps that can help facilitate fertility-timed intercourse, which is intercourse timed to the fertile window of the female cycle. Evidence suggests that estrogenic cervical fluid is likely the most effective biomarker to identify the most fecund ("most fertile") days of the ovulation/menstrual cycle.[18,31-34] Other recognized biomarkers can be very helpful, including urinary estrogen metabolites, a positive urinary LH test, or the days prior to a basal body temperature shift.[35-36] No single biomarker works perfectly for every woman, but a biological identification of the fertile window is sufficient to identify fertility-timed intercourse. Fertility-timed intercourse contrasts with non-contracepted intercourse to conceive, elsewhere referred to as "unprotected intercourse," which is not timed specifically to the fertile window. Clinical data demonstrate that a majority of women with normal fertility conceive within six cycles of fertility-timed intercourse (in a similar proportion to 12 months of non-contracepted intercourse without specific timing), making the 12-month standard unnecessarily prolonged for couples correctly timing intercourse to the fertile window.[37-40]

It is also important to recognize that immediately after 12 months of non-contracepted intercourse, or after 6 cycles of fertility-timed intercourse, conception without further treatment is still possible and may occur within the following 6-12 months in about 50% of couples without further evaluation or intervention. In other words, a diagnosis of infertility based on time trying to conceive is not absolute, but is based on probability.[41-42] This fact may help guide clinical counseling about the timing and intensity of initial evaluation and related treatment recommendations.[43]

In addition to considering time trying to conceive, it is important to consider symptoms of possible underlying conditions--including endometriosis, polyendocrine metabolic ovarian syndrome (PMOS, previously PCOS), thyroid autoimmunity, male health conditions that affect fertility, and many other conditions that should be treated more expediently.[44-46] These conditions do not just impair conception and complicate pregnancy, but also indicate serious health issues.

Male infertility is increasingly linked to increased morbidity and mortality; women with PMOS are at higher risk for heart disease, cancers, diabetes, eating disorders, anxiety and depression, sleep apnea and shortened life expectancy.[47-49] Endometriosis patients have an increased risk of chronic pain, cardiovascular disease, and possibly ovarian cancer. [50-54]

It is critical that the absence of pregnancy is not the only factor considered in decisions about diagnosis and treatment. Thus, treatments targeted specifically for conception should not be employed prematurely before the underlying reproductive dysfunction has been adequately evaluated and treated.[40, 54-55]

A particularly important contributor to infertility is advancing female age, especially after age 40, reflecting progressive decline in ovarian reserve and oocyte quality. Female fertility is highest in the late teens through the late 20s or early 30s, then declines gradually, with clinically meaningful decline by the mid-30s and more rapid decline after approximately age 37. By age 40, relative fertility is reduced by at least half compared with women in their late 20s or early 30s, and fecundability continues to fall substantially thereafter.[56]

PROPOSED DEFINITION OF INFERTILITY

Infertility is a clinical condition that is recognized by the symptom of an inability to conceive through sexual intercourse or to sustain a pregnancy, with that symptom indicating underlying male and/or female pathology.

The clinical diagnosis of infertility is made when couples are found to meet one or more of these criteria:

1. have not conceived or maintained a pregnancy despite 12 months or more of non-contracepted intercourse;
2. have not conceived or maintained a pregnancy despite 6 cycles or more of fertility-timed intercourse (intercourse timed to the fertile window);
3. have had medical identification of one or more conditions that if not corrected or resolved, make conceiving or maintaining a pregnancy physiologically unlikely or impossible (for example, amenorrhea, severe oligospermia, among others)

For the purposes of counting months or cycles of non-contracepted intercourse, the count continues after an intervening miscarriage (i.e., the count is cumulative and does not reset).[57-59] However, months or cycles in which non-contracepted intercourse did not occur should be excluded from the count.[60]

A couple with a clinical diagnosis of infertility based on the

above criteria should be offered a medical fertility investigation. In addition, any one of the following criteria warrants a fertility investigation irrespective of whether a clinical diagnosis of infertility has been made:

