

Curriculum Vitae Prof. Silke Juliane Dyer

FCOG, FRCOG (Hon), MMed, PhD (UCT)

Biographical Information

| Name | Silke Juliane Dyer |
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| Date of Birth | 28 September 1960 |
| Citizenship | German |
| Permanent residency | South Africa |
| ID Number (South Africa) | 6009280840187 |
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Focus

Having spent part of my childhood in Cape Town, South Africa, I returned with the desire to live and work in Africa after obtaining my undergraduate medical degree in Germany. Following qualification as a specialist obstetrician and gynaecologist and then sub-specialist in reproductive medicine through training at Groote Schuur Hospital, Faculty of Health Sciences, University of Cape Town, I dedicated much of my clinical and all of my academic work to infertility-related reproductive health. My work is driven by the desire to improve health services and access to care, and through this the quality of life of infertile people.

I am in full-time practice at Groote Schuur Hospital, University of Cape Town (a level three referral and teaching hospital), where I am a Full Professor and Head of the Division of Gynaecology. I am privileged to be able to combine daily clinical work with a strong academic focus. The former involves clinical service delivery in gynaecology and reproductive medicine as well as after-hours cover of our labour ward. My academic work has evolved from local research on the socio-cultural consequences of infertility in low resource settings, to the monitoring of assisted reproductive technology (ART) at national, regional, and international level. Starting in 2015, I have established and led the African Network and Registry for Assisted Reproductive Technology (ANARA) with its vision to reduce the burden of infertility in Africa; and its mission to build a professional network of ART centres in Africa and to collect scientific data on the utilization, availability, effectiveness and safety of ART. ANARA currently has participation from 18 African countries, is growing steadily, and has shared its scientific data in many scientific meetings and through peer-reviewed publications.

My further international work includes serving on the Board of the International Committee for Monitoring Assisted Reproductive Technologies where I am the Clinical Data Director; on the Education Committee of the International Federation of Fertility Societies; the Scientific and Technical Advisory Group to the Department of Sexual and Reproductive Health and Research, WHO; and as an observer on the Board of the African Federation of Fertility Societies. I am the past chair of the South African Registry for ART, and a past member of the Council of the Southern African Society of Reproductive Medicine and Gynaecological Endoscopy as well as the Reproductive Medicine Committee of the International Federation of Gynecology and Obstetrics. I have also served as an Associate Editor of Human Reproduction.

Qualifications

| 2006 | PhD, University of Cape Town |
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| 1997 | MMed (O&G), University of Cape Town |
| 1993 | Facharzt fuer Gynaekologie und Frauenheilkunde (German equivalent of FCOG), Germany |
| 1992 | FCOG, College of Medicine of South Africa |
| 1985 | MBChB, University of Munich, Germany |

Current Appointments

| 2014 January to present | Professor, Department of Obstetrics and Gynaecology, Groote Schuur Hospital , Faculty of Health Sciences, University of Cape Town (promoted ad hominem from Associate Professor) |
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| May 2013 to present | Head: Clinical Unit, Division of Gynaecology, Department of Obstetrics and Gynaecology, Groote Schuur Hospital, Faculty of Health Sciences, University of Cape Town |
| January 2010 to March 2022 | Deputy Head of Department, Department of Obstetrics and Gynaecology, Groote Schuur Hospital, Faculty of Health Sciences, University of Cape Town |

Post-graduate Professional Experience

Department Obstetrics & Gynaecology, Groote Schuur Hospital, Faculty of Health Sciences, University of Cape Town

| 2007 – 2013 | Associate Professor (promoted ad hominem from Senior Lecturer |
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| 2006 – 2013 | Designation: Head of Clinical Unit (Reproductive Medicine) |
| 1993 – 2013 | Specialist/Senior Specialist |
| 1989 – 1993 | Registrar |
| 1988 – 1988 | Senior House Officer |
| 1985 – 1988 | Registrar, Department Obstetrics & Gynaecology, Medical University Luebeck, Germany |

