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Generative AI in fertility care: an international snapshot of professional use and perceived impact

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Abstract

Background

Generative artificial intelligence (GenAI) is increasingly accessible to both healthcare professionals and patients, yet little is known about how general-purpose GenAI is being used within fertility care or how fertility professionals perceive its influence on patients and clinical practice. This study explored professional use of GenAI, observations of patient use, perceived benefits and concerns, and organisational engagement within fertility and reproductive healthcare. An international cross-sectional online survey of fertility and reproductive healthcare professionals was conducted between May and July 2026. The 14-question exploratory survey examined professional and perceived patient use, potential benefits and concerns, and organisational engagement. Quantitative data were analysed descriptively, with optional free-text comments providing supplementary context.

Results

A total of 166 professionals completed the survey. Overall, 89.8% reported some professional use of GenAI, with 47.0% using it regularly. The most frequently reported uses were drafting correspondence and reports (62.5%), creating presentations or educational materials (50.0%) and administrative support (47.5%), while directly clinical uses were less common. Most respondents (86.6%, 142/164) reported that GenAI was influencing patient knowledge, questions or behaviour. The most frequently observed patient uses included understanding test results or medical information (74.4%), researching treatments or procedures (68.3%) and seeking second opinions or alternative explanations (59.8%). Perceived effects were mixed: 52.4% reported increased misinformation or confusion, while 48.8% reported patients asking more informed or focused questions. Incorrect or misleading information (80.5%) and conflict with professional advice (78.0%) were the most frequently reported concerns. Overall, 68.7% reported that their organisation was already using, planning or discussing GenAI.

Conclusions

General-purpose GenAI was already being used by many fertility professionals in this international sample, while its influence on patients was also being encountered in routine practice. Professional use was predominantly practical rather than directly clinical, and respondents identified both potential benefits and substantial concerns. The accessibility of general-purpose GenAI means that professional, patient and organisational adoption are occurring simultaneously, highlighting the need for fertility-specific guidance, governance and appropriate human oversight.

Introduction

Patients have long looked for fertility information outside the clinic, drawing on a range of online and other sources (Grace et al., 2023). What has changed with generative artificial intelligence (GenAI) is the way they can now question, interpret and revisit that information. Widely available tools such as ChatGPT, Gemini, Claude and Copilot are built around large language models (LLMs). Rather than simply locating information, these models generate responses based on their training and the information provided by users. They also allow users to ask follow-up questions, request explanations and explore information through an ongoing conversation (Shanahan et al., 2023).

GenAI is now being used across healthcare for a range of activities, including communication, documentation, education, research, clinical decision support and administration (Omiye et al., 2024; Wang and Zhang, 2024; Scott et al., 2025). These tools are also readily accessible to patients, who can use them independently to seek health information and advice (Duffy et al., 2026). In fertility care, professionals are encountering patients who have used GenAI before or after a clinical consultation. Some arrive having already researched fertility problems, treatment options or test results, while others use these tools afterwards to revisit explanations, compare recommendations or question information provided by their clinic. This has been described as a form of “second consultation”, where patients return to the information and advice received during a clinical appointment and explore it further through AI (Papathanasiou, 2026; Jones, 2026).

Research from other areas of healthcare has begun to document how professionals are using GenAI in practice. Surveys of UK general practitioners have reported its use for documentation, differential diagnosis, treatment options and referrals (Blease et al., 2025). Studies involving other clinical groups have examined administrative, educational and clinical applications, alongside professional attitudes and organisational approaches to adoption (Ruan et al., 2024). More recent research involving physicians, nurses and mental-health professionals has also considered workload, training and institutional support (Blease et al., 2026; Garcia Sanchez et al., 2026). These studies suggest that healthcare professionals are already incorporating GenAI into their work, although questions remain about training, governance and organisational oversight.

