



# DELAYED DECISION-MAKING TO TAKE IVF PROGRAM AMONG INFERTILITY COUPLES IN DEVELOPING COUNTRIES: A SCOPING REVIEW



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**Background:** Almost 180 million people around the world experience infertility, and most of those people live in developing countries.<sup>1</sup> Nowadays, IVF services has become available in low-income countries, but the proportion of couples seeking and receiving medical care was still low.<sup>2</sup> This study aims to determine the barriers that cause delaying to take IVF program among infertility couples in developing countries.

**Method:** A scoping review was conducted using the Population-Concept-Context framework by the Joanna Briggs Institute. We searched 5 databases for published articles and citation tracking. (fig.1) The following search terms were: ("fertilization in vitro"[MeSH Terms] OR "reproductive techniques, assisted"[MeSH Terms] OR "reproductive technologies, assisted"[MeSH Terms]) AND (barriers OR obstacles OR difficulties) AND ((developing OR low-income OR low resources OR poor OR less developed) AND countr\*)

**Result:** There were 11 included articles in our scoping review. Study characteristics shown in table 1. The barriers of delaying of IVF treatment presented in figure 2.

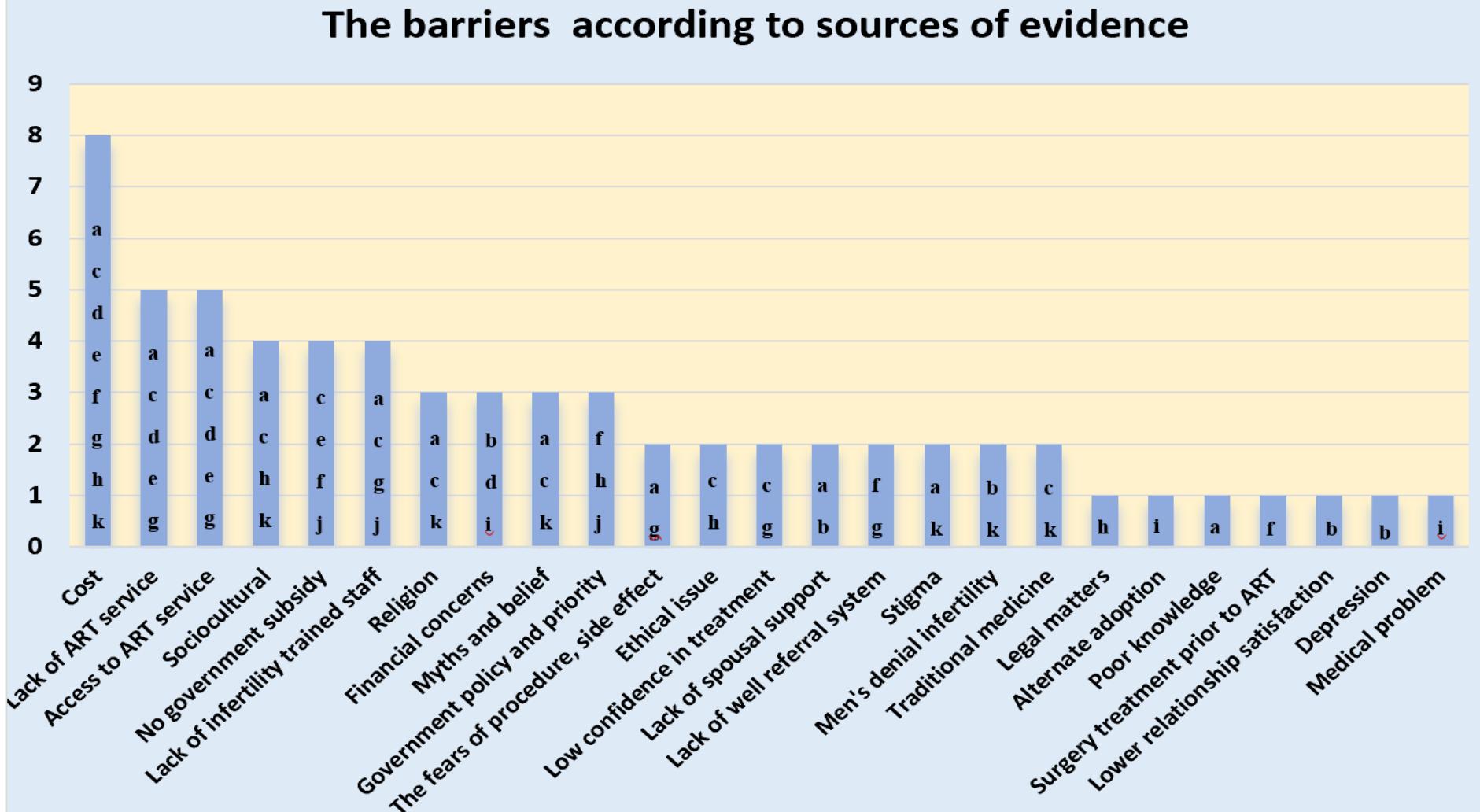


Fig. 2 The barriers of taking IVF program base on included studies

a. Akande SO, et al., b. Hiadzi and Woodward, c. Khalifa and Ahmed, d. Murage A, et al., e. Makuch and Bahamondes, f. Makuch MY, et al., g. Bennett LR, et al., h. Pashigian MJ, i. Kulkarni G, et al., j. Nahar P, k. Tremayne S

PubMed 32, Science Direct 120, EBSCO 115, Clinical Key 12, Cochrane Library 5, Snowballing 25