Professional Committees, Networks and Organisations

| 2016 to present | African Network and Registry for Assisted Reproductive Technology (ANARA) Director |
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| 2010 to present | International Committee for Monitoring Assisted Reproductive Technologies (ICMART) Clinical Data Director and Member of the Board of Directors and |
| 2020 to present | Scientific and Technical Advisory Group to the Department of Sexual and Reproductive Health and Research, World Health Organization Member |
| 2020 to present | Education Committee, International Federation of Fertility Societies (IFFS) Member |
| 2020 to present | Board, African Federation of Fertility Societies (AFFS) Observer |
| 2010 - 2018 | Reproductive Medicine Committee, International Federation of Gynecology and Obstetrics, Committee member |
| 2000 to 2020 | Southern African Society of Reproductive Medicine and Gynaecological Endoscopy [SASREG], Committee member, then Observer |
| 2009 to 2020 | South African Registry for Assisted Reproductive Technology [SARA] Chair |
| Consultancy | I have acted as consultant/temporary advisor to |
| 2019 | Department of Health, South Africa, Infertility guidelines development |
| 2014 & 2015 | World Health Organization, Geneva, International Glossary of Infertility and Fertility Care and WHO Infertility Guidelines development |

Research Interests

Assisted reproductive technology: availability, effectiveness and safety at national, regional and global level

ICMART

Summary: Starting in 2007, I have developed a growing research interest and focus in generating scientific data pertaining to the availability, utilization, practices, outcomes and safety of assisted reproductive technology (ART). This has resulted in establishing a national ART data registry in South Africa and subsequently in Africa; documenting catastrophic household expenditure and lack of financial recovery secondary to utilization of ART; as member of the International Committee Monitoring ART participating in the generation of the annual ART World Reports and exploring ART utilization in the context of gender inequality; and conducting a number of reviews/systematic reviews on infertility in Africa.

ANARA The African Network and Registry for Assisted Reproductive Technology (ANARA)

Starting in 2015, I established ANARA in collaboration with Dr Fernando Zegers-Hochschild, Director of the Latin American Registry for ART, and Dr David Adamson, Chair of the International Committee Monitoring ART. It is the vision of ANARA to reduce the burden of infertility in Africa through strengthening ART; and the mission to establish a network of ART centres in Africa and to collect scientific data pertaining to ART availability, practices and outcome. Following a 1st meeting and training workshop with participation from several African delegates in 2016, there are now approximately 70 ART centres from 18 African countries that participate in ANARA and have reported their data to the Registry. The network is steadily growing. Participation is voluntary and free. Scientific registry data have been presented in numerous scientific meetings and published in RBMOnline (2019; 2020, 2023).

Apart from data collection, network activity includes data training workshops in various African countries; development of an online data workshop; participation in scientific meetings; using our scientific data and network to strengthen the voice of Africa in infertility-related reproductive health at national, regional and international level; maintaining a website (www.anara-africa.com); generating twice-yearly newsletters; and maintaining active channels of communication and information-sharing within the network.

ANARA has been endorsed by many national and regional fertility societies including the African Federation of Fertility Societies. ANARA functions independently of fertility societies but in mutual support of common goals. ANARA is in active South-South cooperation with the Latin American Registry for ART, from which it received substantial developmental assistance, and in triangular cooperation with ICMART.

ANARA Sub-studies have been implemented within the scope of ANARA including the development of interventions to improve follow-up of ART pregnancies; exploring the outcome of multiple pregnancies following ART and their impact on couples as well as the health sector; and conducting a survey on the availability, facilitators and barriers to ART in the public health sector in Africa.

The International Committee for Monitoring Assisted Reproductive Technologies (ICMART)

ICMART collects and reports annually global data pertaining to the availability, utilization, effectiveness and safety of ART. It is a non-state actor in official relations with WHO. As of 2022, I have taken on the role of Clinical Data Director. I was first author of the 2008, 2009 and 2010 World, and co-author of all World Reports since release of the 2007 Report. ICMART also led the work on the International Glossary of Infertility and Fertility Care, which, through a process of extensive communication and collaboration and with participation of WHO, established common, consensus definitions and terminology as a prerequisite for the collection of global data; in addition, terminology and definitions can influence policy and access to reproductive health services.

SARA Starting in 2007 L have established and since led this data registry which y

Starting in 2007, I have established and since led this data registry which was the 1st of its kind in sub-Saharan Africa. As a result of this work, I was invited to become a member of ICMART. SARA now continues to operate within the ambit on ANARA and is led by Dr Paversan Archary.

