IFFS-WHO Webinar: COVID-19 Impact on Access to Fertility Services

27 July 2020
About the IFFS

• 1951
• Federation of Fertility Societies from over 65 countries + individual members
• We promote and develop educational activities on Reproductive Health
• NSA in official relations with WHO

MISSION
“To stimulate research, disseminate educational information, and promote the superior clinical care of patients in all aspects of reproductive and fertility medicine.”

VISION
“All women and men have access to quality fertility and reproductive health care”
Dr. James Kiarie

Head, Contraception and Fertility Care Unit
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Geneva, Switzerland
WHO Infertility Guidance and Policy Portal In Context of COVID 19

Dr. James Kiarie
Head, Contraception and Fertility Care Unit, WHO

Twitter @HRPresearch
Outline

- WHO guidelines on essential services during COVID.

- Data Platforms and Research Opportunities.

- WHO SRMNCAH Policy Survey and Portal.
WHO COVID-19 Guidance

- Numerous guidance.
- Maintaining essential services Guidance.
PART 2: Life course and disease considerations
Part 1: Operational strategies for maintaining essential health services

Context considerations

- Adjust governance and coordination mechanisms to support timely action
- Prioritize essential health services and adapt to changing contexts and needs
- Optimize service delivery settings and platforms
- Establish safe and effective patient flow at all levels
- Rapidly optimize health workforce capacity
- Maintain the availability of essential medications, equipment and supplies
- Fund public health and remove financial barriers to access
- Strengthen communication to support the appropriate use of essential services
- Strengthen the monitoring of essential health services
- Use digital platforms to support essential health service delivery
PART 2: Life course and disease considerations

Life-course stages
- Maternal and newborn health
- Child and adolescent health
- Older people
- Sexual and reproductive health services

Nutrition, NCD and mental health
- Nutrition
- Noncommunicable diseases
- Mental, neurological and substance use disorders

Communicable diseases
- HIV, viral hepatitis and STI
- Tuberculosis
- Immunization
- Neglected tropical diseases and Malaria
2.1.4 Sexual and reproductive health services: Back Ground

- Universal access to SRH services and reproductive rights

- Aligned with Programme of Action of ICPD, Beijing Platform for Action SDG targets (3.7 and 5.6)

- Draws from Lessons from the Ebola and Zika virus disease outbreaks

- Impacts on: unintended pregnancies, unsafe abortions, vulnerable populations and access to essential and emergency care

- Prioritizing digital health services, self-care interventions, task sharing and outreach
Recommendation Areas and Format

<table>
<thead>
<tr>
<th>Programme activities</th>
<th>Modifications for safe delivery of services</th>
<th>Transition towards restoration of activities</th>
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<tr>
<td>1. Access to contraception</td>
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<td>2. Fertility Care</td>
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<td>3. Safe abortion to the full extent of the law and post abortion care</td>
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<td>4. Sexual Health</td>
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<td>5. Cervical cancer screening and prevention</td>
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<td>6. Addressing violence against women &amp; girls, GBV and sexual violence</td>
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- Prioritize fertility care for patients with limited ovarian reserve
- Consider use of cryopreservation where fertility treatments have been interrupted.
Global Registry for Fertility Outcomes and COVID-19

- Core CRF - clinical data
- Multisystem inflammatory syndrome CRF
- Pregnancy specific CRF
  - Clinical presentation and disease course
  - Disease Outcomes
  - Pregnancy outcomes
- To include IVF

https://www.who.int/teams/health-care-readiness-clinical-unit/covid-19/data-platform
Prospective maternal cohort on pregnancy and neonatal outcomes by exposure to COVID

Adverse pregnancy and neonatal outcomes

Mother-to-child transmission

Viral presence in body fluids, and breastmilk?