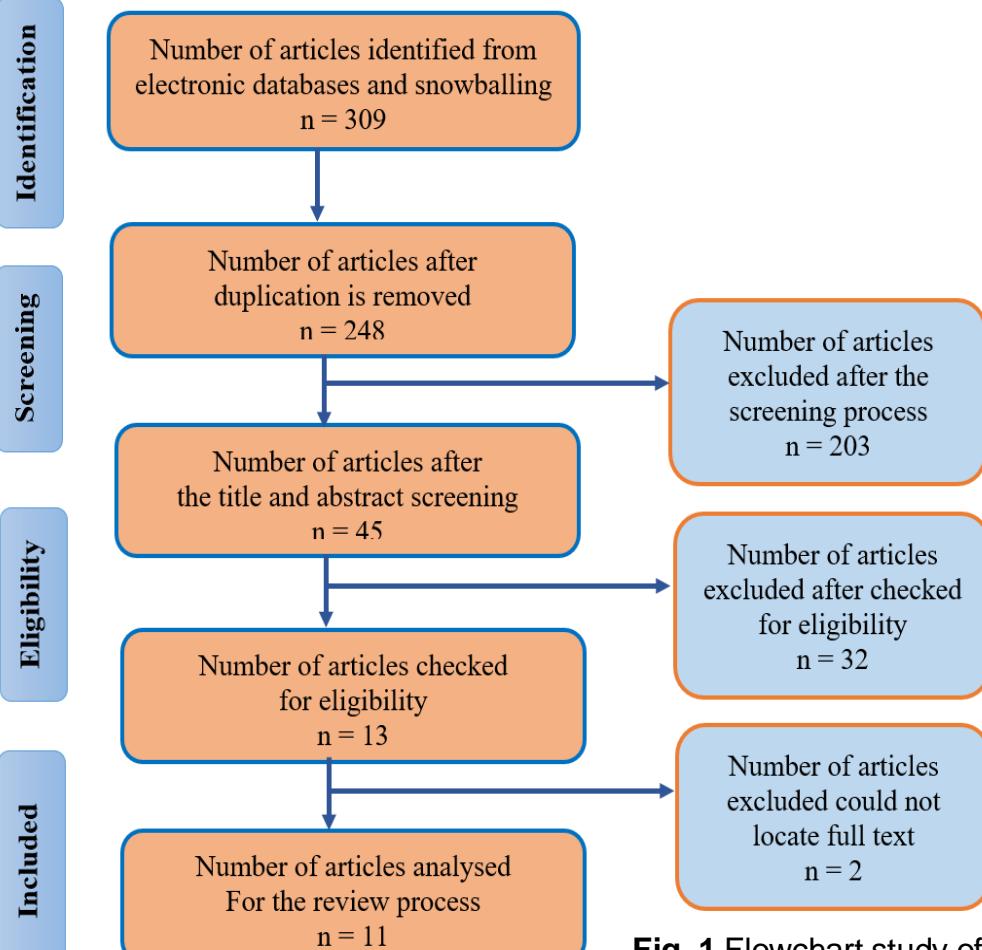


Fig. 1 Flowchart study of selection process

## Conclusion:

The high cost of IVF services is the main barrier on infertility treatment in developing countries. Thus, the affordable, acceptable and effective IVF program is very needed.

## Keywords:

IVF, in vitro fertilization, ART, assisted reproductive techniques, reproductive assisted technologies, developing countries, countries

Table 1. Study characteristics of included articles (N=11)

Characteristics	Categories	N	%
Year of publication	2010-2015	9	81.8
	2016-2020	2	18.2
Country origin	Nigeria	1	9.1
	Ghana	1	9.1
	Sudan	1	9.1
	Kenya	1	9.1
	Brazil	2	18.2
	Indonesia	1	9.1
	Vietnam	1	9.1
	India	1	9.1
	Bangladesh	1	9.1
	Iran	1	9.1
Publication type	Journal Article	7	63.6
	Monograph Article	4	36.4
Study design	Qualitative study	9	81.8
	Mixed quantitative-qualitative	1	9.1
	Retrospective study	1	9.1
Methods	Deep Interview	5	45.5
	Interview and semi-structured questionnaire	3	27.3
	Online survey	1	9.1
	Medical records review	1	9.1
Setting	Infertility Clinics/ART centres	7	63.6
	State Capital and Federal District	1	9.1
	Community	1	9.1
	Hospital	1	9.1
	Government and Non-Government	1	9.1
Sample of study	Patients	5	45.5
	Health Professionals	2	18.2
	Health authorities	1	9.1
	Patient and healthcare providers	2	18.2
	Stakeholder (GO and NGO)	1	9.1

## References

1. Omelet W, et al. Infertility and the provision of infertility medical services in developing countries. Human Reproduction Update. 2008;14(6):605-21.
2. Boivin J, et al. International estimates of infertility prevalence and treatment-seeking: Potential need and demand for infertility medical care. Human Reproduction. 2007;22(6):1506-12.

