

FERTIwise - KNOWLEDGE AND AWARENESS REGARDING FERTILITY AND FAMILY PLANNING AMONG HEALTH CARE PROFESSIONALS (HCPs) IN SWITZERLAND, AUSTRIA AND GERMANY

Authors: P. Quaas (1), M. Fischer (1), N. Chrobok-Voegtli (2), J. Geiger (1) and A. Quaas (3)

Affiliations: (1) Center for Reproductive Medicine and Gynecological Endocrinology, University Hospital Basel, Switzerland; (2) University of Basel, Switzerland; (3) Shady Grove Fertility San Diego, Solana Beach, CA, USA.

BACKGROUND: The quantity and quality of oocytes continuously declines throughout the female reproductive period and is associated with increasing rates of oocyte and embryonic aneuploidy, resulting in higher rates of infertility, pregnancy loss, and chromosomal anomalies in the offspring. Concurrently, women in developed countries delay childbearing and start family planning at higher reproductive ages. Amongst individuals of different populations and academic backgrounds, divergent beliefs and a lack of knowledge have been reported regarding topics like fertility and motherhood. Thus, appropriate counseling by health care professionals (HCPs) is crucial [1].

OBJECTIVE: This study aimed to assess the knowledge of HCPs regarding fertility and fertility preservation using the FERTIwise instrument, a German adaptation of the Fertility & Infertility Treatment Knowledge Score (FIT-KS) instrument [2].

MATERIALS AND METHODS: The FERTIwise instrument was sent to physicians of all disciplines and levels of training in Switzerland, Austria and Germany using the REDCap® survey application. Data preparation and statistical analysis was performed using EXCEL and the DATAtab online statistics calculator. ANOVA one-way factorial analysis was used for multiple comparisons of parametric data. The Chi-squared test was used to analyze non-parametric categorical data. A significance value of $p < 0.05$ was considered statistically significant.

RESULTS: 484 surveys were completed, 109 (22.5%) by ob-gyn physicians (including 43 reproductive medicine specialists) and 375 (77.5%) by physicians of other specialties. 71.9% of participants were female and 26.9% male. 70.7% of test questions were answered correctly by participants. Women answered significantly more questions correctly than men (71.8% vs. 68.9%, $p = 0.001$). Furthermore, gynecologists answered statistically significantly more questions correctly than non-gynecologists (78.2% vs. 68.5%, $p < 0.001$). Reproductive medicine specialists answered significantly more questions correctly than general gynecologists or gynecologists from other subspecialties (82.0% vs 75.8%, $p < 0.001$). Knowledge concerning fertility was significantly better in attendings compared to residents (72.1 vs. 69.4, $p = 0.005$), while Obstetrics and Gynecology department chairs achieved the lowest scores (64.9%, $p = 0.05$). 90.8% of gynecologists stated that they discuss fertility topics with their patients, compared to 42.7% of non-gynecologists ($p < 0.001$). 56.6% of female clinicians stated that they discussed the topic of fertility with their patients, compared to 46.2% of male clinicians ($p < 0.001$). In a self-assessment of knowledge concerning medically assisted reproduction on a scale of 1 to 100, the mean score was 58.4 for women and 50.3 for men ($p = 0.005$).

CONCLUSIONS: There is a significant lack of knowledge regarding fertility and fertility preservation among HCPs. More research in this field and education through specific education programs are crucial to guarantee optimal reproductive counseling of patients.

FINANCIAL SUPPORT: None.

Table 1. Correct answers concerning medically assisted reproduction in different assessment groups

assessment group	n	correct answers [total]	correct answers [%]
total	484	11299	70.7
Female HCPs	348	8252	71.8 (p=0.001)
Male HCPs	130	2959	68.9 (p=0.001)
HCPs from non-gynecology specialties	375	8486	68.5 (p<0.001)
HCPs in gynecology	109	2813	78.2 (p<0.001)
Reproductive medicine specialists	43	1163	81.9 (p<0.001)
Resident physicians	213	4883	69.4 (p=0.005)
Attending physicians	105	2738	72.1 (p=0.005)
Obstetrics and Gynecology department chairs	14	300	64.9 (p=0.05)

REFERENCES:

1. Wyndham N, Marin Figueira PG, Patrizio P. A persistent misperception: Assisted reproductive technology can reverse the "aged biological clock. Fertil Steril. 2012;97(5):1044-1047.
2. Kudesia R, Chernyak E, McAvey B. Low fertility awareness in United States reproductive-aged women and medical trainees: creation and validation of the Fertility & Infertility Treatment Knowledge Score (FIT-KS). Fertil Steril. 2017 Oct;108(4):711-717.