1. female, any age, with symptoms of irregular cycles or suspected anovulation.
2. female, any age, with history or symptoms suggestive of other fertility-impairing conditions including, but not limited to, polyendocrine metabolic ovarian syndrome (PMOS), metabolic disorders, endometriosis, thyroid dysfunction, inflammatory and immune disorders, tubal disease, structural disorders of the reproductive organs, chemotherapy, cervical factors, sexual dysfunction, toxic environmental exposures.
3. female age 35 years to 39 years, who has had 6 cycles of non-contracepted intercourse without conception (to facilitate identifying underlying issues prior to the progression of age-related infertility)
4. female, age 40 or more who desires to conceive, whether or not there has been any non-contracepted intercourse (to facilitate identifying underlying issues prior to the progression of age-related infertility)
5. male, any age, with history of symptoms suggestive of fertility-impairing factors including, but not limited to, testicular injury or surgery, chemotherapy, hormonal disorders, anatomic disorders of the reproductive organs, abnormal semen parameters, inflammatory and infectious conditions, ejaculatory dysfunction, toxic environmental exposures.
6. couple who has experienced two or more pregnancy losses and remains unable to achieve a live birth.

The following criterion may warrant fertility investigation:

7. couple who has experienced one pregnancy loss

This definition of infertility and list of indications for evaluation respect the fact that infertility typically has multiple causes and/or contributors.[61-64] The level, components, sequence and intensity of fertility evaluation procedures that are offered for both female and male should be customized based on clinical judgement, considering the overall prognosis, relative likelihood of specific underlying factors, and concern about progression of age-related fertility decline, as well as availability of procedures, financial issues, and patient preferences. Ultimately, a clinical diagnosis of infertility serves as an indication for comprehensive evaluation of male and female patients to identify underlying etiologic diagnoses. Contributing factors may include anatomical, hormonal, metabolic, genetic, infectious, autoimmune/inflammatory, gamete-related, and lifestyle-related abnormalities, with multiple factors commonly coexisting within the same couple.[65]

RATIONALE

The 12-month threshold for non-contracepted intercourse allows most fertile couples to conceive before initiating unnecessary evaluation. Although some couples may still conceive without evaluation or treatment, the probability of underlying pathology after one year is high enough to justify initiating evaluation. Likewise, the six-cycle threshold for couples using fertility-timed intercourse is grounded in data demonstrating most females with normal fertility conceive within six cycles of timed intercourse and reflects modern advances that now give patients the tools to identify and act on the fertile window.[34-35, 41, 49] Inability to conceive within either the 12-months of non-contracepted intercourse or 6-cycles of fertility timed intercourse indicates that the likelihood of underlying pathology is high enough to justify initiating evaluation. Furthermore, miscarriage is an additional indicator requiring evaluation, rather than necessarily a random biological event. Many pregnancy losses have underlying pathophysiologic contributors that often overlap with contributing factors for infertility—including sperm DNA fragmentation, antiphospholipid syndrome, thrombophilia, luteal phase insufficiency, and immunologic dysregulation.[57-59] A pregnancy loss occurring within the infertility evaluation window should not reset the time- or cycle-based calculation used to identify infertility; rather, prior qualifying months or cycles should continue to count. This loss may provide additional evidence of underlying reproductive dysfunction warranting timely assessment. Delaying evaluation may prolong time to diagnosis, expose patients to additional potentially preventable losses, and defer treatment of identifiable contributing conditions.

RECOMMENDATIONS

1. Clinicians should offer infertility evaluation after 12 months of non-contracepted intercourse or six cycles of fertility-timed intercourse for patients. If the female age is 35 or more, evaluation may be offered earlier to identify underlying issues prior to the progression of age-related infertility. Females age 40 or more desiring pregnancy should be able to access medical care immediately.
2. Females unable to identify a fertile window due to irregular cycles or suspected anovulation or oligo-ovulation, and who desire to conceive, should be offered immediate evaluation, without regard to time seeking to conceive.
3. Females or males with identifiable conditions impairing fertility should be offered immediate evaluation, without regard to time seeking to conceive.
4. A pregnancy loss occurring within the infertility evaluation window should not reset the time- or cycle-based calculation used to identify infertility. Instead, pregnancy

loss should be recognized as a clinically significant reproductive event that may provide evidence of underlying pathology warranting investigation. Early evaluation offers the opportunity to identify potentially treatable contributors to pregnancy loss and infertility, reduce the risk of recurrent loss, and improve the likelihood of a healthy, full-term live birth.