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## *Scientific Program*

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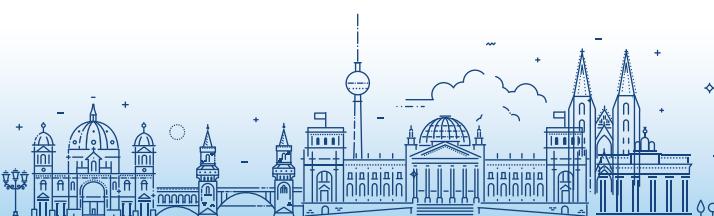


## THURSDAY, DECEMBER 2

14:30-15:30	THE BEST OF RBMO 2020-2021	HALL A
<b>Capsule</b>	The three best papers published in RBMO in 2020 are presented in this session	
<b>Chairperson</b>	<b>Bart Fauser, Netherlands</b>	
14:30-14:50	Drug-free in-vitro activation of follicles for infertility treatment in poor ovarian response patients with decreased ovarian reserve <b>Kazuhiro Kawamura, Japan</b> 	
14:50-15:10	'There is only one thing that is truly important in an IVF lab: Everything' Cairo consensus guidelines on IVF culture conditions <b>Catherine Racowsky, USA</b>	
15:10-15:30	Organoids can be established reliably from cryopreserved biopsy catheter-derived endometrial tissue of infertile women <b>Bich Ngoc Bui, Netherlands</b>	

15:30-16:20	FROM INFERTILITY TO BIRTH	HALL A
<b>Chairpersons</b>	<b>Zion Ben Rafael, Israel</b> <b>Wolfgang Henrich, Germany</b>	
15:30-15:55	Nature to clinics: Paradigm shift. Embryo-maternal signaling <b>Eytan R. Barnea, USA</b>	
15:55-16:20	Fertility, pregnancy, and perinatal outcome among parents in the fourth and fifth decade of life. Pro and contra <b>Christian Dadak, Austria</b>	

16:20-17:50	PLENARY SESSION	HALL A
<b>Capsule</b>	What are the limits of IVF?	
<b>Chairpersons</b>	<b>Bart Fauser, Netherlands</b> <b>Zion Ben Rafael, Israel</b>	
16:20-16:40	<i>This talk will provide an overview of biosensors in medicine, with an emphasis on biosensing in the intrauterine environment</i>  Biological sensors of in-utero monitoring <b>Ying Cheong, UK</b> 	
16:40-16:50	Discussion	
16:50-17:10	<i>Human pluripotent stem cells are being used to model different aspects of human development from directed differentiation to a specific organ (in organoids) to models of gastrulation (in gastruloids) and blastocyst formation (blastoids). This field is moving forward very fast but remains highly controversial. I will review the relevant scientific developments as well as touch on potential ethical and legal implications.</i>  Synthetic human entities with embryo-like features <b>Susana M. Chuva de Sousa Lopes, Netherlands</b> 	



17:10-17:20	Discussion
17:20-17:40	<p><i>Recent efforts of understanding development of human embryos past implantation</i></p> <p>Single cell analyses of human embryo development</p> <p><b>Magdalena Zernicka-Goetz, UK</b> </p>
17:40-17:50	Discussion

17:50-18:30	<b>OPENING SESSION</b>	<b>HALL A</b>
<b>Chairpersons</b>	<p><b>Zion Ben Rafael, Israel</b></p> <p><b>Bart Fauser, Netherlands</b></p> <p><b>Wolfgang Henrich, Germany</b></p>	
17:50-18:20	<p>Nobel prize laureate Robert G. Edwards annual lecture</p> <p><i>Recent efforts and challenges for growing mammalian embryos ex utero</i></p> <p>Advanced artificial mammalian embryogenesis ex utero</p> <p><b>Jacob Hanna, Israel</b></p>	
18:20-18:30	Best Abstract Awards	
<b>18:30</b>	<b>NETWORKING RECEPTION</b>	

## LASER COURSE

14:00-16:45	<b>LASER COURSE</b> <i>See page 84, 85</i>	<b>HALL B</b>
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INFERTILITY/ART/IVF

FRIDAY, DECEMBER 3

08:30-10:00	THE FUTURE OF IVF I	HALL A
<b>Chairpersons</b>	<b>Zion Ben Rafael, Israel</b> <b>Joyce Harper, UK</b>	
<b>Capsule</b>	Expanded genetic screening: The more we can, the more we spend - what is the limit?	
08:30-09:00	<b>Debate: Preparation: Should we be using expanded genetic screening in all patients?</b>	
08:30	Yes: <b>Rita Vassena, Spain</b>	
08:40	No: <b>Tessa Homfray, UK</b>	
08:50	Discussion	
<b>Capsule</b>	Stimulation remains a basic step in IVF, can we do better?	
09:00-09:30	<b>Debate: Stimulation: We should not use more than 150 units in most patients</b>	
09:00	Pro: <b>Frank Broekmans, Netherlands</b>	
09:10	Con: <b>Norbert Gleicher, USA</b> 	
09:20	Discussion	
<b>Capsule</b>	Automation in IVF can improve the lab work and maybe decrease the cost	
09:30-10:00	<b>Debate: Automation in IVF</b>	
09:30	Automation in embryo culture: <b>Laura Rienzi, Italy</b>	
09:40	Automation in embryo freezing: <b>Amir Arav, Israel</b>	
09:50	Discussion	

10:00-10:20 COFFEE BREAK, EXHIBITION, AND POSTER VIEWING

EXHIBITION AREA

10:20-11:50	FUTURE OF IVF II	HALL A
<b>Chairpersons</b>	<b>Zion Ben Rafael, Israel</b> <b>Frank Broekmans, Netherlands</b>	
<b>Capsule</b>	Does biology limit PGT-A's ability to provide accurate information?	
10:20-10:40	Why the PGT-A hypothesis for biological reasons, simply, cannot work <b>Norbert Gleicher, USA</b>	
<b>Capsule</b>	The debate goes on, is PGT-A increase or decrease success?	
10:40-11:15	<b>HFEA recently downgraded PGT-A from "Amber" to "Red", suggesting it has no proof. Are we all in agreement?</b> <b>Debate: PGT-A – more harm than good?</b>	
10:40	Yes: <b>Sebastiaan Mastenbroek, Netherlands</b>	
10:50	No: <b>Tessa Homfray, UK</b>	
11:00	Discussion	
<b>Capsule</b>	HFEA claims that up to 74% of UK patients received some sort of add-ons - none of which received the HFEA "go ahead" light. Should we keep using these costly unproven methods?	
11:15-11:50	<b>Debate: Standard IVF vs add-on IVF – futile expense? What if the patient is willing to pay for add-ons?</b>	
11:15	Pro: <b>Scott Nelson, UK</b> 	
11:25	Con: <b>Joyce Harper, UK</b>	
11:35	Discussion	