Clinical course

- **RT-PCR test**
  - **RT-PCR: negative**
    - **IgG/IgM test**
      - **IgG/IgM test: positive**
        - **Exclusion**
      - **IgG/IgM test: negative**
        - **Enrollment in Unexposed group**
  - **RT-PCR: positive**
    - **Enrollment in Exposed group**

*No IgG/IgM test available: save serology samples for future analysis*
Sexual, Reproductive, Maternal, Newborn, Child and Adolescent Health Policy Survey

The 2018-2019 Global SRMNCAH Policy Survey:

- Expands on the prior surveys by combining MNCAH and reproductive health policy tracer indicators

- Aligns with the Sustainable Development Goals and the Global Strategy for Women, Children and Adolescent health (2016-2030)

- For the first time collected source documents.
Sexual, Reproductive, Maternal, Newborn, Child and Adolescent Health Policy Survey

- Online survey on policies, laws, and guidelines.
- Uploaded documents included national policies, guidelines, legislation and reports
- Source documents used to validate accuracy of responses
- 150 Member States completed the survey and uploaded over 6,500 source documents in their original languages.
Sexual, Reproductive, Health and Rights Policy Portal

Contains SRHR results from the policy survey
Infertility in the SRH policy portal

Infertility included alongside other SRHR thematic areas
Infertility policy portal

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<tr>
<th>Indicators</th>
<th>Questionnaire used on the data collection</th>
<th>Indicators by country</th>
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<td>Documents</td>
<td>Documents and policies</td>
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**Reproductive health**

**Infertility**

- Assisted Reproductive Technology or IVF services is available to heterosexual couples in recognized relationships
- Same-sex/single parenting practice is regulated
- Policies and legislation available on infertility management
- Foetal reduction practice is regulated
- Financial subsidy for Assisted Fertility Services (public)
Policy Indicators (Tracers)

Presence of:

- Policies and legislation on infertility management
  - Policies and legislation on ART
    • Regulation of fetal reduction practices
- Financial subsidy for infertility services (Public)
- Access to ART or IVF services
  - Heterosexual couples in married, recognized or unrecognized relationships
  - Same sex couples in recognised or unrecognized relationships
- Regulation of same sex or single parenting
Highlights of key findings

The survey contained a set of questions related to infertility policies and regulations.

**Inclusion of infertility in national policies**

- 73% of 155 countries include infertility/fertility care as a component of national policies on reproductive health care.

- However, this ranges from 52% in the Americas to 87% in Europe.

- 34% report regulation of ART.
Reported access to ART of 78 countries that reported on this

- Heterosexual couples in recognized relationships 77%
- Heterosexual couples not in recognized relationships 49%
- Same sex couples in recognised relationships 21%
- Same sex couples in non-recognised relationships 18%
Conclusion

- Inclusion of fertility care as an essential component of comprehensive SRHR and UHC in national policies
  - In response to COVID
  - Post COVID

- Opportunities to expand research and learning from country and patient experiences.

- Data related to outcomes of IVF-pregnancies in context of COVID-19 critical.
Department of Reproductive Health and Research (RHR) including the UNDP/UNFPA/UNICEF/WHO/World Bank Special programme of research, development and research training in human reproduction (HRP)

Follow us on Twitter @HRPresearch

Visit our website https://www.who.int/reproductivehealth/en/
Dr. Steven Ory

Professor of Obstetrics and Gynecology, Florida International University, Miami
IVF Florida
Global Access to Fertility Care During the COVID 19 Pandemic

Dr Steven Ory

Professor of Obstetrics and Gynecology, Florida International University, Miami

IVF Florida
Rapidly developed questionnaire of 11 questions submitted to reproductive medicine providers in 132 countries

- 6 Questions pertaining to national response
- 5 Personal questions

- Posted online from April 21 through May 8, 2020
- Responses received from individuals representing 207 individual centres in 97 countries
Participating Countries (N = 97)