5. Payors should align reimbursement triggers with the six-cycle standard for couples practicing fertility-timed intercourse.

ACKNOWLEDGEMENTS

The authors would like to thank the members and organizations of the International Institute for Restorative Reproductive medicine, as well as all participants in the stakeholder review for their critical feedback.

CONFLICT OF INTEREST

All authors are members of the Board of Directors of the International Institute for Restorative Reproductive Medicine, for which they receive no compensation. M.M. is a member of the executive team of NeoFertility (unpaid). T.P. is the medical director of RRMed (unpaid). P.B. is a member of the executive team of NeoFertility.

FUNDING STATEMENT

This work did not receive any funding.

REFERENCES

1. Hippocrates. *Generation. Nature of the Child. Diseases IV. Nature of Women. Barrenness.* Potter P, trans. Cambridge, MA: Harvard University Press; 2012. Loeb Classical Library 520.

2. Avicenna, & Gruner, O C (1985). *A treatise on the Canon of medicine of Avicenna : incorporating a translation of the first book* (Special ed.). Classics of Medicine Library.

3. Zegers-Hochschild F, Adamson GD, de Mouzon J, Ishihara O, Mansour R, Nygren K, Sullivan E, Vanderpoel S. International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organization (WHO) revised glossary of ART terminology, 2009. Fertil Steril. 2009 Nov;92(5):1520-4. doi: 10.1016/j.fertnstert.2009.09.009.

4. Marchbanks PA, Peterson HB, Rubin GL, Wingo PA. Research on infertility: definition makes a difference. The Cancer and Steroid Hormone Study Group. Am J Epidemiol. 1989 Aug;130(2):259-67. doi:10.1093/oxfordjournals.aje.a115332.

5. Gnoth C, Godehardt E, Frank-Herrmann P, Friol K, Tigges J, Freundl G. Definition and prevalence of subfertility and infertility. Hum Reprod. 2005 May;20(5):1144-7. doi: 10.1093/humrep/deh870.

6. Habbema JD, Collins J, Leridon H, Evers JL, Lunenfeld B, te Velde ER. Towards less confusing terminology in reproductive medicine: a proposal. Hum Reprod. 2004 Jul;19(7):1497-501. doi: 10.1093/humrep/deh303.

7. World Health Organization (2023). Infertility prevalence estimates: 1990–2021. World Health Organization. https://iris.who.int/handle/10665/366700.

8. Larsen U. Research on infertility: which definition should we use? Fertil Steril. 2005 Apr;83(4):846-52. doi: 10.1016/j.fertnstert.2004.11.033.

9. Mascarenhas MN, Cheung H, Mathers CD, Stevens GA. Measuring infertility in populations: constructing a standard definition for use with demographic and reproductive health surveys. Popul Health Metr. 2012 Aug 31;10(1):17. doi: 10.1186/1478-7954-10-17.

10. Gurunath S, Pandian Z, Anderson RA, Bhattacharya S. Defining infertility--a systematic review of prevalence studies. Hum Reprod Update. 2011 Sep-Oct;17(5):575-88. doi: 10.1093/humupd/dmr015.

11. Practice Committee of the American Society for Reproductive Medicine, American Society for Reproductive Medicine, Washington, DC. Definition of infertility: a committee opinion. Fertil Steril. 2023 Dec;120(6):1170. doi: 10.1016/S0015-0282(23)01971-4.

12. Practice Committee of the American Society for Reproductive Medicine. Electronic address: asrm@asrm.org. Definitions of infertility and recurrent pregnancy loss: a committee opinion. Fertil Steril. 2020 Mar;113(3):533-535. doi:10.1016/j.fertnstert.2019.11.025.

