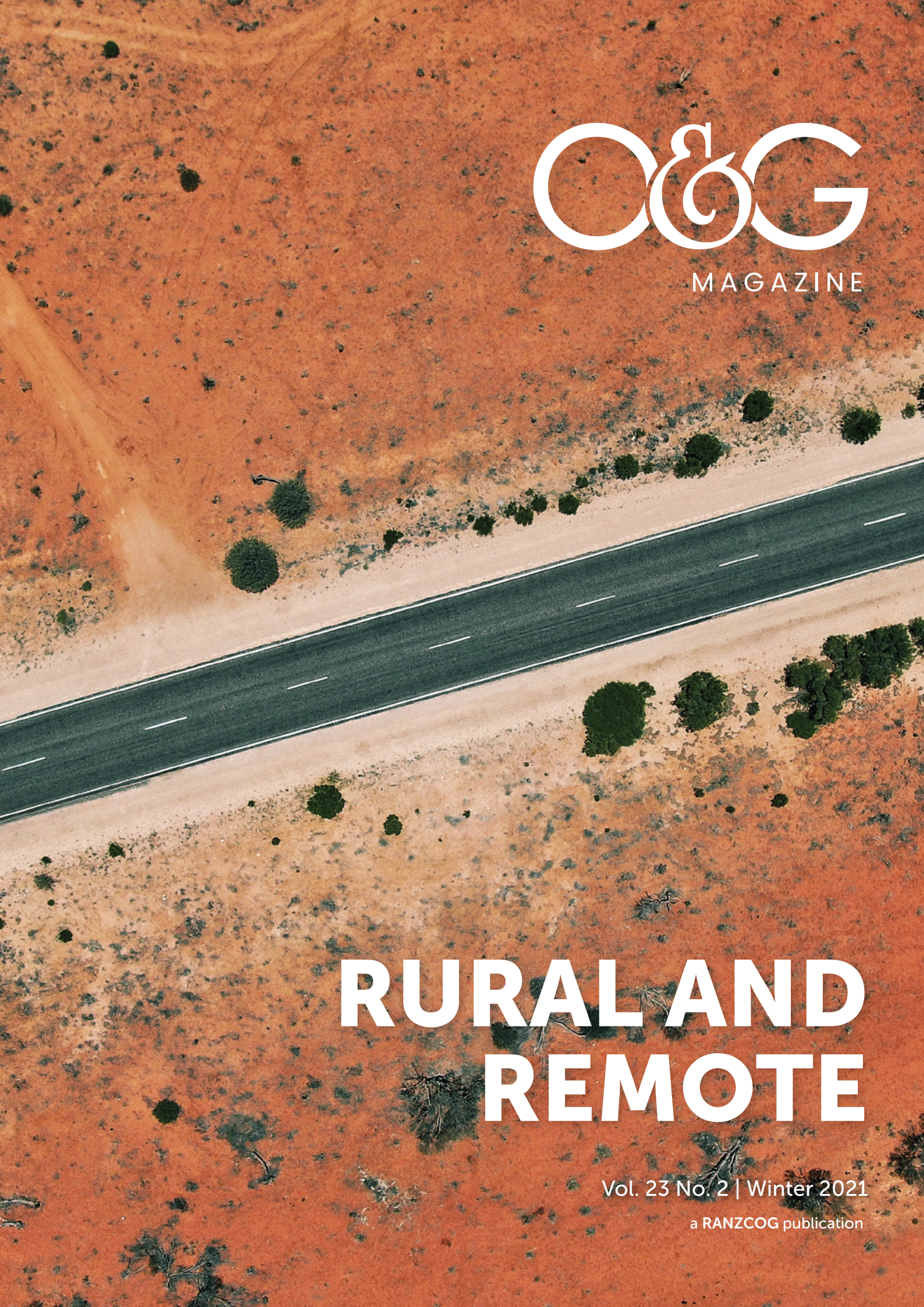


O&G MAGAZINE

RURAL AND REMOTE

Vol. 23 No. 2 | Winter 2021

a RANZCOG publication

O&G MAGAZINE

Vol. 23 No. 2 Winter 2021

Editorial Communications
O&G Magazine Advisory Group
RANZCOG
254–260 Albert Street
East Melbourne, VIC 3002 Australia
(t) +61 3 9417 1699
(e) OGmag@ranzcog.edu.au

Advertising Sales
Minnis Journals
(t) +61 3 9836 2808
(e) minnis@minnisjournals.com.au

Printer
SouthernImpact
(t) +61 3 8796 7000

O&G Magazine authorised by Ms Vase Jovanoska

For further information about contributing to *O&G Magazine* visit: ogmagazine.org.au.

ISSN 1442-5319

Cover image © Dustin | Adobe Stock

The College

Rural and remote

Women's health

The College

RANZCOG acknowledges and pays respect to the Traditional Custodians of the lands, waters and communities across Australia, on which our members live and work, and to their Elders, past, present and future.

RANZCOG recognises the special status of Māori as tangata whenua in Aotearoa New Zealand and is committed to meeting its obligations as Te Tiriti o Waitangi partners.

RANZCOG New Zealand Committee
Te Kāhui Oranga ō Nuku
Dr Celia Devenish **Chair**

Aotearoa New Zealand National Office
Catherine Cooper **Head**
Level 6, Featherston Tower,
23 Waring Taylor Street,
Wellington 6011 / PO Box 10611,
The Terrace, Wellington 6143, NZ
(t) +64 4 472 4608
(e) ranzcog@ranzcog.org.nz

RANZCOG State and Territory Committees
Government Relations and Australian National Offices
Mel Pietsch **Head**
Suite 13, 18 National Cct
Barton, ACT 2600
(t) +61 2 6100 1160
(e) mpietsch@ranzcog.edu.au

Australian Capital Territory
Prof Julie Quinlivan **Chair**
Victoria Peisley **Member Engagement Lead**
Suite 13, 18 National Cct
Barton, ACT 2600
(t) +61 2 6169 3993
(e) act@ranzcog.edu.au

New South Wales
Dr Karen Mizia **Chair**
Dee Quinn **Member Engagement Lead**
Suite 2, Ground Floor, 69 Christie Street
St Leonards, NSW 2065
(t) +61 2 9436 1688
(e) nsw@ranzcog.edu.au

Queensland
Dr Thangeswaran Rudra **Chair**
Sylvia Williamson **Member Engagement Lead**
Suite 2, Level 2, 56 Little Edward Street,
Spring Hill, Qld 4000
(t) +61 7 3252 3073
(e) qld@ranzcog.edu.au

South Australia/Northern Territory
Dr Martin Ritossa **Acting Chair**
Tania Whittington **Member Engagement Lead**
First floor, 213 Greenhill Road
Eastwood, SA 5063
(t) +61 8 7200 3437
(e) sa-nt@ranzcog.edu.au

Tasmania
Dr Lindsay Edwards **Chair**
Madeleine Bowers **Member Engagement Lead**
College Placee, 1 Bowen Crescent,
Melbourne, Vic 3004
(t) +61 3 9114 3925
(e) vic-tas@ranzcog.edu.au