Within fertility care, much of the research on GenAI has examined whether tools such as ChatGPT can provide accurate fertility information or support patients making treatment decisions (Beilby and Hammarberg, 2024). Other studies have compared GenAI-generated fertility counselling with responses from fertility specialists, identifying both strengths and limitations when addressing complex or individualised questions (Alcalay et al., 2026). Research on AI in reproductive medicine has also concentrated on specialist clinical and laboratory applications, such as embryo assessment, gamete evaluation and outcome prediction (Zhang et al., 2025). International survey work has examined the use and understanding of AI within ART laboratories (Palmer et al., 2025). However, there is still limited evidence about how fertility professionals themselves are using GenAI in their everyday work, or what they are observing about its use by patients.

Against this background, we conducted a short international survey to examine how GenAI was being used and perceived within fertility practice between May and July 2026. We explored how frequently professionals were using these tools, what they were using them for and their observations of patient use, including its perceived influence on consultations and treatment journeys. We also examined the benefits and concerns identified by respondents and whether their organisations were already using, planning or discussing the adoption of GenAI.

Materials and methods

Study design

An international cross-sectional online survey was conducted between May and July 2026 with professionals working in fertility and reproductive healthcare. The study was designed to capture a snapshot of how general-purpose GenAI chatbots, including ChatGPT, Gemini, Claude and Copilot, were being used and perceived within fertility practice at that point in time.

Participants and eligibility

The survey was open internationally to anyone working professionally within fertility or reproductive healthcare. Respondents reported their professional role, geographical region and length of experience in the field. Multiple professional roles could be selected.

Questionnaire development and content

The 14-question questionnaire was developed by members of the European Fertility Society Education Committee and was designed as a short exploratory survey rather than a validated psychometric instrument. It was not formally piloted.

The questionnaire used closed-ended questions, with multiple responses permitted where appropriate. Questions covered respondent characteristics; frequency and purposes of professional GenAI use; perceived patient use and influence on consultations and treatment journeys; perceived benefits and concerns; and organisational use or consideration of GenAI.

One optional free-text question invited additional comments.

The full questionnaire is provided in Appendix 1.

Recruitment and sampling

Convenience sampling was used. The anonymous survey was distributed internationally through the European Fertility Society and wider professional networks, including social media, newsletters,

professional groups and direct contacts. Distribution was also supported by IVF Media Ltd through its professional database and by Progress Educational Trust (PET), which featured the survey in BioNews. The survey was open for responses from 1 May to 31 July 2026. Recipients were encouraged to share the survey within their own professional networks.

Participation was voluntary and recruitment was open, allowing the survey to be shared beyond the original distribution channels. As it was therefore not possible to determine how many professionals received or saw the invitation, a response rate could not be calculated.

Data analysis

Quantitative data were analysed descriptively using frequencies and percentages, calculated from valid responses to each question. For questions allowing multiple responses, each response option was analysed separately, and percentages therefore did not necessarily total 100%.

The optional free-text responses were used to provide supplementary context to the quantitative findings rather than as a formal qualitative analysis. Comments were grouped into broad, overlapping areas, and selected anonymised quotations were used illustratively.

Results

Respondent characteristics

A total of 166 fertility and reproductive-health professionals completed the survey. Respondents represented a range of professional groups, with embryologists (28.3%) and fertility nurses (22.3%) the largest groups. Most were based in the UK (41.0%) or Europe excluding the UK (26.5%), and 62.7% had worked in fertility or reproductive healthcare for more than 10 years (Table 1).

Table 1
Respondent characteristics Professional role (Q1; multiple selections)

Response	n	%
Embryologist	47	28.3
Fertility nurse	37	22.3
Fertility doctor/clinician	22	13.3
Clinic manager/coordinator	16	9.6
Counsellor/psychologist	14	8.4
Genetic counsellor	10	6.0
Patient advocate/support organisation	10	6.0
Digital health, AI, FemTech or industry professional	8	4.8
Researcher/academic	6	3.6
Administrator	2	1.2
Sonographer	2	1.2
Fertility nutritionist	2	1.2
Andrologist	2	1.2
Operations manager	2	1.2
Patient care coordinator	2	1.2
Fertility/reproductive reflexologist	2	1.2

Note: Multiple professional roles could be selected. Percentages are based on the total sample (N = 166) and therefore do not sum to 100%.