**11:50-12:10 BREAK**

12:10-13:10	<b>INDUSTRY SUPPORTED SESSION</b> <i>See page 86</i>	<b>HALL A</b>
13:10-13:40		<b>HALL A</b>
13:10-13:40	The new approaches with oral antagonist and new algorithm <b>Jacques Donnez, Belgium</b>	

**13:40-14:30 LUNCH BREAK, EXHIBITION, AND POSTER VIEWING**

**EXHIBITION AREA**

14:30-16:30	<b>SURGICAL TREATMENT</b>	<b>HALL A</b>
<b>Capsule</b>	Controversial aspects of surgical procedures associated with IVF	
<b>Chairperson</b>	<b>Joop Laven, Netherlands</b>	
14:30-14:55	Update on Müllerian duct anomalies: Modern surgical approaches <b>Sara Brucker, Germany</b>	
14:55-15:40	<u>Debate: Cesarean scar defect: When to correct, by which method?</u> 14:55 Pro hysteroscopy: <b>Eleonora Boschetti, Germany</b> 15:10 Pro laparoscopy: <b>Olivier Donnez, Belgium</b> 15:25 Discussion	
15:40-16:05	Fibroids must be treated prior to IVF? <b>Michelle Nisolle, Belgium</b> 	
16:05-16:30	End of endometrial scratching? <b>Ben Mol, Australia</b> 	

**16:30-16:50 COFFEE BREAK, EXHIBITION, AND POSTER VIEWING**

**EXHIBITION AREA**

16:50-18:20	<b>ISMAAR SESSION</b>	<b>HALL A</b>
<b>Capsule</b>	Almost every novelty in IVF is met with skepticism	
<b>Chairperson</b>	<b>Geeta Nargund, UK</b> 	
16:50-17:05	Natural and mild IVF - when and how to do it? <b>Geeta Nargund, UK</b> 	
17:05-17:20	The microbiome - does it really matter to ART? <b>Joop Laven, Netherlands</b>	
17:20-17:50	<u>Debate: Duo-stim advantages and disadvantages</u> 17:20 Pro: <b>Alberto Vaiarelli, Italy</b> 17:30 Con: <b>Bart Fauser, Netherlands</b> 17:40 Discussion	
17:50-18:20	<u>Debate: Freeze only strategy for all?</u> 17:50 Con: <b>Ben Mol, Australia</b>  18:00 Pro: <b>Human Fatemi, United Arab Emirates</b> 18:20 Discussion	



**INFERTILITY/ART/IVF**

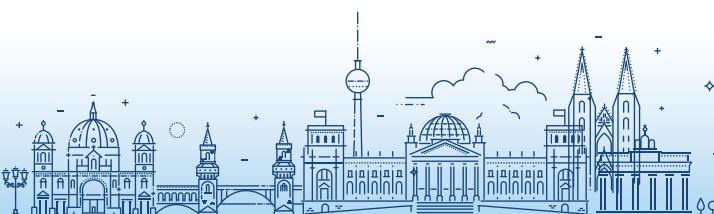
**SATURDAY, DECEMBER 4**

08:30-10:00	PCOS	HALL A
<b>Capsule</b>	The definition of PCO/PCOS has changed several times during the last 4 decades. Should we change it again? Despite our better understanding, the treatment remains a challenge	
<b>Chairpersons</b>	<b>Bart Fauser, Netherlands</b> <b>Ben Mol, Australia</b> 	
08:30-08:55	PCOS: A brain disease? <b>Joop Laven, Netherlands</b>	
08:55-09:20	Defining the polycystic ovary: AMH or ultrasound? <b>Antonio La Marca, Italy</b>	
09:20-09:40	Does Cochrane reviews show any role for metformin in the management of PCOS? <b>Thomas Tang, UK</b>	
09:40-10:00	The hypo-androgenic PCOS-like phenotype at advanced ages, one of the most frequent causes of repeat IVF failure <b>Norbert Gleicher, USA</b>	

**10:00-10:20 COFFEE BREAK, EXHIBITION, AND POSTER VIEWING**

**EXHIBITION AREA**

10:20-11:50	CONTROVERSIAL ASPECTS ROUND ADD-ONS TO IVF, LABORATORIES AND CLINICAL PROCEDURES	HALL A
<b>Chairpersons</b>	<b>Laura Rienzi, Italy</b> <b>Zion Ben Rafael, Israel</b> <b>Bart Fauser, Netherlands</b>	
<b>Discussants</b>	<b>Catherine Racowsky, France</b> <b>Norbert Gleicher, USA</b> <b>Antonio La Marca, Italy</b> <b>Joop Laven, Netherlands</b> <b>Verena Nordhoff, Germany</b>	
Lab procedures	<ul style="list-style-type: none"> <li>Perfect timings in the embryology lab: When to denude, when to fertilize, when to culture?</li> <li>One or several culture media - which?</li> <li>Noninvasive embryo selection</li> <li>Genetic testing for donors</li> </ul>	
Clinical procedures	<ul style="list-style-type: none"> <li>RIF - is there a valid definition?</li> <li>Fresh versus frozen: What to prepare?</li> <li>Optimal luteal support?</li> <li>Aromatase inhibitors - when to use?</li> </ul>	