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<th>Region</th>
<th>Percentage</th>
<th>N</th>
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<td>EUROPE</td>
<td>35%</td>
<td>34</td>
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<td>Austria, Belarus, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Latvia, Lithuania, Malta, Moldova, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Turkey, Ukraine, United Kingdom</td>
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<td>MIDDLE EAST</td>
<td>7%</td>
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<td>Iran, Israel, Jordan, KSA, Kuwait, Lebanon, UAE</td>
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<td>AFRICA</td>
<td>20%</td>
<td>19</td>
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<td>Algeria, Cameroon, DR Congo, Egypt, Ghana, Ivory Coast, Kenya, Mali, Mauritius, Morocco, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Tunisia, Uganda, Zambia, Zimbabwe</td>
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<td>ASIA/OCEANIA</td>
<td>18%</td>
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<td>NORTH AMERICA/Caribbean</td>
<td>7%</td>
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<td>CENTRAL/SOUTH AMERICA</td>
<td>13%</td>
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<td>Argentina, Bolivia, Brazil, Costa Rica, Colombia, Chile, Ecuador, Guatemala, Panama, Paraguay, Peru, Uruguay, Venezuela</td>
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Are fertility treatments regarded as an essential medical service?
Has your country modified its policy regarding fertility treatments …?

**YES (60%, N=58)**
- Algeria
- Argentina
- Armenia
- Australia
- Austria
- Bangladesh
- Belarus
- Belgium
- Brazil
- Bulgaria
- Cameroon
- Canada
- Chile
- China
- Colombia
- Czech Republic
- Denmark
- Egypt
- Finland
- France
- Greece
- Hungary
- Ireland
- Israel
- Italy
- Japan
- Jordan
- Kazakhstan
- Kenya
- KSA
- Lithuania
- Malaysia
- Malta
- Mauritius
- Mexico
- Morocco
- Namibia
- Norway
- Philippines
- Poland
- Portugal
- Romania
- Russia
- Rwanda
- Serbia
- Singapore
- Slovakia
- Slovenia
- South Africa
- Spain
- Sweden
- Thailand
- Tunisia
- Turkey
- UAE
- Ukraine
- United Kingdom
- USA

**NO (40%, N=39)**
- Barbados
- Bolivia
- Costa Rica
- Dominican Republic
- DR Congo
- Ecuador
- Estonia
- Guatemala
- Georgia
- Germany
- Ghana
- Hong Kong
- Iceland
- India
- Indonesia
- Iran
- Ivory Coast
- Jamaica
- Kuwait
- Latvia
- Lebanon
- Mali
- Moldova
- Myanmar
- Netherlands
- New Zealand
- Nigeria
- Panama
- Paraguay
- Peru
- Taiwan
- Tanzania
- Trinidad & Tobago
- Uganda
- Uruguay
- Venezuela
- Vietnam
- Zimbabwe
- Zambia
What is the status of ART centres in your country?

Closed or Limited Access for Special Circumstances (N=80)

- Algeria
- Argentina
- Armenia
- Australia
- Austria
- Bangladesh
- Barbados
- Belarus
- Belgium
- Brazil
- Bulgaria
- Cameroon
- Canada
- Chile
- China
- Colombia
- Costa Rica
- Czech Republic
- DR Congo
- Ecuador
- Egypt
- Estonia
- Finland
- France
- Germany
- Georgia
- Greece
- Guatemala
- Hungary
- Iceland
- India
- Indonesia
- Iran
- Jamaica
- Japan
- Ireland
- Jordan
- Kazakhstan
- Kenya
- KSA
- Kuwait
- Latvia
- Lithuania
- Malta
- Mexico
- Moldova
- Morocco
- Myanmar
- Namibia
- Netherlands
- New Zealand
- Nigeria
- Panama
- Peru
- Philippines
- Poland
- Portugal
- Romania
- Russia
- Rwanda
- Serbia
- Singapore
- Slovakia
- Slovenia
- South Africa
- Spain
- Trinidad & Tobago
- Tunisia
- Turkey
- Uganda
- Ukraine
- UAE
- UK
- USA
- Uruguay
- Vietnam
- Venezuela

Open with no restrictions to access infertility treatment (N=14)

- Bolivia
- Denmark
- Dominican Republic
- Ghana
- Hong Kong
- Ivory Coast
- Lebanon
- Mali
- Paraguay
- Taiwan
- Tanzania
- Thailand
- Zambia
- Zimbabwe

Different circumstances for private and public centres (N=3)

- Malaysia
- Norway
- Sweden

[Public centres limited access, no ET. Private centres open with no restrictions to access infertility treatment./Public centres closed, private centres open with no restrictions to access infertility treatments/government centres closed, private centres unsure]
What is the status of ART centres in your country?