Professional use of GenAI

GenAI was already widely used within this sample. Overall, 149 of 166 respondents (89.8%) reported some professional use, with 47.0% using it regularly and 42.2% occasionally. The most frequently reported uses were drafting emails, letters or reports (62.5%), creating presentations or educational materials (50.0%), administrative support (47.5%), brainstorming or problem-solving (43.8%), summarising information or guidelines (41.3%) and research or academic work (37.5%). More directly clinical uses, including clinical documentation (17.5%), clinical decision support or information-seeking (16.3%) and patient communication (15.0%), were reported less frequently (Table 2).

Organisational engagement with GenAI was also emerging. Almost one-third of respondents (31.3%) reported that their organisation was already using GenAI, while 22.3% said its use was being actively

discussed and 15.1% reported that implementation was being planned. Overall, 68.7% reported that their organisation was either using, planning or discussing its use.

Table 2. Organisational engagement

Organisational position and reported uses (Q12 and Q13; n = 166)

Organisational position (Q12)

Response	n	%
Currently using generative AI chatbots	52	31.3
Actively discussing potential use	37	22.3
Not currently considering generative AI chatbots	33	19.9
Planning implementation	25	15.1
Unsure	19	11.4

Current organisational or professional uses (Q13; multiple selections)

Response	n	%
Administrative support	90	54.2
Drafting emails, letters or reports	68	41.0
Patient communication	50	30.1
Social media or marketing content	50	30.1
Patient education or information	44	26.5
Appointment preparation or follow-up	30	18.1
Clinical documentation	30	18.1
Research or academic work	20	12.0
Clinical decision support or information-seeking	20	12.0

Note: Q12 and Q13 percentages are based on 166 respondents. Multiple responses were permitted for Q13; selected Q13 categories are shown.

Perceived patient use and impact

Most respondents (86.6%) reported that GenAI was having some influence on patient knowledge, questions or behaviour. The most frequently observed patient uses were understanding test results or medical information (74.4%), researching fertility treatments or procedures (68.3%), seeking second

opinions or alternative explanations (59.8%), checking or validating information provided by clinics (47.6%) and understanding symptoms or side effects (45.1%). Other reported uses included preparing questions before appointments, writing emails or complaints, researching success rates and clinics, supporting treatment decisions and seeking emotional support or reassurance.

The perceived impact on consultations, patient interactions and treatment journeys was mixed. Increased misinformation or confusion (52.4%) and patients asking more informed or focused questions (48.8%) were the two most frequently reported effects. Respondents also reported unrealistic expectations about treatment or outcomes (46.3%), increased anxiety or feeling overwhelmed (42.7%), greater reassurance-seeking (41.5%) and increased challenges to professional advice (39.0%). At the same time, 32.9% reported patients arriving more informed and 31.7% felt patients were more empowered or involved in their care.

When asked to assess the overall impact of GenAI within fertility care, almost half of respondents (47.6%) considered it neutral or mixed. Just over one-third (36.7%) described the impact as slightly or mostly positive, while 13.3% expressed a negative view.

Respondents identified both potential benefits and concerns. Improved access to information (59.0%) and better patient understanding (48.2%) were the most frequently reported benefits, followed by reduced barriers to asking questions (39.8%) and better preparation for appointments (36.1%).

Concerns were more frequently reported. Incorrect or misleading information (80.5%) and conflict between chatbot information and professional advice (78.0%) were the most frequently identified, followed by unrealistic expectations (67.1%), increased anxiety or confusion (65.9%) and lack of regulation or oversight (62.2%). Every respondent who answered the question identified at least one concern (Table 3).