## 11:50-12:00 BREAK

12:00-13:30	ENDOMETRIOSIS ADENOMYOSIS	HALL A
<b>Capsule</b>	The concept that uterine adenomyosis and pelvic endometriosis as well as endometriotic lesions at distant sites of the body share a common pathophysiology with endometriosis was promoted almost a decade ago. What is the current thinking?	
<b>Chairpersons</b>	<b>Zion Ben Rafael, Israel</b> <b>Olivier Donnez, Belgium</b>	
12:00-12:20	Adenomyosis and deep endometriosis: Two linked diseases? <b>Jacques Donnez, Belgium</b>	
12:20-12:40	Uterine adenomyosis: Can surgery help? <b>Leila Adamyan, Russia</b> 	
12:40-13:10	<b>Debate: The endometrioma and the ovarian reserve: The challenge of the surgeon</b>	
12:40	To operate first: <b>Jacques Donnez, Belgium</b>	
12:50	ART before operation: <b>Edgardo Somigliana, Italy</b>	
13:00	Discussion	
13:10-13:30	Medical targets in endometriosis <b>Ludwig Kiesel, Germany</b> 	

## 13:30-14:20 LUNCH BREAK, EXHIBITION, AND POSTER VIEWING

EXHIBITION AREA

14:20-15:50	HORMONAL AND MORAL ASPECTS OF HUMAN FERTILITY	HALL A
<b>Chairperson</b>	<b>Edgardo Somigliana, Italy</b>	
14:20-14:40	The luteal phase in ART: Are we gaining ground? <b>Ben Mol, Australia</b> 	
14:40-15:05	Women's biological clock, the molecular mechanisms <b>Jennifer Gruhn, Denmark</b>	
15:05-15:25	40 years of experience with the German IVF registry <b>Klaus Bühler, Germany</b>	
15:25-15:50	Does social egg freezing increase women's emancipation? <b>Guido Pennings, Belgium</b>	

## 15:50-16:00 COFFEE BREAK, EXHIBITION, AND POSTER VIEWING

EXHIBITION AREA

16:00-17:00	PREGNANCY LOSS	HALL A
<b>Capsule</b>	Can we prevent pregnancy loss?	
<b>Chairperson</b>	<b>Matthias Korell, Germany</b>	
16:00-16:20	Prevention of pregnancy loss <b>Paul Piette, Belgium</b>	
16:20-16:40	Recurrent pregnancy loss (RPL) - what are the solutions? <b>Bettina Toth, Austria</b> 	
16:40-17:00	Fertility surgery, myoma <b>Matthias Korell, Germany</b>	



**GYNECOLOGY**

**FRIDAY, DECEMBER 3**

08:30-10:00	HRT AND CANCER	HALL B
<b>Capsule</b>	Demystification of the relationship between HRT and cancer	
<b>Chairpersons</b>	<b>Santiago Palacios, Spain</b> <b>Sven O. Skouby, Denmark</b>	
08:30-09:00	Can HRT and treatment for menopause be individualized to reduce the incidence of breast cancer? <b>Mark Brincat, Malta</b>	
09:00-09:30	Breast cancer in special populations <b>Herjan Coelingh Bennink, Netherlands</b>	
09:30-10:00	HRT in cancer survivors <b>Pierluigi Benedetti Panici, Italy</b>	

**10:00-10:20 COFFEE BREAK, EXHIBITION, AND POSTER VIEWING**

**EXHIBITION AREA**

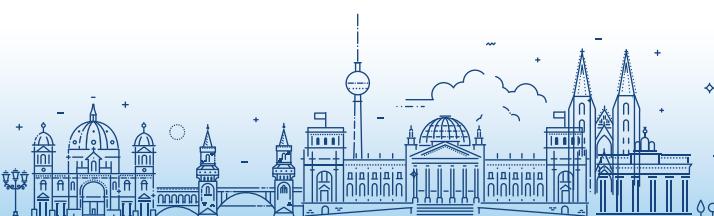
10:20-11:50	INDUSTRY SUPPORTED SESSION <i>See page 86</i>	HALL B
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**11:50-12:10 BREAK**

12:10-13:40	VULVAR AND VAGINA	HALL B
<b>Capsule</b>	Longevity accentuates the need for better strategies for vulvar and vaginal atrophy	
<b>Chairpersons</b>	<b>Nick Panay, UK</b> <b>Sven O. Skouby, Denmark</b>	
12:10-12:30	Advances in anatomy and physiology of the vagina based on new treatments <b>Santiago Palacios, Spain</b>	
12:30-12:50	Vulvar pains and co-morbidities: Data from 1183 cases <b>Alessandra Graziottin, Italy</b>	
<b>Capsule</b>	Postmenopausal atrophy of the lower genital and urinary tract is distressing and requires new ideas to control symptoms	
12:50-13:20	<b>Debate: Is laser effective for treatment of Stress Urinary Incontinence</b>	
12:50	Yes: <b>Zdenko Vizintin, Slovenia</b>	
13:00	No: <b>Tim Hillard, UK</b>	
13:10	Discussion	
13:20-13:40	Translational medicine in reproductive ageing <b>Sven O. Skouby, Denmark</b>	