- Open, no restrictions
- Closed/ Limited access for special circumstances
- Different circumstances for private and public centres
What is the status of your ART centre in relation to the COVID-19 pandemic?

- Limited access for special circumstances (N=117) - 56.5%
- Closed per government or other mandate (N=65) - 31.5%
- Open with no restrictions to access to infertility treatment (N=21) - 10.0%
- Voluntary Closure (N=4) - 2.0%
If your ART centre is closed, was the closure mandated by?:

- Government (55) 33.1%
- Voluntary Closure (53) 32.0%
- Professional Society’s recommendation (N=50) 30.1%
- Government/Professional Society (N=4) 2.4%
- Hospital Policy/Professional Society (N=1) 0.6%
- Government/ Hospital Policy (N=1) 0.6%
- Departmental Policy (N=2) 1.2%
If a mandate to close was issued, were there any exceptions made for patients with certain conditions?

- Yes (N=94): 66%
- No (N=48): 34%
Are you providing any fertility treatments?

- Providing limited fertility treatments (N=106): 51.4%
- All fertility treatments stopped (N=76): 36.9%
- Providing all fertility treatments (N=17): 8.3%
- Telemedicine (N=4): 1.9%
- Referred to another centre (N=3): 1.5%
If you are providing fertility treatments, what fertility treatments are being provided?

- **Diagnostic Evaluation (N=116)**: 33%
- **IVF for diminished ovarian reserve or cancer patients (N=84)**: 24%
- **IUI for all patients (N=38)**: 11%
- **IUI for diminished ovarian reserve patients (N=36)**: 10%
- **IVF for all patients (N=27)**: 8%
- **PGT-A (N=20)**: 6%
- **Third Party Reproduction (N=17)**: 5%
- **PGT-M (N=14)**: 4%
If a mandate to close ART centres was issued, are you aware of any centres that have remained open?

No (N=104) - 62%
Yes (N=65) - 38%
Are you aware of any reproductive health care providers that have contracted COVID-19?

- No (N=164) - 79%
- Yes (N=43) - 21%
Are you aware of any reproductive health care provider that have died from COVID-19?

- Yes (N=10): 5%
- No (N=197): 95%
Conclusions

- 75% of countries did not regard infertility services as an essential medical service at outset of pandemic
- 60% of countries modified policy regarding access to fertility treatment in response to pandemic
- 82.5% of countries limited or curtailed access to ART
- Closure was prompted almost equally by voluntary, governmental and professional society considerations

We would like to gratefully acknowledge the valuable contributions of our international colleagues:
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<td>Amina Oumeziane</td>
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Fertility services during COVID-19: Nigerian Experience

Professor Oladapo A. Ashiru, OFR
MB, BS, MS, PhD, HCLD/CC, FASN, FESOM, FNAMS.

Medical Art Center
Institute of Reproductive Medicine
Ikeja, Lagos State Nigeria
Fertility careSituation in Nigeria

- Fertility care is principally provided by private centers and a few government centers in the Teaching Hospitals.
- There are over 90 IVF clinics in Nigeria.
- ≥ 8,000 cycles performed every year.
- Regulated by Association for Fertility and Reproductive Health (AFRH).
- Lagos State has a regulating body (HEFAMAA).
- National law pending in the National Assembly.
The Federal Ministry of Health confirmed the index case COVID-19 case in Lagos State, Nigeria on the 27th of February 2020

- Italian citizen
- Italy to Lagos, to Cement Factory Nigeria on the 25th of February
- Ebola defense protocol was activated by February 15th

GOVERNMENT AND NCDC (Nigeria Center for Disease Control)

- Presidential Task force
- State wide Lockdown (Lagos, Abuja & Ogun) - 30th March - 4th May
- Isolation centers
- Suspension of commercial flights
- Relief materials/Palliatives
- Mandatory face masks (April 2020)
- Curfew

- Guidelines and SOP for
  - Self Isolation & Quarantine
  - Home care for mild suspected cases
  - Transfer of serious cases to treatment centers
  - Social Distancing
- Hotline numbers
How COVID-19 has impacted fertility services in Nigeria