Victoria
Dr Charlotte Elder **Chair**
Madeleine Bowers **Member Engagement Lead**
College Placee, 1 Bowen Crescent,
Melbourne, Vic 3004
(t) +61 3 9114 3925
(e) vic-tas@ranzcog.edu.au

Western Australia
Dr Patty Edge **Chair**
Claire Siddle **Member Engagement Lead**
34 Harrogate Street,
West Leederville, WA 6007
(t) +61 8 9381 4491
(e) wa@ranzcog.edu.au

From the President

Dr Vijay Roach
President

On 16 March 2021, at Parliament House, Canberra, RANZCOG joined the Rural Doctors Association of Australia (RDAA) for their annual lunch, throwing a spotlight on the value and importance of maternity care in rural and remote Australia. Dr John Hall, RDAA President, kindly invited me to address the audience comprised of medical leaders, health bureaucrats and senior politicians. A full transcript is included below. It contains many of the messages I want to convey. While the speech was given to an Australian audience, the messages apply to New Zealand, Māori women, and women everywhere.

The central tenet of the message that RANZCOG delivered is that supporting maternity services in rural and remote communities is an opportunity to grow those communities and see them thrive. We began our presentation with a wonderful, commissioned video (https://vimeo.com/524091391) which beautifully illustrates the centrality of maternity care. While the initial investment in infrastructure and personnel may seem expensive, the return is significant and enduring. Maternity care is a bedrock, a keystone. To provide safe maternity care requires skilled personnel, appropriate facilities and other medical supports. Because you're caring for pregnant women and their babies you can also provide acute care in so many other areas. The availability of medical care attracts people and services to these regions and the opportunity for growth.

Equity in healthcare is a principle that RANZCOG holds dear. It underpins our training program. Women who live in distant parts of our country are entitled to a high standard of medical care. Closure of local maternity units means that they are dislocated from their families when they have a baby.

The authors in this issue explore the opportunities, challenges and complexities of rural and remote healthcare. Telehealth is one way of bridging the tyranny of distance, a skill that we have all developed during the pandemic. There are the challenges of training the specialist and GP obstetrician to be fit for purpose in a rural setting. Convincing professionals to leave the cities for greener pastures has always been difficult and RANZCOG has established workforce working groups in Australia and New Zealand to explore potential solutions.

At the time of writing, the vaccine against COVID-19 is being rolled out across Australia and New Zealand. Travel is opening up and we're starting to meet people in person. The RANZCOG CEO, Vase Jovanoska, and I, have taken the opportunity to visit members in Dubbo, Orange, Newcastle, Sydney, Hobart, Launceston and Burnie. The welcome has been warm and generous, and we've been able to gain an understanding of the issues facing O&G services in rural locations. Having spent my working life in a metropolitan setting, I am humbled by the aptitude of the doctors and midwives that we've met. They deliver quality healthcare with skill and compassion and without the abundant resources we enjoy in the city. I have left each place buoyed by the warmth and culture of my colleagues.

The effects of the pandemic are clearly not over. While we are enjoying a return to a semblance of normality, the rest of the world is imploding. RANZCOG has sent a message of support to our friends in India as we watch in horror the seemingly unstoppable rise in infection and death. Australia and New Zealand are multicultural countries and our thoughts our with the friends and families of our members in the many countries that have not been as fortunate as us. With our midwifery colleagues, we urged the Australian Government to support our neighbours in Papua New Guinea. Periodic outbreaks have meant uncertainty, but we hope that travel between Australia and New Zealand will allow College members to be reunited.

By the time this issue is released, RANZCOG will be relocated to our new home at 1 Bowen Crescent. Visiting College House with all the furniture gone, the books in the library stacked and sorted and the numerous artifacts packed for storage, transfer, or sale, was a melancholy experience. So much of our history is contained at 254 Albert Street. That being said, the new building is fresh, spacious, modern and fit for purpose. I am confident that our members will feel genuinely positive about the new location. It will be a better space for our staff and the facilities will mean that many College activities can be delivered in-house.

On 27 May, during National Reconciliation Week, leaders from all around Australia will gather in Canberra for the RANZCOG Women's Health Summit. Panels will discuss gender equity, violence against women, mental health and the importance of data. But we won't just talk. The tagline of the conference is Time to Act, and this summit's aim is to set the agenda, to identify opportunities and set a course for real and meaningful change. RANZCOG, your College, is best placed to lead that change and lead it we will. A similar Summit is planned for New Zealand later in the year.

Finally, 2021 marks the final year of the Eleventh RANZCOG Council. I am pleased to congratulate Dr Ben Bopp as the President-elect. Elections for the Board and Council will be conducted soon. This is

your opportunity. Put your name forward. Have your say. Contribute to your College and the advancement of women's health in Australia and New Zealand. Be part of something bigger. My own experience of leadership has been challenging and, at times, overwhelming, but ultimately fulfilling. I'll leave you with the words of American poet Maya Angelou 'When you do nothing you feel overwhelmed and powerless. But when you get involved you feel the sense of hope and accomplishment that comes from knowing you are working to make things better.'

Transcript of address to the RDAA Parliament House lunch, Canberra 16 March 2021

Honorable Ministers, ladies and gentlemen.

I would like to begin by acknowledging the Traditional Owners of this land and all lands, waters and communities across Australia. I acknowledge their elders, past, present and emerging. When I say Acknowledgement of Country, I mean it. This is Aboriginal land. Always was. Always will be. What happened 200 years ago is not okay. RANZCOG is a College dedicated to training the next generation of health practitioners who will care for Australian women, wherever they may be. Women are at the centre of all that we do. When we think about the deep trauma and loss of generations of Aboriginal people, past present and emerging, we must make sure that women are central to the narrative. Women who have lost their children. Women who have been physically and sexually abused. Women who are often not represented by panels that discuss women's issues.

But there is also another loss in this story and that is the loss of opportunity for all of us. By failing to genuinely engage, we deny ourselves the opportunity to learn, to experience, to understand deep and profound truths, history, connection with the land and with each other. We hold conferences on climate change but we don't consult with the people who managed the environment effectively for 40,000 years.

We hand down a damning report on the Aged Care Sector and we are encouraged to look overseas at the way that they treat their elders. In Australia, we pay respect to elders past, present and emerging. We don't need to look anywhere else. The answer has been here for 40,000 years. Aboriginal history is our history and our opportunity.

For RANZCOG, women are at the centre of all that we do. Respect for women is our opportunity. The events of the last few weeks, and the last few days, are not political issues. They are cultural issues. The way that our society treats women is a cultural issue. When women feel unsafe, when women feel disrespected, when women do not have an equal place in the home, in the workplace or in leadership positions, the loss is profound for the women themselves.