**13:40-14:30 LUNCH BREAK, EXHIBITION, AND POSTER VIEWING**

**EXHIBITION AREA**



14:30-16:30	<b>PRESCRIBING HRT</b>	<b>HALL B</b>
<b>Capsule</b>	Balancing the benefits/risks of HRT will allow larger populations to enjoy HRT	
<b>Chairpersons</b>	<b>Mark Brincat, Malta</b> <b>Alessandra Graziottin, Italy</b>	
<b>Capsule</b>	The controversy surrounding androgen addition to HRT is ongoing	
14:30-15:00	Should androgens be routinely offered to optimize quality of life in menopause? <b>Alessandra Graziottin, Italy</b>	
15:00-15:30	Update on practical prescribing of new hormone therapy regimens <b>Nick Panay, UK</b>	
15:30-16:00	New strategies in the prevention of fragility fractures <b>Santiago Palacios, Spain</b>	
16:00-16:30	Use of HRT for cardiovascular prevention <b>Johannes Ott, Austria</b>	

#### 16:30-16:50 COFFEE BREAK, EXHIBITION, AND POSTER VIEWING

**EXHIBITION AREA**

16:50-18:20	<b>GLOBAL HEALTH INITIATIVES IN GYNECOLOGICAL MALIGNANCIES</b>	<b>HALL B</b>
<b>Capsule</b>	In 90 minutes around the world	
<b>Chairpersons</b>	<b>Sara Nasser, Germany</b> <b>Jalid Sehouli, Germany</b>	
16:50-16:55	Greetings and Introduction	
16:55-17:05	A wake-up call: Gynecological oncology on the global health agenda <b>Andreas Ullrich, Switzerland</b>	
17:05-17:15	20 years of gynecological capacity building in Cameroon through partnership <b>Patrick Petignant, Switzerland</b>	
17:15-17:20	Q & A	
17:20-17:30	Digital health as a driver for global women's health: The iSTARC and PARSGO vision <b>Sara Nasser, Germany</b>	
17:30-17:40	Patient advocacy groups in the MENA region <b>Joelle Abou Khalil, Lebanon-Sweden</b> 	
17:40-17:50	Q & A	
17:50-18:00	Towards a global women's health taskforce <b>Jalid Sehouli, Germany</b>	
18:00-18:20	Panel Discussion: <b>Namory Keita, Guinea</b> <b>Basel Refky, Egypt</b> <b>Hind ElMalik, Qatar</b> 	



## GYNECOLOGY

### SATURDAY, DECEMBER 4

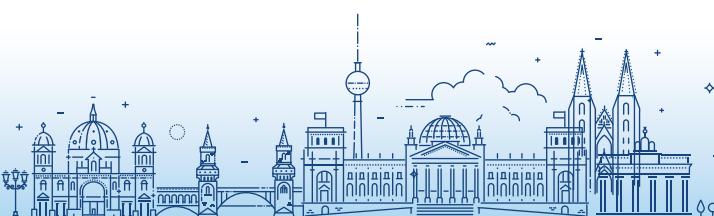
08:30-10:00	ENDOMETRIAL CANCER	HALL B
<b>Capsule</b>	News, options and current barriers in the management of endometrial cancer	
<b>Chairpersons</b>	<b>Robert Armbrust, Germany</b> <b>Jalid Sehouli, Germany</b>	
08:30-09:00	Clinical implications of molecular diagnostics in endometrial cancer <b>Elena Braicu, Germany</b> 	
09:00-09:30	Personalized surgical approach in endometrial cancer <b>Robert Armbrust, Germany</b>	
09:30-10:00	New options in medical therapy of advanced and relapsed endometrial cancer <b>Jalid Sehouli, Germany</b>	

### 10:00-10:20 COFFEE BREAK, EXHIBITION, AND POSTER VIEWING

EXHIBITION AREA

10:20-11:50	WOMEN'S HEALTH AND WEALTH A PREIS SCHOOL ACADEMY SESSION	HALL B
<b>Chairpersons</b>	<b>Gian Carlo Di Renzo, Italy</b> <b>Nick Panay, UK</b>	
10:20-10:25	Welcome <b>Gian Carlo Di Renzo, Italy</b>	
10:25-10:35	The Welfare of Women (WoW) global health program endorsed by FIGO <b>Gian Carlo Di Renzo, Italy</b>	
10:35-10:50	Will body-identical MHT become the first choice for menopausal hormone therapy? <b>Vanadin Seifert-Klauss, Germany</b>	
10:50-11:05	Testosterone or not testosterone in menopause: That's the question! <b>Nick Panay, UK</b>	
11:05-11:20	Which progestogen to optimize breast and endometrial safety in MHT? <b>Ewald Boschitsch, Austria</b>	
11:20-11:50	Q & A	

### 11:50-12:00 BREAK



12:00-13:30	IN SEARCH OF NEW PERSPECTIVES: POI MAINLY DRIVEN BY GENETICS	HALL B
<b>Capsule</b>	Can better understanding lead to better solutions?	
<b>Chairpersons</b>	<b>Bart Fauser, Netherlands</b> <b>Nick Panay, UK</b>	
12:00-12:25	Is the ovary the mirror of longevity? <b>Micheline Misrahi, France</b>	
12:25-12:45	Genetic architecture of reproductive ageing <b>Felix Day, UK</b>	
12:45-13:05	FMR1 and the genetic control of folliculogenesis <b>Julia Rehnitz, Germany</b> 	
13:05-13:30	Endo-ERN and POI <b>Luca Persani, Italy</b> 	