13. Practice Committee of the American Society for Reproductive Medicine. Definitions of infertility and recurrent pregnancy loss: a committee opinion. Fertil Steril. 2013 Jan;99(1):63. doi:10.1016/j.fertnstert.2012.09.023.

14. Polis CB, Cox CM, Tunçalp Ö, McLain AC, Thoma ME. Estimating infertility prevalence in low-to-middle-income countries: an application of a current duration approach to Demographic and Health Survey data. Hum Reprod. 2017 May 1;32(5):1064-1074. doi:10.1093/humrep/dex025.

15. Stanford JB, Dunson DB. Effects of sexual intercourse patterns in time to pregnancy studies. Am J Epidemiol. 2007 May 1;165(9):1088-95. doi:10.1093/aje/kwk111.

16. Johnson S, Stanford JB, Warren G, Bond S, Bench-Capon S, Zinaman MJ. Increased Likelihood of Pregnancy Using an App-Connected Ovulation Test System: A Randomized Controlled Trial. J Womens Health (Larchmt). 2020 Jan;29(1):84-90. doi:10.1089/jwh.2019.7850.

17. Robinson JE, Wakelin M, Ellis JE. Increased pregnancy rate with use of the Clearblue Easy Fertility Monitor. Fertil

Steril. 2007 Feb;87(2):329-34. doi:10.1016/j.fertnstert.2006.05.054.

18. Stanford JB, Smith KR, Dunson DB. Vulvar mucus observations and the probability of pregnancy. Obstet Gynecol. 2003 Jun;101(6):1285-93. doi: 10.1016/s0029-7844(03)00358-2.

19. Faust L, Bradley D, Landau E, Noddin K, Farland LV, Baron A, Wolfberg A. Findings from a mobile application-based cohort are consistent with established knowledge of the menstrual cycle, fertile window, and conception. Fertil Steril. 2019 Sep;112(3):450-457.e3. doi:10.1016/j.fertnstert.2019.05.008.

20. Keulers MJ, Hamilton CJ, Franx A, Evers JL, Bots RS. The length of the fertile window is associated with the chance of spontaneously conceiving an ongoing pregnancy in subfertile couples. Hum Reprod. 2007 Jun;22(6):1652-6. doi:10.1093/humrep/dem051.

21. Najmabadi S, Schliep KC, Simonsen SE, Porucznik CA, Egger MJ, Stanford JB. Menstrual bleeding, cycle length, and follicular and luteal phase lengths in women without known subfertility: A pooled analysis of three cohorts. Paediatr Perinat Epidemiol. 2020 May;34(3):318-327. doi:10.1111/ppe.12644.

22. Wilcox AJ, Dunson D, Baird DD. The timing of the "fertile window" in the menstrual cycle: day specific estimates from a prospective study. BMJ. 2000 Nov 18;321(7271):1259-62. doi: 10.1136/bmj.321.7271.1259.

23. Bull JR, Rowland SP, Scherwitzl EB, Scherwitzl R, Danielsson KG, Harper J. Real-world menstrual cycle characteristics of more than 600,000 menstrual cycles. NPJ Digit Med. 2019 Aug 27;2:83. doi: 10.1038/s41746-019-0152-7.

24. Malliou-Becher MN, Herrmann PM, Freis A, Freundl-Schütt T, Wallwiener LM, Baur S, Fehring RJ, Gnoth C, Mallios A, Strowitzki T, Frank-Herrmann P. Variations in ovulation time and menstrual cycle characteristics: analysis of a prospective long-term cohort study. Hum Reprod. 2026 Jun 1;41(6):959-968. doi:10.1093/humrep/deag057.

25. Colombo B, Masarotto G. Daily fecundability: first results from a new data base. Demogr Res. 2000 Sep 6;3:[39].

26. Dahlberg B, Yates S, Kelly L, et al. *The Dawn of the FemTech Revolution.* McKinsey & Company. February 14, 2022.

27. Rampazzo F, Raybould A, Rampazzo P, Barker R, Leasure D. "UPDATE: I'm pregnant!": Inferring global downloads and reasons for using menstrual tracking apps. Digit Health. 2024 Nov 21; 10:20552076241298315. doi:10.1177/20552076241298315.