But it is also a lost opportunity for all of us. We lose the opportunity to benefit from the qualities and contribution of half of our world. We lose the opportunity to live in a harmonious society. We lose the social and economic value that all people can contribute. Inclusion of women, support of women, empowerment of women won't take away anything from those who already have power. We won't be worse off if women feel safe, if women aren't abused, if women aren't killed. It's hard to find the negative in a society that actively encourages the full engagement of women. Instead, we will grow, we will develop, we will learn and we will all be happier.

Supporting maternity services in rural and remote communities offers us an opportunity and also ties in with creating a society that values women. There's an initial investment in infrastructure and personnel. Australia is an enormous country and reaching small communities is difficult and expensive. But the women of the outback are entitled to that care. They have a right to expect the same standard of care as their metropolitan counterparts. They shouldn't have to be dislocated from their families when they have a baby.

Once again, there is an opportunity. As the video you have just seen so beautifully illustrates, a maternity unit serves pregnant women, but it does so much more. It attracts medical, midwifery and nursing staff and other allied health providers. If you have a facility that can provide acute maternity care, you need the equipment and people who can do that, and those people can do so much more. You can care for acute trauma, heart attacks and strokes, snake bites and asthma. In that moment when you need care, there's a place where you can go, and it isn't 500 miles away.

Maternity units attract a very special group of health professionals called GP obstetricians. When I was at medical school, we were told 'don't be just a GP'. So I completed specialist training and became a specialist obstetrician and gynaecologist. If you're pregnant, I have expertise to offer you. But if you're in a car accident, or have a heart attack, you want someone like John Hall. He can deliver your baby and fix a broken leg. I have come to realise that I am just a specialist.

A maternity service will attract the John Halls of this world. In turn it will attract the people who support him, including specialists. The animator who produced our video lives in rural NSW. Seeking medical care for his family was a nightmare, particularly when his wife was pregnant. They almost moved back. They worried about the lack of medical services. They chose to stay and it's young people like him that we need in the country. They build communities, support local businesses, attract more people and, before you know it, a town in the country is thriving again.

I'm not a politician and I accept that there are many needs and complexities when it comes to allocation of resources. But what I'm offering you is a gift. Build a maternity unit which gives direct benefit to Australian women. From that maternity unit will grow additional services that will benefit farmers, Indigenous Australians, the people outside our cities who contribute to the soul of this country. Build a maternity unit and they will come. Teachers, bankers, tradespeople, all manner of workers. Turn a remote part of Australia into a place that people want to go, confident that they can receive healthcare for themselves and their family. Watch a town grow. Watch a community grow. Watch a boost to our productivity as a nation.

I hope that I can sell this concept to you simply on the basis that maternity care is a right of Australian women no matter where they live. I hope that caring for women is enough. But if you need more, then our message today is that a maternity unit in rural and remote Australia will reap rich rewards for our country. Start there and the rest will follow.

From the CEO

Vase Jovanoska
Chief Executive Officer

Welcome everyone, to the latest issue of *O&G Magazine*, focusing on rural and remote health.

It has been an encouraging and busy start to 2021 at the College, as we adapt to working in our new covid environment. For most of us, it is starting to feel as though we are out of the woods, but we remain ever-so conscious that things could change in a matter of days or weeks. What we do know, and what 2020 taught us, is that we are ready and equipped to adapt and be agile should the situation call for change. We embrace new technology and ways of working to be able to continue to provide a high standard of service to our members and trainees.

Firstly, I would like to extend my congratulations to President-elect, Dr Benjamin Bopp, who will officially commence his term as RANZCOG President at the November 2021 Annual General Meeting (AGM). I look forward to working closely with Dr Bopp to continue the work of the College and carry on the strong leadership of our current President, Dr Vijay Roach.

Elections for the Twelfth College Council and RANZCOG Board will commence in May with successful candidates announced in July. RANZCOG members are encouraged to nominate for the College Council to engage with and be part of the pivotal work that RANZCOG does for the women of Australia and New Zealand. If you would like more information about the nomination process, please visit https://ranzcog.edu.au/our-college/governance/elections

In March, President Dr Vijay Roach and myself had the great fortune of travelling through NSW to visit a number of rural and remote hospitals and speak with many of our members and trainees about their challenges related to workforce and training. As always, it was a pleasure to see our RANZCOG community hard at work and to hear about the positive impact that they were having on their local communities and families. The College co-presented with the Rural Doctors Association of Australia (RDAA) at Parliament House in early March to advocate for the importance of quality rural maternity services across Australia. RANZCOG, in partnership with an external designer, created a special animation for this event which can be viewed via our Vimeo channel, here: https://vimeo.com/524091391.

The RANZCOG Women's Health Summit 2021 is being held on 27 May at Parliament House in Canberra and will host many influential stakeholders from across the women's health landscape in Australia, as well as key ministers, organisations and media. The Summit program will comprise a series of panel discussions relating to some of the important and topical issues in women's health and what we can do collectively, to improve the care we give to the women of Australia. It is *Time to act*. Later in 2021, Aotearoa New Zealand will also host a Women's Health Summit and I look forward to sharing more details about that event, in due course.

RANZCOG is committed to providing a respectful workplace, and training environment, that is free of bullying, harassment and discrimination. Any form of bullying, harassment or discrimination is unacceptable, and is a risk to mental and physical health, and safety. The College recognises that there are systemic issues within the College, in our workplaces and in our broader society and these must be addressed.

The RANZCOG Board recently approved the development of a Bullying, Discrimination and Harassment Survey that will be distributed to all members and trainees. A similar survey was conducted in 2016 and it is timely for us to gather this important data again. The College will also form a BDH Advisory Working Group, which will include independent members. Both initiatives will inform the College's work in preventing bullying, discrimination, and harassment in the O&G specialty.

It has been a long time coming but work on the new College building, 1 Bowen Crescent, is nearing its first practical completion phase in mid-May. College House at Albert Street is in the process of being packed up as we get closer to our relocation date. I would like to extend my sincere gratitude and acknowledge the work of the Building Project Working Group led by Dr John Regan, and the Historical Collections Committee chaired by Dr Scott White, who have spent many hours reviewing the College's artefacts, books, and collections, as part of the relocation project. The College is steeped in rich history and tradition and we intend to take as much of this as we practically can to Bowen Crescent, preserving the rest appropriately.

July 2021 Council Week will be the very first Council Week held at Bowen Crescent and our new facilities, as well as the first hybrid Council Week we have hosted. The last meeting of the Eleventh College Council will also take place that week and we look forward to welcoming Councillors to Melbourne in July.

As always, I extend my thanks for the support, encouragement and direction of the RANZCOG Board and our President Dr Vijay Roach who have led the College from strength to strength over the past three years.

LEADERS IN FOCUS

Dr Nisha Khot
MBBS, MD, FRCOG, AFRACMA, FRANZCOG

This feature sees Dr Nisha Khot in conversation with women's health leaders in a broad range of leadership positions. We hope you find this an interesting and inspiring read.