PhD Research Titled "Infertility in the public health care system in South Africa: Patients' experiences, reproductive health knowledge and treatment-seeking behaviour", my dissertation comprised a number of qualitative and quantitative studies documenting reproductive health knowledge, patient expectations and barriers to treatment, quantifying psychosocial distress, and exploring the impact of HIV in the context of infertility among women and men accessing infertility care at a tertiary level referral hospital in urban South Africa. I published the research findings in five 1st author papers in Human Reproduction between 2002 and 2008.

Awards

Patrik Steptoe Memorial Lecture and Medal awarded by the British Fertility Society for outstanding contribution to the field of reproductive medicine, 2022

Fellowship Honoris Causa awarded by the **Royal College of Obstetricians and Gynaecologists** for dedication and achievement in supporting and advancing healthcare for women, **2017**.

Boet Dommisse Award for Special Contributions to the Department, Department of Obstetrics and Gynaecology, University of Cape Town, <u>2008 and 2011</u>

Health Professions Council of South Africa Award for Excellence in Health Care, 2005 JC Coetzee Prize for Best Original Research in Obstetrics & Gynaecology, University of Cape Town, 2014, 2004 and 1999

J. Behrman Scholarship for Best MMed Dissertation, Department Obstetrics & Gynaecology, University of Cape Town, 1997

Daubenton Medal for Best National Candidate in the FCOG II Examination, 1992

Publications

Recent publications (2019 – 2023) are listed below. A full list of academic publications is available via my Google Scholar citation page, <u>https://scholar.google.com/citations?authuser=1&user=Q_JhQ7UAAAAJ</u>

Archary P, Potgieter L, Elgindy E, Adageba RA, Mboloko J, Iketubosin F, Serour G, Dyer S, African Network A. Dyer S, Assisted reproductive technologies in Africa: The African Network and Registry for ART, 2018 & 2019. RBMOnline 2023;46(5):835-845.

Karaga RM, Archary P, Bell EG, Khrouf M, Loto O, Wada I, Dyer S. **The status of ART in the public health sector in Africa: a multi-country survey**. RBMOnline **2023** Apr 12

Adamson GD, Zegers-Hochschild F, Dyer S. **Global fertility care with assisted reproductive technology**. Fertil Steril, available online 12 jan **2023**.

Njagi P, Groot W, Arsenijevic J, Dyer S, Mburu G, Kiarie J. **Financial costs of assisted reproductive technology for patients in Iow-and middle-income countries: a systematic review**. Hum Reprod Open 2023; (2):hoad007.

Chambers GM, Dyer S, Zegers-Hochschild F, de Mouzon J, Ishihara O, Banker M, Mansour R, Kupka MS, Adamson GD. International Committee for Monitoring Assisted Reproductive Technologies world report: assisted reproductive technology 2014. Hum Reprod 2021;36(11):2921-34.

Banker M, Dyer S, Chambers GM, Ishihara O, Kupka M, de Mouzon J, Zegers-Hochschild F, Adamson GD. International Committee for Monitoring Assisted Reproductive Technologies world report: assisted reproductive technology 2013. Fertil Steril 2021;116(3):741-756.

Dyer S, Archary P, Potgieter L, Smit I, Ashiru O, Bell EG, Network A. Assisted reproductive technology in Africa: a 5-year trend analysis from the African Network and Registry for ART. RBMOnline 2020;41(4):604-15.

Dyer S, Chambers GM, Adamson GD, Banker M, De Mouzon J, Ishihara O, Kupka M, Mansour R, Zegers-Hochschild F. **ART** utilization: an indicator of access to infertility care. RBMOnline 2020; 41(1):6-9.

Devall AJ, Out HJ, Mol BW, Duffy JM, Collura B, Dyer S. Coordination and planning of clinical research on a national and global level. Fertility and Sterility. **2020** Jun 1;113(6):1100-6.

Mendelson M, Booyens L, Boutall A, Cairncross L, Calligaro G, Dave JA, Dlamini S, Dyer S, Eick B, Fieggen K, Frankenfeld P. **The** mechanics of setting up a COVID-19 response: Experiences of the COVID-19 epidemic from Groote Schuur Hospital, Cape Town, South Africa. South Afr Med J 2020; 110(9):0-.

Njagi P, Groot W, Arsenijevic J, Dyer S, Mburu G, Kiarie J. Economic costs of infertility care for patients in low-income and middle-income countries: a systematic review protocol. BMJ Open 2020;10(11):e042951

de Mouzon J, Chambers GM, Zegers-Hochschild F, Mansour R, Ishihara O, Banker M, Dyer S, Kupka M, Adamson GD. International Committee for Monitoring Assisted Reproductive Technologies world report: assisted reproductive technology 2012. Hum Reprod 2020;35(8):1900-13.