28. Broad A, Biswakarma R, Harper JC. A survey of women's experiences of using period tracker applications: Attitudes, ovulation prediction and how the accuracy of the app in predicting period start dates affects their feelings and behaviours. Womens Health (Lond). 2022 Jan-Dec;18:17455057221095246. doi:10.1177/17455057221095246.

29. Wilcox AJ, Weinberg CR, Baird DD. Timing of sexual intercourse in relation to ovulation. Effects on the probability of conception, survival of the pregnancy, and sex of the baby. N Engl J Med. 1995 Dec 7; 333(23):1517-21. doi:10.1056/NEJM199512073332301.

30. Ali R, Gürtin ZB, Harper JC. Do fertility tracking applications offer women useful information about their fertile window? Reprod Biomed Online. 2020 Sep 11:S1472-6483(20)30509-5. doi:10.1016/j.rbmo.2020.09.005.

31. Bigelow JL, Dunson DB, Stanford JB, Ecochard R, Gnoth C, Colombo B. Mucus observations in the fertile window: a better predictor of conception than timing of intercourse. Hum Reprod. 2004 Apr;19(4):889-92. doi:10.1093/humrep/deh173.

32. Evans-Hoeker E, Pritchard DA, Long DL, Herring AH, Stanford JB, Steiner AZ. Cervical mucus monitoring prevalence and associated fecundability in women trying to conceive. Fertil Steril. 2013 Oct;100(4):1033-1038.e1. doi:10.1016/j.fertnstert.2013.06.002.

33. Ecochard R, Duterque O, Leiva R, Bouchard T, Vigil P. Self-identification of the clinical fertile window and the ovulation period. Fertil Steril. 2015 May;103(5):1319-25.e3. doi:10.1016/j.fertnstert.2015.01.031.

34. Mu Q, Fehring RJ. Efficacy of achieving pregnancy with fertility-focused intercourse. MCN Am J Matern Child Nurs. 2014 Jan-Feb;39(1):35-40. doi:10.1097/NMC.0b013e3182a76b88

35. Duane M, Stanford JB, Porucznik CA, Vigil P. Fertility Awareness-Based Methods for Women's Health and Family Planning. Front Med (Lausanne). 2022 May 24;9:858977. doi:10.3389/fmed.2022.858977.

36. Frank-Herrmann P, Gnoth C, Baur S, Strowitzki T, Freundl G. Determination of the fertile window: reproductive competence of women--European cycle databases. Gynecol Endocrinol. 2005 Jun;20(6):305-12. doi: 10.1080/09513590500097507.

37. Hilgers TW, Prebil AM. The ovulation method--vulvar observations as an index of fertility/infertility. Obstet Gynecol. 1979 Jan;53(1):12-22.

38. Stanford JB, White GL, Hatasaka H. Timing intercourse to achieve pregnancy: current evidence. Obstet Gynecol. 2002 Dec;100(6):1333-41. doi:10.1016/s0029-7844(02)02382-7.

39. Favaro C, Pearson JT, Rowland SP, Jukic AM, Chelstowska M, Berglund Scherwitzl E, Scherwitzl R, Gemzell Danielsson K, Harper J. Time to Pregnancy for Women Using a Fertility Awareness Based Mobile Application to Plan a Pregnancy. J Womens Health

(Larchmt). 2021 Nov;30(11):1538-1545. doi:10.1089/jwh.2021.0026.

40. Practice Committee of the American Society for Reproductive Medicine and the Practice Committee of the Society for Reproductive Endocrinology and Infertility; Penzias A, Azziz R, Bendikson K, Falcone T, Hansen K, Hill M, Jindal S, Kalra S, Mersereau J, Reindollar R, Shannon CN, Steiner A, Tanrikut C, Taylor H, Yauger B. Optimizing natural fertility: a committee opinion. Fertil Steril. 2022 Jan;117(1):53-63. doi: 10.1016/j.fertnstert.2021.10.007.