Join the conversation on Twitter
#CelebratingLeadership @RANZCOG @Nishaobgyn

Prof Ruth Stewart DRANZCOG Adv

In this issue of *O&G Magazine*, I speak to Prof Ruth Stewart, Australia's second National Rural Health Commissioner. She has been called Australia's 'First Lady' of rural health. She is also a Diplomate of RANZCOG and worked as a GP obstetrician (GPO) in Camperdown in south-west Victoria for 22 years. Her PhD research examined the lessons learnt from a Managed Clinical Network of rural maternity services in south-west Victoria. Her experience of rural healthcare is not just professional; she herself was born prematurely in a bush nursing hospital in Victoria and, in turn, had three of her four children in a small rural hospital.

Prof Stewart lives on Thursday Island in the Torres Strait. She had held many leadership positions including Director of Rural Clinical Training at James Cook University, Director of Medical Training with Queensland Rural Generalist Program (2014–16), and President of the Australian College of Rural and Remote Medicine (ACRRM) (2016–18). She has been a board member of the Torres and Cape Hospital and Health Service, Rural Doctors Association of Australia, ACRRM and the Tropical Australian Academic Health Centre.

Incidentally, did you know that RANZCOG has approximately 1.5 times as many Diplomate members as Fellows? Our GPO colleagues far outnumber us specialists within the College. In recognition of their valuable contribution, Diplomates now have representation on the College Board. The College actively supports GPOs by providing refresher courses as well as co-ordinating the Advanced Diploma in obstetrics and gynaecology.

Why is it so important to keep rural maternity services open? If you missed it, I highly recommend this video entitled 'Beating Hearts of Australia' produced by RANZCOG that highlights how rural maternity services provide the beating heart of any community (https://vimeo.com/524091391).

What does a typical day for Australia's Rural Health Commissioner look like?

There isn't really any typical day. I am travelling a lot so what I do depends really on where I am. I like to start my day with a bike ride wherever I am and even though I am travelling, I try to travel with a bike, usually a mountain bike, so I can go for a ride every day. The first thing I do after my ride is to connect with my team – my EA to discuss the agenda for the day, to check I have all the information and documents I need for the meetings scheduled for the day. After that, I connect with one or more of my senior advisors to talk through the schedule for the day. I have a team of five advisors, including two senior advisors and a principal advisor who manages external relationships. My day is usually very structured with meetings, most often these days they are video-conferenced, but with a gradual return to travel in Australia, I am now beginning to have face-to-face meetings. I have just had a week where I travelled around western NSW visiting five rural communities where the government is funding innovative models of care. I spent the following week in Canberra meeting with politicians and key stakeholder groups and the Department of Health. My job is all about connections and communication and being the connector between community groups, peak bodies, key stakeholders and feeding their concerns and views to the Ministers for Heath and the Department of Health.

What made you choose the rural pathway?

I always wanted to be a rural doctor; I went into medicine with this intention without understanding it to be unusual at the time. I grew up in a country town and I wanted to be like the doctors I knew during my early years. They were very much of the model that we would now call rural generalists. I didn't particularly enjoy my medical course and, from time to time, I would think of all the other things I would rather be doing. Every time I said this, my mother would say to me, 'Look, before you decide on leaving

the course, how about you just spend a day or two with our local doctors. If you still think medicine is not what you want to do then you can drop out.' Each time I would do this, it made me realise that this was really what I wanted to do. My problem was that the work of rural doctors was pretty much invisible at the University of Melbourne where I was doing my medical degree and I worked out pretty quickly that if I wanted to be a rural doctor, I didn't need to impress anyone at the university because they didn't actually care about that kind of work. I think things have changed significantly now or at least I hope they have. I hope that aspiring rural doctors feel valued during their undergraduate years these days. But this certainly was not the case in the early 80s.

What advice would you give to medical students or junior doctors who may be considering a rural pathway but are unsure partly because they have experienced the attitude you describe toward rural medicine?

I think if you want to make a real difference to the health of Australians then the opportunities to make a tangible difference are in rural and remote medicine and Aboriginal and Torres Strait Islander health. These groups have the least access to healthcare and the worst health outcomes. Sometimes people think that there isn't a fulfilling career path in rural medicine, but my career demonstrates that there are lots of different things you can do in rural medicine. I have had a very active life as a clinician providing obstetric care. I have then moved to academia, done a PhD, been involved in medical politics and policy development and now in my current role, I spearhead future planning for rural healthcare development. I have had a very full life as a rural doctor and I have never gone to bed wondering if what I am doing makes a difference. I know it makes a difference.

Following on from this, how does a rural GPO find a pathway to academia and medical politics?

In the early 2000s, I had started to do a master's degree with a research project and I was on the board of ACRRM. I was really interested in exploring what was required to train rural doctors of the future. Being on the Board, I learned a lot about the principles and theories of medical education. A rural medical school (Deakin University) was starting up in south-west Victoria. At the time, I was a GPO in Camperdown and I looked at the faculty and thought that there really wasn't anyone on the faculty with knowledge or experience in rural medicine. So, I applied for one of the jobs and astounded myself more than anyone else by becoming the Associate Professor of General Practice/ Rural Medicine establishing the rural program for Deakin University. Along the way, I completed my PhD. In 2012, I moved to North Queensland to become the Director of Rural Clinical Training at James Cook University where I oversaw the doubling of rural clinical placements for the medical school. I continued to be on the Board of ACRRM and went on to become President. The pathways exist, one just has to find them. And where they don't exist, one has to make them and hope that others will follow.

How does Thursday Island fit into all of this?

My husband and I moved to North Queensland when I started at James Cook University and I said to my husband that he could choose where we lived just so long as it was in the JCU patch, and he chose Mareba, which is a town up on the Tablelands from Cairns. He started off as Senior Medical Officer in Mareba. He had a lot of governance and management experience from his previous roles in Victoria. He went on very quickly to take on leadership roles within the Cairns and Hinterland

Prof Ruth Stewart in a chopper over Thursday Island.

Rural Health Service. The position of Director of Medical Services at Torres Strait Health Service came up and I encouraged him to apply for that role because he is a change agent and I could see that he would be the person who would be able to lead the changes required in the service. He took up the position and that is when we moved to Thursday Island. He subsequently became the Executive Director of Medical Services for Torres and Cape Hospital and Health Service. Initially when we moved up there, we were both doing some clinical work but as our other roles became more senior, we both stopped our clinical work. So home is on Thursday Island, which is one of the smaller Torres Strait islands. Getting there involves flying from Cairns to Horn Island followed by a ferry to Thursday Island. You can also drive up Cape York but that is a much longer, arduous four-wheel-drive trip. I wouldn't recommend it more than once.

How do you balance your personal and professional life?

When I agreed to take on the role of National Rural Health Commissioner, my husband and I decided that we would prioritise spending time together. That meant that when the pandemic started, we decided that if travel was necessary, we would travel together so we wouldn't get stuck, apart from each other with state border closures. Both of us share a love of cycling. We prioritise staying connected to family and friends who are now scattered across Australia.

What do you see as the challenges for rural maternity care in Australia?