Zegers-Hochschild F, Adamson GD, <u>Dyer S</u>, Racowsky C, de Mouzon J, Sokol R, Rienzi L, Sunde A, Schmidt L, Cooke ID, Simpson JL, van der Poel S. **The International Glossary on Infertility and Fertility Care**, 2017. Hum Reprod **2017**; 32(9): 1786-1801.

| Book Chapters | Dyer S, Archary P, Adamson GD. ART Surveillance in Africa . In: D Kissin, D Adamson, G Chambers and C De Geyter (Eds.) Assisted Reproductive Technology Surveillance. Cambridge University Press., Cambridge. 2019: pp 1-22. |
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| | Dyer S, Patel M. The economic consequences of infertility. In: Infertility and Assisted Conception in the Tropics. Coordinating Ed L Omo-Aghoja. |
| Associate Editor | Associate Editor for Human Reproduction January 2016 to January 2020 Selective reviewing for other international journals. |

International Conference and Webinar Presentations

| (2019 to present) | |
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| 2023, ESHRE | i. Adamson GD, Dyer S, Chambers G, Ishihara O, De Mouzon J, Banker M, Kupka M, Zegers-Hochschild F. "ICMART preliminary world report 2019" (invited presentation) ii. Dyer, S. "National ART Registries: Government agency or clinician initiative - what is the most useful to consumers" (invited presentation) presented at the 39th Annual Meeting of the European Society of Human Reproduction and Embryology, Copenhagen, Denmark, July 2023. |
| 2023, Colombia | i. Dyer, S. "Ethical challenges in balancing myths, science and policy in the delivery of ART: the case of twins and triplets" ii. Dyer, S. "Strategies for the provision of quality ART in Low and Middle Income Countries - The case of Africa" Presented at the 26th Brazilian Congress on Assisted Reproduction & the 16th Latin American Red of Assisted Reproduction, Medellin, Colombia, April 2023. |
| 2022, USA | Dyer, S. "South-to-South Learning for Fertility Education". Joint WHO-ASRM Symposium on "Strengthening Fertility Education and Awareness Globally". (invited Panel speaker) Presented at the Annual ASRM Scientific Congress, Anaheim USA, October 2022. |
| 2022, Nigeria | Dyer, S. "The African Network and Registry for ART: Lessons from real-life scientific data" (invited) Presented at the 12th Annual International Conference of the Association for Fertility and Reproductive Health, Lagos, Nigeria, September 2022. |
| 2022, ESHRE | iii. Adamson GD, <u>Dyer S</u>, Chambers G, Ishihara O, De Mouzon J, Banker M, Kupka M, Zegers-Hochschild F. "ICMART preliminary world report 2018" (invited presentation) iv. F Zegers-Hochschild, <u>S Dyer</u>, De Mouzon J, Kupka M, Banker M, Chambers GM, Adamson GD. "The role of South-South and Triangular Cooperation in the establishment of national and regional registries" (invited presentation) presented at the 38th Annual Meeting of the European Society of Human Reproduction and Embryology, Milan, Italy, July 2022. |
| 2022, Egypt | Dyer, S. "The African Registry for ART: Lessons from real-life scientific data" Presented at the 2nd annual conference of the Egyptian Foundation of Reproductive Medicine and Embryology (EFRE), Cairo, Egypt, June 2022. (invited presentation) |
| 2022, Great Britain Patrick Steptoe Memorial Lecture | Dyer, S. "'Matters of Life': ART in Africa in the context of global reproductive health" Eponymous Patrick Steptoe Memorial Lecture presented at Fertility 2022 , the joint annual conference hosted by the Association of Reproductive and Clinical Scientists, the British Fertility Society and the Society for Reproduction and Fertility (Virtual conference). January, 2022. |
| 2021, Brazil | Dyer, S. "South-South Cooperation in the development of regional ART monitoring in Africa" Presented at the 25th Brazilian Congress on Assisted Reproduction & the 15th Latin American Red of Assisted Reproduction, Rio de Janeiro, Brazil, November 2021. (invited presentation; virtual) |
| 2021, Egypt (Virtual event) | Dyer, S. "Quality ART: the role of national, regional and global data registries" Presented at the 1st annual conference of the Egyptian Foundation of Reproductive Medicine and Embryology (EFRE), Cairo, Egypt, June 2021. |
| 2020, Rwanda (Virtual event) | Dyer, S. Infertility: Why it matters (invited presentation) Dyer, S. The African Network and Registry for Assisted Reproductive Technologies: Experiences and Lessons learned (invited presentation) presented at the pre-congress workshop of the Regional Congress of the International Federation of Obstetrics and Gynecology (FIGO), Kigali, Rwanda, December 2020 |