- Virtually fertility treatments for 6 weeks
- Loss of income- Reduced patient inflow due to the fear of contact with infected person.
- Uncertainty about transmission of virus through gametes.
- Time and opportunities perceived as lost during lockdowns when fertility treatments were cancelled
- Expiration of the laboratory media / Inability to replenish basic clinical materials sourced from overseas
- Reduction in staff strength due to redundancy / No staff lay offs
Response to COVID-19 pandemic in reaction to fertility services

- **At initial pandemic outbreak**
  - Complete nationwide cessation of all IVF services
  - Practice guidance released by AFRH, SOGON & AFFS

- **After the lockdown was lifted**
  - Gradual reopening of clinics
  - Skeletal work/shifts for staff
  - Strict adherence to safety guidelines

- **Present date**
  - Return to full capacity
  - Strict adherence to safety guidelines

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**Practice Guidelines**

- Mandatory for everyone before entrance into facilities
- Patients evaluated by questionnaire for risk of exposure 24-48hrs before scheduled appointment
- Complete verification of appointments. Walk-ins to be authorised only by the Medical Officer in charge after administering and reviewing the questionnaire
- Hourly wipe down of door knobs and surfaces as well as quick deep cleaning of surfaces and equipment after each patient.
- Proper spacing of appointments to observe social and physical distancing
- Regular washing of hands with soap and water and the use of alcohol based hand sanitisers in the absence of water
Ways to boost your immune system

SUPPLEMENTS TO HELP BODY DEFENSE SYSTEM
- Vit D 1000i.u daily
- Zinc 25mg daily
- Vit C 1000 mg daily or twice
- Vit E 100mg daily
- Baby Aspirin After Food
- Daraprim (Metaprim)- Qenercrine

NATURALLY OCCURING IMMUNE BOOSTERS
- Lemon, Garlic and Ginger Tea.
- Lime in place of lemon
- Dongo Yaro Tea (Neem Tea)
- Awopa (Quinine) Tea
- Bitter kola nut
- Coconut Oil
CONCLUSION

• Cases still rising albeit slowly
• Government need to do more frequent testing and in larger capacity
• Fertility clinics will continue to follow safety guidelines
• Hopeful for a ‘vaccine’ although many are skeptical.
Jacky Boivin, PhD, CPsychol

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School of Psychology
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Patient experiences of fertility clinic closure during the COVID-19 pandemic: Appraisals, coping and emotions

Jacky Boivin, PhD, CPsychol

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Disclosure

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- Speaker honoraria & advisory fees Ferring International, Ferring Pharmaceuticals A/S, Merck KGaA, Theramex
Background & study aim

- **Rapid assessment** of patient appraisals, coping strategies and emotional reactions to COVID-19 fertility clinic closures

→ **Study period April 09 to 21, 2020**
12.3% of women pregnant after ART at risk of Post Traumatic Stress Disorder (Wuhan, China), N=488

- Risk factors: History of chronic disease, hyper-vigilance, uncertainty in illness

80% important emotional impact, 50% pandemic same as loss of chance to conceive (from 600 cycles, Tunisia)

Distress level moderated by sense of control (N=168, Israel)

- Social support and sense of mastery associated with lower distress, feeling helpless after clinic closed associated with high distress
UK Participants & Recruitment

Recruitment
- Online platforms

Eligibility criteria
- people affected by COVID-19 fertility clinic closure
- 18 years of age or older
- able to complete survey in English

N=450 final sample
- 48% completion, 446 women, 4 men
- 946 people clicked on the survey link, 76 did not consent,
- 420 started the survey but did not complete it

Sample characteristics
- 74.7% (n=336) UK residents
- Average age 33.6 years (SD=4.4) & years infertile 3.5 years (SD=2.22).
Materials

English language survey, co-produced with healthcare providers, counsellors and patient involvement

Quantitative: reliable instruments for appraisals, emotions & coping in ART
(Lancastle & Boivin, 2010)

Qualitative: Open-text questions
Specifically about clinic closure, :
- effect on fertility plans
- related fears and concerns, coping strategies employed
- [any] perceived benefits
- information received and desired
- understanding of COVID-19 effects on fertility, pregnancy and the baby

Sociodemographic & background information
Data analysis

• **Thematic qualitative analysis of textual data**
  - Braun & Clarke 2006\(^1\) approach
  - inductive coding (bottom up) for each question
  - deductive coding (top down) across questions for meta-themes related to cognitive stress and coping theory (Lazarus & Folkman, 1984).