The biggest challenge is keeping rural maternity services open. In the last 30 years, 70% of rural birthing services have closed. The decision is often economic, but this means that rural women have to bear the cost of travel to access maternity care. We know that rural communities tend to be economically deprived, and this additional burden of cost is unfair. The decision making has often not been woman-centred. Safety statistics are quoted as another reason for closing birthing services. In my research, I found over 40 clinical audits of safety of rural maternity services and only two of them suggested that rural maternity services are less safe than urban services. When we looked at these two studies, there was ample evidence that they are flawed. It is important that we dispel this misconception that rural birthing units are unsafe. The quality of rural services is good but what is lacking is support from the system to maintain and continually improve the care rural women receive in pregnancy and during childbirth. The problem is that reopening a closed service takes much more time, money and effort. We have had some success stories with reopening closed units, but these are few and far between.

What would you tell your younger self if you had the chance to go back in time?

I would tell myself that being different can be an advantage. I was that medical student who got into medicine with an advantage in literature and communication. It used to worry me that there were others who remembered all the details of chemical bonds and cycles that I had difficulty managing. But in fact, being just adequate in the pure sciences but an excellent communicator has made me a better doctor and a more effective health activist. When it comes down to it, being a doctor is standing in the gap between the patient and the science and translating the science into simple terms to help patients make choices that are right for them. And doing this requires an understanding of science but more than this, it requires language and communication skills.

Do you have advice for aspiring women leaders?

You can do it and you should. I observed very early on in a clinical teaching session when the tutor asked us to do something, the men in the group immediately put their hands up while the women didn't. I thought to myself at the time, 'I know who the competent clinicians in this group are. Why have the competent women not stepped forward?'

It is not that men don't do a good job. It is that women want to be better than good before we will consider taking on a role. We need to recognise that sometimes you can do a job better if you are not perfect. And embrace learning on the job.

What does the future hold for you?

My current role is a political appointment and I feel a great sense of urgency to get things done. Things such as the national rural generalist program, increasing access for rural and remote communities to allied health services and reforms to primary care in Australia to improve access to healthcare for rural Australians. I didn't graduate with the goal of leading rural healthcare. I graduated wanting to become a good rural doctor and I was one for many years. There were occasions when I would get frustrated and look around and think, 'Why don't they...? Why doesn't someone...?'. Until I realised that there was no knight in shining armour coming to save rural health. It has got to be people like you and I who step up and take responsibility to be leaders. To be honest, this was a fairly challenging decision for me. I grew up under the strong influence of the tall poppy syndrome, so I had to overcome the sense of wanting to just fade into the background. It was in my early 40s that I thought that fading into the background doesn't seem to work for me. Even when I was standing in the background, people were looking to me either thinking that I should lead or getting cross with me because they felt I was undermining their leadership when I had no intention of doing this. I had to accept that I was a leader and focus on how to do it well. Its not that I can do things better, but I try hard to listen and reflect and communicate well. This has made all the difference in the way I have approached all my leadership roles.

Are you optimistic about the future of remote and rural healthcare?

Yes, I am optimistic, and it is the medical students, interns and junior trainees that make me optimistic. There are many more students who are not just interested but passionate about rural healthcare. It is now our responsibility to set up the systems that facilitate their career pathway into generalist rural training pathways. When we give students the opportunity to study and train in rural communities, they enjoy their experience, they can see the purpose and the difference they can make. At the moment, the paths to rural and remote practice look a bit like a Snakes and Ladders board and we need to make a clear pathway instead. My aim is to help redesign the system to make the path clear and easy to access for anyone who wants to be a rural doctor.

You can follow Prof Ruth Stewart on Twitter @raatusruth

Editorial

Dr Jared Watts
MBBS(Hons), MHM, MIPH, MPHTM, MRMed, FRANZCOG
Co-Director of O&G, WA Country Health Service
Medical Coordinator and Senior Lecturer,
Rural Clinical School of WA, UWA

My midwifery colleague leans over and whispers to me, 'It is like we live and work in another country.' We are currently sitting in the annual state meeting of clinical leaders in O&G. There are representatives from tertiary and smaller secondary city hospitals, a number of private hospitals and then us, representing 18 small- and medium-sized rural and remote obstetric units.

We have been discussing the different issues that each of us are facing across our health services. Some of the metropolitan issues are not as relevant to us, such as access to theatre or advanced laparoscopic equipment. There are also other issues that were once only rural problems, such as the syphilis outbreak in northern Australia, which has now become a state problem as it spreads south. We then have many common issues, such as staff shortages and the current 'covid baby boom' which is stretching resources, but often we have to deal with these problems quite differently.

While our city colleagues have to consider diverting patients to other hospitals or cancelling elective procedures, we have to contemplate quite different solutions. For example, there is no hospital we can bypass to in Kununurra, with the next obstetric unit over 800km away and across a state border. There are then many unique rural challenges. These include providing antenatal care for patients that live at least a two-day drive away from their closest hospital, the wet season and how it can close air strips and roads for months at a time and the challenge of providing termination services in small towns where 'everyone knows everyone.' In a world of subspecialisation, we also face the challenge of how we can train generalists and keep them skilled and able to manage anything that walks through the door, often with limited local resources.

In this issue of *O&G Magazine*, we invite you to take a trip with us across rural Australia and New Zealand to hear of these challenges firsthand. We invite you to set your alarm clock for a 4am flight with Dr Melville as she faces the challenge of providing termination services in rural areas and supporting the doctors in some of these smaller towns that risk their business and standing in the community by providing such services. Having seen the amazing sunrise and conquered any fear of flying in a small plane, we then head off on a helicopter from Thursday Island to provide antenatal care in some very remote areas. We will hear of the challenges Indigenous and remote women face when having to leave their family, traditional lands and support networks for 'sit down,' moving to a town that has a maternity unit in preparation for the birth.

We also hear from Kath Brundell and her team regarding how the distances women must travel to their closest maternity unit continues to grow, as smaller rural services are being closed down. With fewer rural obstetric units, Drs Roxburgh and Gardiner will then take us on a RFDS emergency flight to pick up a woman labouring in a rural area, discussing the challenges of trying to decide 'do we put this patient on a plane and risk a mid-air birth, or deliver them here with limited resources?'

Noting that we need more rural obstetric doctors, Dr Moore and her team will discuss the challenges of training and supporting GP obstetricians who can literally provide 'birth to grave' healthcare in rural areas. With the push for subspecialisation in all areas of medicine, Prof Permezel will explore the challenge the College faces in how to train rural general O&G specialists, such as A/Prof Pettigrew, who will then tell us about his 30 years of being a rural O&G and why you should 'head bush' with your career.

We sadly know that rural and Indigenous women have poorer health outcomes for many reasons, including access to healthcare and many social determinants of health. Therefore, as you make your 'covid safe' trip around rural Australia and New Zealand, we ask each and every doctor and midwife, irrespective of where you live and practise, to consider what you can do to help address this large disparity in health outcomes for rural women, their babies and families. While we are always looking for more 'bush doctors' who are up for an amazing adventure such as Dr Erwin describes in her article, we also are very appreciative of our city colleagues who are there to pick up the phone when we call. For our metropolitan colleagues we ask you to consider being a 'city-based bush champion' which means

considering what you can do, wherever you are, to improve obstetric and gynaecological outcomes for rural women.