Table 3
Potential benefits and concerns about generative AI Potential benefits (Q10; n = 166)

Response	n	%
Improved access to information	98	59.0
Better patient understanding	80	48.2
Reduced barriers to asking questions	66	39.8
Better appointment preparation	60	36.1
Support outside clinic hours	56	33.7
Improved professional efficiency or workflow	56	33.7
Improved patient engagement	44	26.5
Increased patient confidence	26	15.7
Emotional reassurance or support	24	14.5
No significant benefits	10	6.0

Note: Multiple responses permitted. Percentages based on n = 166; totals do not necessarily sum to 100%.

Reported concerns (Q11; n = 164 valid responses)

Response	n	%
Incorrect or misleading information	132	80.5
Conflicts between chatbot information and professional advice	128	78.0
Unrealistic expectations	110	67.1
Increased patient anxiety or confusion	108	65.9
Lack of regulation or oversight	102	62.2
Generic or non-personalised information	84	51.2
Patients delaying professional medical advice	54	32.9
Privacy or confidentiality concerns	48	29.3
Commercial bias or hidden advertising	44	26.8
Increased clinic workload	28	17.1
No major concerns	0	0.0

Note: Multiple responses permitted. Percentages based on 164 valid responses; totals do not necessarily sum to 100%.

Optional comments

Seventeen respondents (10.2%) provided an optional free-text comment. These provided additional context to the quantitative findings, including examples of GenAI being used to support documentation and efficiency, alongside concerns about misinformation, unrealistic expectations and additional professional workload.

Some respondents distinguished between general-purpose GenAI and more clinically focused AI systems, while others emphasised the importance of maintaining human oversight, empathy, reassurance and personalised care.

Given the small number of comments, these findings were treated as supplementary and are not considered representative of the wider sample.

Discussion

Overview

This study provides a snapshot of how GenAI was being used by fertility and reproductive-health professionals between May and July 2026, and what they were observing in relation to patient use.

The findings show that professionals were using GenAI mainly for practical tasks, while also reporting its influence on the information, questions and expectations patients brought to fertility care.

Professionals, patients and organisations are therefore engaging with GenAI at the same time. This may partly reflect how widely available and easy to access these tools have become. GenAI is also changing the relationship between clinicians and patients, becoming part of both clinical decision-making and patients' understanding of their care (Shen et al., 2026).

GenAI is already being used in fertility practice

In this study, 89.8% of respondents reported some professional use of GenAI, with almost half using it regularly. As this was a self-selected sample, the results should not be interpreted as representing fertility professionals more widely, but they do show that GenAI was already part of everyday practice for many of those who responded.

Most use was practical, including drafting correspondence and reports, preparing educational material, administration, summarising information and research. Clinical documentation, clinical decision support and patient communication were less commonly reported. This broadly reflects emerging evidence from other areas of healthcare, where GenAI is being used for administrative, information and clinical tasks (Blease et al., 2025; Garcia Sanchez et al., 2026; Blease et al., 2026).

Much of the research on AI in fertility has previously focused on specialist applications such as embryo assessment, gamete evaluation and outcome prediction (Palmer et al., 2025; Hu et al., 2026). Our findings highlight another aspect of AI adoption in fertility care: professionals using readily available, general-purpose GenAI tools as part of their everyday work.

Easy access may help explain the uptake of GenAI

This is perhaps one of the most important differences between GenAI and many of the technologies that have previously been introduced into healthcare. Tools such as ChatGPT, Gemini, Claude and Copilot are widely available and, importantly, can generally be accessed free of charge at a basic level.

A healthcare professional does not need their employer to purchase a system before they can start using one. There is no specialist equipment to buy and, when accessed through a browser, no software to install or need for integration with a clinical system. Someone can open a browser or an app and start using it immediately.

This is very different from the way most new healthcare technologies have traditionally entered practice, where funding, procurement, implementation, training and organisational approval would usually come first. With GenAI, the technology is already available to the individual.

In our study, 89.8% of respondents reported some professional use of GenAI, while 68.7% reported that their organisation was already using, planning or discussing its use. Although these figures measure different aspects of adoption, they suggest that individual use and organisational engagement are both already taking place. This is consistent with findings from other areas of healthcare.