### 13:30-14:20 LUNCH BREAK, EXHIBITION, AND POSTER VIEWING

EXHIBITION AREA

14:20-15:50	SLS: THE SOCIETY OF LAPAROENDOSCOPIC SURGEONS	HALL B
<b>Capsule</b>	Surgical management of endometriosis depends on thorough understanding of the pathophysiology and anatomy	
<b>Chairpersons</b>	<b>Jessica Ybanez Morano, USA</b> <b>Mona Orady, USA</b> 	
14:20-14:50	VNOTES: Vaginal Natural Orifice Transluminal Endoscopic Surgery <b>Jessica Ybanez Morano, USA</b>	
14:50-15:20	Pearls in endometrioma management <b>Mona Orady, USA</b> 	
15:20-15:50	Robotics: A systematic approach to deep infiltrative endometriosis <b>Thiers Soares Raymundo, Brazil</b> 	

### 15:50-16:00 COFFEE BREAK, EXHIBITION, AND POSTER VIEWING

16:00-17:00	INDUSTRY SUPPORTED SESSION <i>See page 87</i>	HALL B
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## FETOMATERNAL MEDICINE

### FRIDAY, DECEMBER 3

08:30-10:00	COVID 19	HALL C
<b>Capsule</b>	In the midst of this incredible pandemic, can we already draw initial conclusions?	
<b>Chairpersons</b>	<b>Gian Carlo Di Renzo, Italy</b> <b>Micheline Misrahi, France</b>	
08:30-08:45	Collateral damage of the COVID pandemic on pregnancy <b>Asma Khalil, UK</b> 	
08:45-09:05	Vertical SARS-COV2 transmission support fetal/newborn resistance to infection <b>Eytan R. Barnea, USA</b>	
09:05-09:20	Effect of lockdown on premature birth <b>Ben Mol, Australia</b> 	
09:20-09:40	Effect of COVID 19 on male fertility <b>Christopher Barratt, UK</b> 	
09:40-10:00	Update on COVID-19 vaccination <b>Leif-Erik Sander, Germany</b>	

### 10:00-10:20 COFFEE BREAK, EXHIBITION, AND POSTER VIEWING

### EXHIBITION AREA

10:20-11:50	PRENATAL DIAGNOSIS	HALL C
<b>Capsule</b>	Non-invasive and invasive prenatal diagnosis for all or by indication?	
<b>Chairpersons</b>	<b>Yariv Yoge, Israel</b> <b>Wolfgang Holzgreve, Germany</b>	
10:20-11:20	<b>cfDNA diagnostic or screening?</b>	
10:20	NIPD diagnostic indications: <b>Lyn Chitty, UK</b> 	
10:40	Screening for aneuploidies and common genetic aberrations: <b>Caterina Bilardo, Netherlands</b> 	
11:00	Discussion	
11:20-11:50	Non-invasive prenatal testing (NIPT) - ethical and legal issues, proper counseling is the key <b>Wolfgang Holzgreve, Germany</b>	

### 11:50-12:10 SHORT BREAK

12:10-13:40	GESTATIONAL DIABETES MELLITUS (GDM)	HALL C
<b>Capsule</b>	The clinical definition and management of this common complication of pregnancy , remain controversial	
<b>Chairperson</b>	<b>Gerard Visser, Netherlands</b>	
12:10-12:25	How to define well glycemic control? <b>Yariv Yoge, Israel</b>	
12:25-12:55	<b>Debate: Induction of labor for women with diabetes for all women at 38 weeks?</b>	
12:25	Yes: <b>Yariv Yoge, Israel</b>	
12:35	No: <b>Ute Schäfer-Graf, Germany</b>	
12:45	Discussion	
12:55-13:10	What is the best pharmacological therapy for GDM? (metformin\glyburide\insulin?) <b>Gerard Visser, Netherlands</b>	



13:10-13:40	<b>Debate: Should obese women be advised to lose weight in pregnancy?</b>
13:10	Yes: <b>Yariv Yoge, Israel</b>
13:20	No: <b>Alexander Weichert, Germany</b>
13:30	Discussion

## 13:40-14:30 LUNCH BREAK, EXHIBITION, AND POSTER VIEWING

EXHIBITION AREA

14:30-16:30	ROUND TABLE DISCUSSION ON PRETERM LABOUR	HALL C
<b>Capsule</b>	Audience expert discussion of burning issues in perinatology	
<b>Chairpersons</b>	<b>Wolfgang Henrich, Germany</b> <b>Yariv Yoge, Israel</b>	
<b>Discussants</b>	<b>Diogo Ayres-de-Campos, Portugal</b> <b>Ute Schäfer-Graf, Germany</b> <b>Gerard Visser, Netherlands</b>	
<ol style="list-style-type: none"> <li>1. First trimester embryosonography before or after NIPT?</li> <li>2. Detailed second trimester expert screening for everybody?</li> <li>3. Induction of labor at 39 completed weeks for every pregnant woman?</li> <li>4. How to induce women after previous C-section?</li> <li>5. When and how to deliver twins?</li> <li>6. Cervical length without or combined with biomarkers to predict prematurity</li> <li>7. Is hospitalization necessary after preterm rupture of membrane?</li> <li>8. How to use or combine progesterone, pessary and cerclage in the prevention of PTB?</li> <li>9. How to manage adnexal masses in pregnancy?</li> <li>10. What is the best technique to close the uterotomy during C-section?</li> </ol>		