There are many ways you can be a city-based bush champion. This may include becoming involved in telehealth, as discussed by Dr Williams, so rural and Indigenous women can access your specialised knowledge and skills. Maybe you can think about spending a week or two out in a rural area, sharing your subspecialist skills with rural doctors and patients. You could give a lecture to the RANZCOG Regional Fellows group, invite a rural doctor to come and upskill with you in the city or just appreciate that things are often challenging in rural areas and give positive and supportive advice on the phone, especially when things may not have gone to plan.

Being a city-based bush champion can also involve sometimes 'bending the rules', such as accepting a direct admission for a remote Indigenous patient, that yes, maybe could just have an outpatient appointment. But for many remote Indigenous women, where English might be a third language, they are already fearful coming to the city and with added challenges such as finding their accommodation and meals, they may not come at all, or make their way back home quickly.

We also love 'one stop shops' for our rural patents so they do not have to make multiple trips up and down to the city. If you see a referral for a rural patient that will likely need a hysteroscopy, consider blocking off a spot on your theatre list the same week or squeezing her on your list the following day. Each time she comes to the city will mean more time off work for her and her partner, extra costs associated with the travel, needing to find childcare and all these additional factors can often stop women accessing care.

Finally, if you are involved in policy development, always consider how a state or national policy will affect rural women and their access to health services. They are already some of the most vulnerable women in Australia and New Zealand, with limited access to healthcare.

An example we have seen of this is the mandating of the number of TVTs a surgeon needs to perform each year. With the implementation of this policy Australia wide, we saw the treatment option pretty much removed for many of our Indigenous and remote women. Many regional gynaecologists, who had performed this surgery for many years and audited their results, were stopped as there were not the numbers required in their local area. Many patients, in particular Indigenous women, do not want to travel to the city to have such procedures performed. Reasons include family responsibilities, fear of the city, extra costs or loss of income. Many rural specialists, including myself, have tried to organise local lists of TVTs for a certified visiting surgeon to come up and perform. We then faced the challenge of trying to get all the patients to the same hospital, on the same day. For our two attempts, this was thwarted by unexpected rain cutting off the road out of a remote community, 'sorry business' for another two patients, the greyhound bus being late once and then cancelled the second time and a patient being unwell on the day.

It is common for us in rural areas to have large 'did not attend' rates for our outpatients and theatre lists because of the weather, remote travel difficulties and the cultural needs of our patients. While we appreciate the TVT policy was designed to protect women, it has neglected some of our most vulnerable patients, by being applied to all city, regional and remote areas the same. Urogynae services, including pelvic floor physiotherapy, are extremely limited in rural areas, with many patients forced to wear incontinent pads all the time. We therefore need to carefully consider any similar future policies, such as for advanced laparoscopic surgery, as to how any such policy would affect Indigenous and rural and remote women's access to the service and treatment options.

Therefore, while we cannot easily travel at present, we hope you enjoy this issue of *O&G Magazine*, as it provides you an opportunity to take an armchair trip to rural and remote areas of Australia and New Zealand that often can 'seem like a different country.' Hopefully it will inspire you to think about rural O&G in your everyday practice and even better, inspire you to come join us for a few days, a couple of months or even a whole career! See you out bush soon!

Keeping rural maternity services open

Kath Brundell
BN, GDipMid, MMid
PhD student Deakin University
Lecturer Australian Catholic University

Prof Linda Sweet
PhD
Midwifery Chair, School of Nursing and Midwifery
Deakin University Victoria Australia
Centre for Quality and Patient Safety Research
Western Health Partnership Victoria Australia

Dr Vidanka Vasilevski
PhD Research Fellow,
School of Nursing and Midwifery
Deakin University Victoria Australia
Centre for Quality and Patient Safety Research
Western Health Partnership Victoria Australia

Adjunct Professor Tanya Farrell
Chair CCOPMM Senior Maternity Advisor
Safer Care Victoria
Latrobe University Victoria

Rural maternity service closure has been a consistent area of concern across the Australian health sector for several decades.[1] During this time we have seen the centralisation of services from rural areas to regional and metropolitan settings with higher maternity capability, and the closure of rural maternity care which shapes not only health service provision but the fabric of rural communities.[2]

A variety of pressures are evident when examining the sustainability of rural maternity services. These include community demand, staffing, maternity care models and accessibility, with particular consideration for clinical skill and resources to meet capability requirements. Maternity services require streamlined communication pathways between health services, appropriate maternal assessment, and care planning.[3]

Every state and territory in Australia has a separate maternity service framework which guides health service executives in the allocation of resources, whilst in New Zealand, maternity care operates under the maternity standards which provide national directives for district health boards related to access of continuity of care from a lead maternity carer (LMC). These governance documents are quite different in structure, some are frameworks and others ministerial directives. There is varied consistency in application from country to country and jurisdiction to jurisdiction, and they have been produced in an effort to provide an overview of what is needed, to assure a safe and certain ability to deliver a set level of maternity care.

Time, effort, maternity consultation and commitment are required to rise to the challenge when assuring the viability of rural maternity services.[4] These pressures are a reality for many organisations seeking to sustain and retain safe rural maternity services for women, however not insurmountable.[5] A sense of rural health service pressure has seen the concept of maternity provision framed in the negative, as a risk, something that is too costly or dangerous.[6] Whilst maternal wellbeing should be carefully assessed for appropriateness alongside service capability, this does not mean that birth is innately 'risky' or that rural maternity services should be considered 'too hot to handle'. Rural maternity service closure may seem a simple option, but this notion is challenged when considering the immediate and long-term benefits rural maternity access has on women, families, and communities.[7]

Maternity governance

In the absence of a fully evaluated current Australian (national) maternity service capability framework, maternity services rely on markedly variable state and territory governance documents when assessing rural capability.[8,9] Several Australian jurisdictions operate maternity capability under the auspice of clinical services, while others designate specific policy to maternity and neonatal capability. The lack of a formal network and communication strategy built into the majority of maternity capability policy

is striking. To enable rural services to provide models of maternity care that are high quality and safe, expected referral pathways and network communication strategies should be mapped accordingly and embedded in policy documents.[10]

The flow-on effect for rural services who work to employ clear governance processes at ground level is that maternity services can be provided alongside a detailed understanding of how to best structure and plan maternity care in their own settings. The maternity service capability framework then becomes a complete and functional document which also instructs the expectation for higher capability receival services in support of ongoing rural maternity care.[11] This in turn enables consistency in rural maternity operations and continuity for women across far reaching geographical ranges.