Blease et al. (2025) found that 85% of UK GPs had not been encouraged by their employer to use GenAI and 95% had received no employer-provided training. Research involving psychotherapy professionals has also suggested that accessibility, familiarity and low cost may be contributing to the uptake of GenAI tools (Blease et al., 2026).

These findings, together with our own, suggest that professionals may be adopting GenAI independently of formal organisational implementation. Healthcare organisations may therefore need to focus less on whether GenAI should enter practice and more on how its use can be managed safely and appropriately.

Using GenAI does not mean professionals are unconcerned about it

Despite widespread professional use among respondents, concerns about GenAI remained. Only 36.7% considered its overall impact on fertility care positive, while 47.6% described it as neutral or mixed.

Benefits included better access to information, improved understanding and professional efficiency. However, concerns were widespread, particularly around incorrect or misleading information, conflict with professional advice, unrealistic expectations, anxiety and lack of regulation or oversight. Similar

concerns about hallucination, bias, privacy, security, over-reliance and clinical reliability have been identified across the wider healthcare literature (Ruan et al., 2024; Scott et al., 2025).

Professional use of GenAI should therefore not be taken to mean that professionals necessarily view its overall impact on fertility care positively.

The challenge now is how this is governed

Not all GenAI use carries the same risk. Using it to improve the wording of an email is very different from entering clinical information or using it to help make a treatment decision. The same applies to patients: asking what AMH means is very different from providing detailed fertility results and treatment history and asking what to do next.

Simply distinguishing between GenAI use and non-use is therefore no longer sufficient. The level of risk depends on how the technology is being used, the information being entered and the potential consequences of its outputs, supporting the need for a risk-based approach to use and governance with appropriate human oversight (Scott et al., 2025; FDA, 2026).

Fertility clinics therefore need clear guidance around what patient and clinical information can be entered into general-purpose GenAI tools, how outputs should be checked, and where professional responsibility remains.

Keeping the human part of fertility care

Several respondents highlighted the importance of empathy, trust and professional oversight. This is particularly relevant in fertility care, where GenAI may support information and communication but cannot replace professional judgement and human care (Hu et al., 2026). As one respondent put it:

“We are supporting humans who are trying to create humans—let’s make the human factor a priority in the process” (Respondent 16).

Strengths, limitations and future research

This study provides an early international snapshot of GenAI use in fertility care. However, the convenience sample was self-selected, predominantly from the UK and Europe, and cannot be considered representative of fertility professionals internationally. Professionals with an existing interest in AI may have been more likely to participate. Patient use was reported by professionals rather than patients themselves, and the survey was deliberately short and exploratory.

Further research should examine how patients are using GenAI in fertility care and how professional use, organisational guidance and governance develop as the technology changes.

Conclusion

GenAI is already being used by many of the fertility professionals who responded to this survey, mainly for practical everyday tasks. These professionals also reported its influence on the information, questions and expectations patients brought to fertility care.

Unlike many healthcare technologies, general-purpose GenAI is widely available and often free to access, allowing professionals and patients to use it without formal organisational implementation. This accessibility may help explain its uptake and highlights the need for fertility-specific guidance and governance.

Declarations

Ethics approval and consent to participate

The study received ethical approval through the formal research review and approval process of the European Fertility Society (EFS) Education Programme (ethics reference: EFS-ETH-2026-1044).

Consent for publication

Not applicable. No identifiable individual participant information is included in this manuscript.

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Author Contribution

J.M. contributed to the conceptualisation, methodology, investigation, data curation, formal analysis, original manuscript drafting, and review and editing.V.S. contributed to the methodology, formal analysis, preparation and presentation of results, and manuscript review and editing.K.P. contributed to the methodology, interpretation of findings, and manuscript review and editing.All authors reviewed and approved the final manuscript.

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Data Availability

Availability of data and materialsThe data supporting the findings of this study are held securely by the corresponding author and are not publicly available. Individual-level survey data will not be shared, as participants did not provide consent for their data to be made available to third parties. The study findings are presented in the manuscript.

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Supplementary Files

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- Appendix1.docx