41. Gnoth C, Godehardt D, Godehardt E, Frank-Herrmann P, Freundl G. Time to pregnancy: results of the German prospective study and impact on the management of infertility. Hum Reprod. 2003 Sep;18(9):1959-66. doi:10.1093/humrep/deg366.

42. Dunson DB, Baird DD, Colombo B. Increased infertility with age in men and women. Obstet Gynecol. 2004 Jan;103(1):51-6. doi:10.1097/01.AOG.0000100153.24061.45.

43. Annual Capri Workshop Group. Towards a more pragmatic and wiser approach to infertility care. Hum Reprod. 2019 Jul 8;34(7):1165-1172. doi:10.1093/humrep/dez101.

44. Tańska K, Gietka-Czernel M, Glinicki P, Kozakowski J. Thyroid autoimmunity and its negative impact on female fertility and maternal pregnancy outcomes. Front Endocrinol (Lausanne). 2023 Jan 11;13:1049665. doi:10.3389/fendo.2022.1049665.

45. Teede HJ, Khomami MB, Morman R, Laven JSE, Joham AE, Costello MF, Patil M, Rees DA, Berry L, Cree MG, Zhao H, Norman RJ, Dokras A, Piltonen T; Global Name Change Consortium. Polyendocrine metabolic ovarian syndrome, the new name for polycystic ovary syndrome: a multistep global consensus process. Lancet. 2026 Jun 6;407(10545):2329-2339. doi:10.1016/S01406736(26)00717-8.

46. Van Gestel H, Bafort C, Meuleman C, Tomassetti C, Vanhie A. The prevalence of endometriosis in unexplained infertility: a systematic review. Reprod Biomed Online. 2024 Sep;49(3):103848. doi:10.1016/j.rbmo.2024.103848.

47. World Health Organization. Polycystic ovary syndrome. Updated January 22, 2026. Available at: https://www.who.int/news-room/fact-sheets/detail/polycystic-ovary-syndrome/. Accessed June 8, 2026.

48. Palomba S, Santagni S, Falbo A, La Sala GB. Complications and challenges associated with polycystic ovary syndrome: current perspectives. Int J Womens Health. 2015 Jul 31;7:745-63. doi:10.2147/IJWH.S70314.

49. Piltonen TT, Koskenkari N, Koivuaho E, Morin-Papunen L, Hurskainen E, Gissler M, Arffman RK, Ollila MM. Increased mortality in polycystic ovary syndrome- a cohort study. Eur J Endocrinol. 2026 Apr 30;194(5):724-731. doi:10.1093/ejendo/lvag080.

50. Blom JN, Velez MP, McClintock C, Shellenberger J, Pudwell J, Brogly SB, Bougie O. Endometriosis and cardiovascular disease: a population-based cohort study. CMAJ Open. 2023 Mar 7;11(2):E227-E236. doi:10.9778/cmajo.20220144.

51. Singh SS, Allaire C, Al-Nourhji O, Bougie O, Bridge-Cook P, Duigenan S, Kroft J, Lemyre M, Leonardi M, Leyland N, Maheux-Lacroix S, Wessels J, Wahl K, Yong PJ. Guideline No. 449: Diagnosis and Impact of Endometriosis - A Canadian Guideline. J Obstet Gynaecol Can. 2024 May;46(5):102450. doi:10.1016/j.jogc.2024.102450.

52. Barnard ME, Farland LV, Yan B, Wang J, Trabert B, Doherty JA, Meeks HD, Madsen M, Guinto E, Collin LJ, Maurer KA, Page JM, Kiser AC, Varner MW, Allen-Brady K, Pollack AZ, Peterson KR, Peterson CM, Schliep KC. Endometriosis Typology and Ovarian Cancer Risk. JAMA. 2024 Aug 13;332(6):482-489. doi:10.1001/jama.2024.9210.

53. Kvaskoff M, Mahamat-Saleh Y, Farland LV, Shigesi N, Terry KL, Harris HR, Roman H, Becker CM, As-Sanie S, Zondervan KT, Horne AW, Missmer SA. Endometriosis and cancer: a systematic review and meta-analysis. Hum Reprod Update. 2021 Feb 19;27(2):393-420. doi:10.1093/humupd/dmaa04.