By comparison, New Zealand maternity standards provide operational policy that guides the development, funding, and evaluation of maternity services, which underpins primary maternity care and secondary services overseen by District Health Boards.[12] The New Zealand maternity system is based in continuity of care, and as such LMCs, midwives or GP obstetricians, provide care for women.[13]

In rural areas self-employed midwives are the most common LMC, funded by a contract for service arrangement.[14] A LMC midwife is supported by the guidelines for consultation with obstetric and related medical services which guide practice and referral. These guidelines are collaborative and agreed to by consumers, midwives, and obstetricians.[15] The burden to retain LMCs to rural and remote areas in New Zealand is also an ongoing concern, with LMC payments largely based in intrapartum care. Referral from primary care to higher capability services leads to a loss of wage, additionally impacted by lower caseload opportunity in rural and remote areas. Whilst this pressure exists, the self determination of midwives as self-employed practitioners able to control and organise their own working environment appears to mitigate other pressures.

Rural connection to safety

Many rural clinicians recognise that communities are intertwined by generational bonds. Influence and narratives pass from family to family, or through community connection. There is a comfort and continuity for women and families in knowing who key maternity providers are, or simply knowing the health service history. The concept of continuity and consistency in maternity care spans beyond the pregnancy and birth continuum, it is the bedrock that forms trust in local health governance.[16]

The maternal and neonatal benefit of continuity of care has been evidenced.[17] We understand women cared for by a known provider have better birth outcomes, less premature birth, and reduced anxiety associated with pregnancy and birth.[18] To be known by a midwife or GP Obstetrician should not be underappreciated as an integral element of safety for women and babies in the rural sector.

A commitment to continuity in maternity care in the public health system, the sector most often accessed by rural women, requires an evaluation in the model of care, or structure of service, to best meet the needs of women. This may mean a normal-risk maternity service caring from pregnancy through to postpartum, care provided in the antenatal and postnatal period only, or a rural maternity service providing care as a satellite campus under the governance of an organisation with a higher level of maternity capability. Support for local health service executives to maintain rural service provision, with a clear communication and referral pathway enables a safe assurance of care, localised access for women to maternity care, and continuity rather than closure.

The budget

Closure of services simply means the transfer of pressure with ongoing impact on women and families. Factors such as financial costs and distress caused by travel and separation heighten the social risks experienced by rural families as a result of maternity service closure. Financial cost has been a common consideration by health service executives when considering the viability of their rural maternity services. Whilst budget constraints are an inevitable point of contention for rural health services, cost effective maternity models have been successfully adopted in rural Australia, with salaried midwifery group practice (MGP) options to effectively support maternity workforces.[19]

The great challenge for rural maternity services and their communities is operational expense versus long-term financial costs, often absorbed by maternal and child health, allied health or support services tasked with building maternal and family resilience after pregnancy, largely evidenced as emotional trauma.[20] Rural maternity services have the opportunity to offset the potential for intrapartum transfer, roadside birth, or birth before arrival at hospital, by critically considering health service and community strengths or barriers when structuring a maternity service to meet women's needs and provide women with a clear and agreed pathway of care.

Working as one

Rural midwives, nurses and GP's often know each other outside their professional roles. Rural clinicians understand that women cannot afford disconnect between disciplines and deserve better. Improved networking amongst rural maternity clinicians has been reflected as a valuable support mechanism in retaining midwives in the rural sector.[21] In this way, the strength of rural connection can be harnessed for the benefit of women. We need to reset our notions of what should be, consider what is, and what could be. Women seeing and hearing of birthing in local community strengthens community.

Birth knowledge shared between women is often framed in the negative; however, open relationships in rural communities can be the sharing of goodwill toward health services. It can also be the sharing of trust in establishments and with practitioners.[16] Rural maternity services need to be part of conversations with their community and foster open and transparent discussions.

Pressure arising from rural communities to maintain maternity services will inevitably be the deciding factor for service longevity, but health service executives and boards must engage with people where they are and ensure the communities perspective is heard and valued. A defunct position is to offer public attendance in a health service setting. A far more viable option would be to meet with people in commonly occupied community spaces, such as library time, kindergarten, and schools. These are where health service executives will find women and families. This is where community response will be garnered, and women's needs articulated. We have an opportunity to think laterally, restructure services, and develop network

pathways that support and maintain maternity care as a valuable community service.

Let's change the conversation, reframe the concept of risk, challenge centralisation, and change our thinking towards enhancing the safety of local rural services. For many women, rural services enhance care. Let's stop perpetuating the idea that rural services are 'risky' and get busy sustaining safe options and access for rural women.

References

1. Sweet L, Boon V, Brinkworth V, et al. Birthing in rural South Australia: The changing landscape over 20 years. *Australian Journal of Rural Health*. 2015;23(6):332-8.
2. Kildea S, McGhie A, Gao Y, et al. Babies born before arrival to hospital and maternity unit closures in Queensland and Australia. 2015;28(3):236-45.
3. Commonwealth of Australia. National maternity services capability framework. North Adelaide: Commonwealth of Australia; 2013.
4. Toohill J, Chadha Y, Nowlan S. An interactive decision-making framework (i-DMF) to scale up maternity continuity of carer models. *Journal of Research in Nursing*. 2020;25(6-7):561-576.
5. Durst M, Rolfe M, Longman J, et al. Local birthing services for rural women: Adaptation of a rural New South Wales maternity service. *Australian Journal of Rural Health.* 2016;24(6):385-91.
6. Barclay L, Kornelsen J, Longman J, et al. Reconceptualising risk: Perceptions of risk in rural and remote maternity service planning. *Midwifery*. 2016;38:63-70.
7. Lewis M, Passant L, Cooke H, Challis D. Women's experiences of antenatal transfer for threatened premature labour in NSW: A qualitative study. *Women and Birth.* 2019;33(6):535-542.
8. Victorian State Government. Capability frameworks for maternity and newborn services. *Melbourne: Department of Health and Human Services.*; 2019.
9. Government of Western Australia. WA Health clinical services framework 2014-2024. Perth: *Department of Health*; 2015.
10. Government of South Australia. Clinical services capability framework: Maternity and neonatal services. Adelaide: SA Health; 2015.
11. New South Wales Government. NSW maternity and neonatal service capability framework. Sydney: NSW Health; 2016.
12. Ministry of Health. New Zealand maternity standards: A set of standards to guide the planning, funding and monitoring of maternity services by the ministry of health and district health boards. Wellington: *Ministry of Health*; 2011.
13. Ministry of Health. Section 88 primary maternity services notice 2007. New Zealand: *Ministry of Health*; 2007.
14. Crowther S, Smythe L, Spence D. Unsettling moods in rural midwifery practice. *Women and Birth.* 2019;31(1):59-66.
15. Ministry of Health. Guidelines for consultation with obstetric and related medical services (Referral Guidelines). Wellington: *Ministry of Health*; 2012.
16. Crowther S, Smythe E. Open, trusting relationships underpin safety in rural maternity a hermeneutic phenomenology study. *BMC Pregnancy and Childbirth*. 2016;16(1):1-11.
17. Sandall J, Soltani H, Gates S, et al. Midwife-led continuity models versus other models of care for childbearing women. *The Cochrane Database of Systematic Reviews*. 2016;4:CD004667.
18. McLachlan H, McCourt C, Coxon K, Forster D. Midwifery Continuity of Care; Is midwifery continuity of care better for women and babies? What is the evidence? Chatswood: *Elsevier Health Sciences*; 2019. p. 1-20.
19. Durst M, Rolfe M, Longman J, et al. Local birthing services for rural women: Adaptation of a rural New South Wales maternity service. *Australian Journal of Rural Health.* 2016;24(6):385-91.
20. Priddis H, Keedle H, Dahlen H. The perfect storm of trauma: The experiences of women who have experienced birth trauma and subsequently accessed residential parenting services in Australia. *Women and Birth.* 2018;31(1):17-24.
21. Daellenbach R, Davies L, Kensington M, et al. Rural midwifery practice in Aotearoa/New Zealand: Strengths, vulnerabilities, opportunities and challenges. *New Zealand College of Midwives Journal.* 2020;56.