## 16:30-16:50 COFFEE BREAK, EXHIBITION, AND POSTER VIEWING

EXHIBITION AREA

16:50-18:20	PERINATAL CHALLENGES	HALL C
<b>Capsule</b>	Hot controversies in perinatology	
<b>Chairpersons</b>	<b>Wolfgang Henrich, Germany</b> <b>Diogo Ayres-de-Campos, Portugal</b>	
16:50-17:05	The effect of antibiotics and environmental toxicants on placenta function and fetal growth <b>Gian Carlo Di Renzo, Italy</b>	
17:05-17:20	Is there a metabolic syndrome in pregnancy? <b>Yariv Yoge, Israel</b>	
17:20-17:35	Screening of HPV: Options and limits <b>Andreas Kaufmann, Germany</b>	
17:35-17:50	The role of secondary prevention in CMV - Valaciclovir, hyperimmune immunoglobulins <b>Max Hackelöer, Germany</b>	
17:50-18:05	Fetal-neonatal Rh disease eradication is still far to be completed in the world <b>Gian Carlo Di Renzo, Italy</b>	
18:05-18:20	Discussion	



## FETOMATERNAL MEDICINE

### SATURDAY, DECEMBER 4

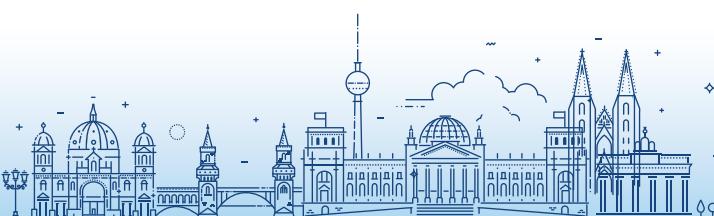
08:30-10:00	ULTRASOUND IN PREGNANCY	HALL C
<b>Capsule</b>	High resolution ultrasound has become the leading tool in gestation and postpartum care. What are the limits?	
<b>Chairpersons</b>	<b>Wolfgang Henrich, Germany</b> <b>Larry Hinkson, Germany</b>	
08:30-08:55	1 <sup>st</sup> trimester ultrasound screening <b>Rabih Chaoui, Germany</b> 	
08:55-09:15	2 <sup>nd</sup> trimester ultrasound screening <b>Stuart Campbell, UK</b> 	
09:15-09:35	Ultrasound in the delivery room <b>Tullio Ghi, Italy</b>	
09:35-10:00	Ultrasound in the postpartum period <b>Wolfgang Henrich, Germany</b>	

### 10:00-10:20 COFFEE BREAK, EXHIBITION, AND POSTER VIEWING

EXHIBITION AREA

10:20-11:50	PRE-ECLAMPSIA TOXEMIA (PET) AND INTRAUTERINE GROWTH RETARDATION (IUGR)	HALL C
<b>Capsule</b>	Can we predict and prevent pre-eclampsia toxemia (PET)?	
<b>Chairperson</b>	<b>Ute Schäfer-Graf, Germany</b>	
10:20-10:50	Value of preeclampsia screening: Do we need angiogenic factor? <b>Asma Khalil, UK</b> 	
10:50-11:20	Correlation between placental weight and angiogenic marker in women with pre-eclampsia and IUGR <b>Lisa Dröge, Germany</b>	
11:20-11:50	The impact of sFlt/PIGF ratio on the prediction and management of preeclampsia <b>Luisa Pinto, Portugal</b>	

### 11:50-12:00 SHORT BREAK



12:00-13:30	LABOUR AND DELIVERY	HALL C
<b>Capsule</b>	All aspects for management during labor and delivery should be researched with adequately powered and designed to provide evidence-based guidance	
<b>Chairpersons</b>	<b>Asma Khalil, UK</b>  <b>Larry Hinkson, Germany</b>	
12:00-12:30	Operative vaginal delivery should be forgotten? <b>Gerard Visser, Netherlands</b>	
12:30-13:00	Rotational forceps in the second stage of labour under ultrasound guidance <b>Larry Hinkson, Germany</b>	
13:00-13:30	Is peripartum cardiomyopathy an autoimmune disease? <b>Norbert Gleicher, USA</b>	

#### 13:30-14:20 LUNCH BREAK, EXHIBITION, AND POSTER VIEWING

EXHIBITION AREA

14:20-15:50	INTRAPARTUM CARE (PART I)	HALL C
<b>Capsule</b>	Women should have the opportunity to make informed decisions about their delivery. Physicians ought to be knowledgeable about the new subtleties of the various techniques	
<b>Chairpersons</b>	<b>Gerard Visser, Netherlands</b> <b>Diogo Ayres-de-Campos, Portugal</b>	
14:20-14:45	ST analysis: A false hope? <b>Diogo Ayres-de-Campos, Portugal</b>	
14:45-15:05	Fetal arrhythmias <b>Christoph Berg, Germany</b>	
15:05-15:30	Ultrasound in labor ward <b>Larry Hinkson, Germany</b>	
15:30-15:50	US external version in breech presentation <b>Larry Hinkson, Germany</b>	

#### 15:50-16:00 COFFEE BREAK, EXHIBITION, AND POSTER VIEWING

EXHIBITION AREA

16:00-17:00	INTRAPARTUM CARE (PART II)	HALL C
<b>Capsule</b>	Women should have the opportunity to make informed decisions about their delivery. Physicians ought to be knowledgeable about the new subtleties of the various techniques	
<b>Chairpersons</b>	<b>Christoph Berg, Germany</b> <b>Larry Hinkson, Germany</b>	
16:00-16:20	Can arrested labor be predicted by early labor ultrasound? <b>Elvira Di Pasquo, Italy</b>	
16:20-16:40	Does intrapartum cardiotocography allow full maternal mobility? <b>Catarina Reis de Carvalho, Portugal</b>	
16:40-17:00	Do we need to use oxytocin in spontaneous labor? <b>Diogo Ayres-de-Campos, Portugal</b>	