54. Ganci D, Steeper M, Polyakov A, et al. The effectiveness and safety of restorative reproductive medicine compared to ART: a systematic review. Fertil Steril. 2026; 125, 993-1001. doi: 10.1016/j.fertnstert.2026.03.039

55. Boyle PC. Understanding Restorative Reproductive Medicine. *J Restorative Reprod Med* (2025) 1(7):1–2. Epub 2025 Sep 17. doi: 10.63264/f0b0xh81.

56. Wesselink AK, Rothman KJ, Hatch EE, Mikkelsen EM, Sørensen HT, Wise LA. Age and fecundability in a North American preconception cohort study. Am J Obstet Gynecol. 2017 Dec;217(6):667.e1-667.e8. doi:10.1016/j.ajog.2017.09.002.

57. Practice Committee of the American Society for Reproductive Medicine. Recurrent pregnancy loss: a committee opinion. Fertil Steril. 2026 Jun;125(6):1023-1041. doi: 10.1016/j.fertnstert.2026.03.001.

58. Robinson L, Gallos ID, Conner SJ, Rajkhowa M, Miller D, Lewis S, Kirkman-Brown J, Coomarasamy A. The effect of sperm DNA fragmentation on miscarriage rates: a systematic review and meta-analysis. Hum Reprod. 2012 Oct;27(10):2908-17. doi:10.1093/humrep/des261.

59. Empson M, Lassere M, Craig J, Scott J. Prevention of recurrent miscarriage for women with antiphospholipid antibody or lupus anticoagulant. Cochrane Database Syst Rev. 2005 Apr 18;2005(2):CD002859. doi:10.1002/14651858.CD002859.pub2.

60. Stanford JB, Smith KR, Varner MW. Impact of Instruction in the Creighton Model Fertilitycare System on Time to Pregnancy in Couples of Proven Fecundity: Results of a Randomised Trial. *Paediatr Perinat Epidemiol* (2014) 28(5):391–9. doi:10.1111/ppe.12141

61. Practice Committee of the American Society for Reproductive Medicine. Fertility evaluation of infertile women: a committee opinion. Fertil Steril. 2021 Nov;116(5):1255-1265. doi:10.1016/j.fertnstert.2021.08.038.

62. Stanford JB, Carpentier PA, Meier BL, Rollo M, Tingey B. Restorative reproductive medicine for infertility in two family medicine clinics in New England, an observational study. BMC Pregnancy Childbirth. 2021 Jul 7;21(1):495. doi:10.1186/s12884-021-03946-8.

63. Stanford JB, Parnell TA, Boyle PC. Outcomes from treatment of infertility with natural procreative technology in an Irish general practice. J Am Board Fam Med. 2008 Sep-Oct;21(5):375-84. doi:10.3122/jabfm.2008.05.070239.

64. European Society of Human Reproduction and Embryology (ESHRE). *Factsheet on Infertility – Prevalence, Treatment and Fertility Preservation*. Brussels: ESHRE; 2024.

65. Stanford JB, Parnell T, Kantor K, Reeder MR, Najmabadi S, Johnson K, Musso I, Hartman H, Tham E, Winter I, Galczynski K, Carus A, Sherlock A, Golden Tevald J, Barczentewicz M, Meier B, Carpentier P, Poehailos K, Chasuk R, Danis P, Lipscomb L. International Natural Procreative Technology Evaluation and Surveillance of Treatment for Subfertility (iNEST): enrollment and methods. Hum Reprod Open. 2022 Aug 9;2022(3):hoac033. doi:10.1093/hropen/hoac033.

Correspondence to: IIRRM Board of Directors
Email: trustees@iirrm.org

How to cite this article: Minjeur M, Parnell TA, Stanford JB, Boyle PA, Arraztoa JA, Horodenchuk Z, Suszczewicz N, McCarthy K, International Institute for Restorative Reproductive Medicine. Definition of Infertility and Indications for Fertility Evaluation: Consensus Document. J Restorative Reprod Med. 2026 July 13, 2:1 1–7. https://doi.org/10.63264/zvpr3e66