| 2020, GIEARF (Webinar) | Dyer, S. The Registry for ART in Africa (Invited presentation) Presented at the regional webinar of the Groupe Interafricain d'Etude, de Recherche et d'Application sur la Fertilité and the International Federation of Fertility Societies, November 2020. |
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| 2020, ESHRE (Virtual event) | v. Adamson GD, <u>Dyer S</u>, Chambers G, Ishihara O, Mansour R, Banker M, De Mouzon J, Zegers-Hochschild F. "ICMART preliminary world report 2016" (invited presentation) vi. O Ishihara, F Zegers-Hochschild, J de Mouzon, <u>S Dyer</u>, R Mansour, M Banker, G Chambers, D Adamson. "SET in a global perspective. Regional similarities and differences. vii. Potgieter L, Archary P, Smit I, Ashiru O, Gwet-Bell E, <u>Dyer S</u>. Assisted reproductive technology in Africa: a five-year analysis of data from the African Network and Registry presented at the 36th Annual Meeting of the European Society of Human Reproduction and Embryology, June 2020. |
| 2019, Canada | Dyer, S. "Global access to infertility care: Building reproductive networks – experience from Africa" presented at the 65th Annual Meeting of the Canadian Fertility and Andrology Society, Ottawa, Canada 2019. (invited presentation) |
| 2019, Japan | Dyer, S. "The current situation of reproduction and reproductive medicine in African Countries" presented at the 37th Annual Meeting of the Japan Society of Fertilization and Implantation, Japan, Tokyo 2019. (invited presentation) |
| 2019, Austria | viii.Adamson GD, Dyer S, Chambers G, Ishihara O, Mansour R, Banker M, De Mouzon J, Zegers-Hochschild F. "ICMART preliminary world report 2015" (invited presentation) ix. Dyer SJ, Chambers G, Zegers-Hochschild F, Adamson GD. "Access to ART: Concepts, indicators, impact." (invited presentation) x. Dyer S. "Universal access to infertility care: Perspectives from Africa" (Pre-congress workshop, invited presentation) presented at the 35th Annual Meeting of the European Society of Human Reproduction and Embryology, Vienna, Austria, June 2019. |
| 2019, USA | Dyer, S. "Infertility in developing countries: doing something, doing more, doing better" presented at the 2019 Best of ESHRE and ASRM meeting, New York, USA 2019. (invited presentation) |

Teaching and Examinations

| OnLine Teaching | Developed the ANARA Data Online Course Level 1 and Level 2. This course aims to build capacity among biologists, fertility nurses, data managers, and scientist in the collection and utilisation of scientific registry data. Since inception in November 2021, the courses have been offered approximately 6monthly. It is hosted on the UCT learning platform. |
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| Teaching | The Department of Obstetrics and Gynaecology has a high teaching load with the teaching of undergraduate students in all clinical years (years 3-6) as well as postgraduate students undergoing specialist and sub-specialist training. I am involved in these activities with particular emphasis on the teaching and skills training of senior registrars and sub-specialist in reproductive medicine. |
| Examinations | Examiner for FCOG Part 2; and Examiner and Convenor for Certificate in Reproductive Medicine for the College of Obstetricians and Gynaecologists of South Africa (under the auspices of the Colleges of Medicine of South Africa); Dissertation Examiner for Master of Medicine in Obstetrics and Gynaecology (MMed) and Master of Philosophy in Reproductive Medicine (MPhil) |

Leadership, Management & Administration

| University | Member of University Senate since 2014 |
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| Faculty | Member of Board of Faculty since 2007 Intermittent Member of Dean Advisory Committee (2010 – 2021) Member of Faculty Research Committee (2001- 2015) Member of Human Research Ethics Committee, Faculty of Health Sciences (2010 - 2012) |
| Dept. Obstetrics & Gynaecology | Deputy Head of Department (2010 – 2022) Head of Clinical Unit, Division of Gynaecology |