• **Statistical analysis of quantitative data**
  - analysis of variance analysis of variance, posthoc analysis with Bonferroni correction

\(^1\)Braun & Clarke 2006: http://dx.doi.org/10.1191/1478088706qp063oa
Results (quantitative analysis)

- Most patients (81.6%, n=367) had tests or treatments postponed, with these being mainly self (41.6%) or publicly (46.8%) funded.

**Figure 1**: Mean intensity of appraisals and emotions about clinic closure. Mean ± 95% confidence interval around the mean. Higher scores means more of the attribute. Main effect appraisal (F(4, 1764)=1074.37, p < .001. Main effect emotions (F(3, 1341)=1631.38, p < .001. All pairwise comparisons, p < .05

- **Threat** = nervous, worried
- **Harm** = sad, discouraged
- **Challenge** = positive, hopeful
- **Benefit** = relieved, happy
Results (qualitative analysis)

- Inductive (per question) coding
  - 33 broad themes

- Deductive coding (across questions)
  - 4 meta-themes linked to transactional stress and coping theory
### Stressor

| Clinic closure |

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### Context

- Understood COVID-19 effects unknown
- Understood closure precautionary
- Closure perceived as unfair & discriminatory

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**Closure strongly triggered coping process**

- "It's a necessary evil.", P74
- "Get the clinics open. If not, start telling everyone not to conceive otherwise this is a massive breach against our human rights.", P163

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Transactional theory of stress and coping
Context
Understood COVID-19 effects unknown
Understood closure precautionary
Closure perceived as unfair & discriminatory

Primary appraisal
Is this a threat to my wellbeing?
Threat to attainability of parenthood goal
Loss of family dream

• “It’s painful to think [...] we will have gone through another year without a child”. P210
• “Infertility is cruel as it is let alone combined with COVID-19”. P142

• “shattered our world” P243
• “world collapsed” P123
• “running out of time” P225
• “not knowing … is agonising” P104

Secondary appraisal
Do I have coping resources?
Strategies for uncertainty
Multiple forms of coping engaged

• “It’s a necessary evil”. P74
• “Get the clinics open. If not, start telling everyone not to conceive otherwise this is a massive breach against our human rights”. P163
• “I am trying not to think at all about a future I cannot control” P80
• “… taken control …through healthy eating and exercise … I am ready to go as soon as the clinic re-opens.” P330
• “[closure] gives me more time to process the grief associated with using a donor […]” P426

Transactional theory of stress and coping
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Stress response
Do demands exceed coping resources?
Clinic closure taxing but for most manageable
Proportion unable to cope (11.4%)

- “[…] can’t help feeling how it’s so unfair and unjust. Feel angry and a deep, deep sadness.” P86”
- “[…] feeling nauseous the majority of the time … P155”
- “I fell into a slump of drinking wine, eating rubbish and not exercising, not being able to sleep […] P281”
- “If there’s no hope of any treatment [soon] I’m wondering whether to leave my partner. P217”

“Get the clinics open. If not, start telling everyone not to conceive otherwise this is a massive breach against our human rights”. P163

Transactional theory of stress and coping
Conclusions

- Closure devastating uncertain situation that taxed coping abilities

- **Communication strategies** for [reduction of] uncertain and unpredictable situations required

- **Patients expectations** for reality of fertility care in COVID-19 era

- **Stepped approach** to psychosocial care matching intervention to need

- Psychological input essential in **International COVID-19 consortia**

- Implement survey in different populations for better representativeness (e.g., men, minority groups, countries)

- Control for infertility and COVID-19 confounders

- Study adaptation over time

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Patient experiences of fertility clinic closure during the COVID-19 pandemic: Appraisals, coping and emotions

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Thanks to online platforms willing to distribute survey

IFFS, July 2020
Questions and Answers