A career in regional Australia: why go bush?

Dr Romany Erwin
MBBS MPH FRANZCOG
Staff Specialist O&G Royal Darwin Hospital

A/Prof Ian Pettigrew
MBBS, FRANZCOG, FRCOG
Regional Fellow since 1996. Mildura

As a new Fellow, many of us feel daunted by the prospect of being a generalist. With the medicalisation of gynaecology, the further subspecialisation of our craft, and the changed conditions we train under, it can be difficult to feel confident in providing every aspect of women's healthcare that a regional community needs. Even more intimidating can be leaving the safe confines of the familiar environment in which we trained.

However, what I found as a new Fellow in a regional centre is that you are working amongst colleagues that have a vested interest in mentoring and supporting you. These experienced and wise O&G specialists want and need you to be the best you can be, so that one day you will be able to carry on caring for their community.

So, what did my first year as a consultant look like?

As a consultant, I taught trainees gynaecological surgery, including everything from total laparoscopic hysterectomy to pelvic floor repairs and laparotomies. I supervised breech births and emergency classical caesareans, trained future general practitioner obstetricians (GPOs), taught medical students, resident medical officers, and supported midwifery educators to deliver Practical Obstetric Multi Professional Training. I had to learn quickly how to help plan retrievals with CareFlight from across the vast 'top end.' I even participated in a delicate, logistical, web of time-sensitive couriers and flights, to enable an ovarian harvest to be performed for the first time in our region, without the woman having to travel away from family and delay her medical treatment.

I travel a ten-minute commute to work most days but also might travel 873 km to do my outreach gynae clinic as far away as Lajamanu, a small town of the Northern Territory. We carry everything we need, including the colposcope and ultrasound, all on our little chartered plane. Our outreach service is an important piece of the puzzle of health equity, and it is a privilege to participate in it. I have learnt so much about what it means to provide woman-centered care, from our midwives who run the service to the women I get to 'yarn' with when I am in the community.

I have had the opportunity to work in Aboriginal community controlled clinics, finally getting to experience healthcare outside of the hospital setting. I have even spent a short stint trying my best to cover GPO services in Nhulunbuy and Katherine, which is by far the best way to understand the very unique, wide-ranging and highly developed skillset GPOs have that sets them apart from the O&G specialist.

I could never have dreamt of all that I would encounter and experience in my first year of being an O&G consultant, or how vastly interesting and rewarding being a Regional Fellow would be. I can only imagine what the rest of my career will bring.

So, should you start your career as a Regional Fellow? Absolutely.

The lifetime experience of a 'veteran' Regional Fellow

I write this article as a Regional Fellow, who was originally a 'Provincial Fellow'. The definition of a Provincial Fellow was; 'A Fellow in an area more than 100 km from a tertiary centre and where there were less than ten specialists locally'.

A Regional Fellow is now defined using the Modified Monash Model. This Australian Government Department of Health workforce classification system defines whether a location is city, rural, remote or very remote. Its data is collected by the Australian Bureau of Statistics.

Most of what I will say also applies to GPOs in regional and rural areas.

It was 1969 when I first became aware of the inequality and inequity of women's health in rural and remote areas. I had just finished my PGY1 year with a rotation to a regional hospital, when I became aware of the inappropriate management of trophoblastic disease, having spent some time dealing with the disease at the Royal Women's Hospital as a student. I was then approached by a rural GP, some 400 km from Melbourne, to do a locum for him in January 1970. This also led me to becoming more acutely aware of how difficult it was to maintain good maternity services in rural areas.

Having obtained my specialist qualification, the FRACOG as it was then, I decided to move to a regional area to continue my practice. There were many reasons why I decided to 'go regional.'

Demographics

The majority of Australians live in the coastal regions Australia, with a few exceptions such as Canberra, Toowoomba, Bendigo and Ballarat, which are all large inland towns. Approximately 30% of Australians live outside major cities; these are the people that regional, rural and remote medical practitioners serve. With a countrywide population of just over 26 million, more than 11.6 million Australians do not have local access to tertiary level obstetric services.

Equality and equity

When I started my career, I worked in a region that had GP services which were also supported by physicians, surgeons and anaesthetic services. Some of the GPs also had interests in paediatrics and obstetrics. The larger district hospital supported several smaller maternity units in the surrounding area. I was able to provide the area with a specialist O&G service, which helped many local women avoid the need to travel to a capital city for ongoing management.

This was in the time before subspecialities, and so my practice covered a full range of obstetrics and gynaecology. I worked with the surgeons in treating oncology cases and with physicians for women with medical conditions in pregnancy. I also developed skills in ultrasound and infertility.

Today, most regional hospitals can provide facilities for a whole range of obstetric and gynaecology procedures, but there is still the need to transfer women for oncology, urogynaecology, tertiary level ultrasounds and maternal-fetal medical problems. Many of these women can still be cared for in a shared care arrangement. Many regional centres are also developing assisted reproductive technology capabilities. Again, the need for travel is reducing.

Lifestyle

Living in a regional area has many benefits. Most regional cities have great schools, including public and private. This means it is easy to get involved with the school community at all levels. When children are involved in activities such as sport, drama or music, being in a regional area, doctor parents can often still attend these activities without being too far away from the practice and/or hospital.

Most regional areas are blessed with cultural resources including performing art centres, art galleries and local entertainment. Many also have renowned visiting performing arts events, such as Bell Shakespeare and Opera Australia, who have both visited my town this year.

Regional areas also have many high-level sporting activities and even offer sports that are difficult to participate in in urban areas such as equestrian, fishing and shooting. Local sporting competitions are often a resource for state-level teams including the AFL, netball, soccer and rugby. It is easy to become involved in all aspects of sport from playing to coaching and administration.

Most regional centres have plenty of outstanding places to eat, usually using local produce that is of a very high quality. There is also a wide variety of food options, thanks to diverse multicultural communities. Many regional restaurants feature in good food guides and regional areas host specific food and wine festivals. For those who like to cook at home, local farmers markets are a great source of high-quality, home-grown produce.

There is always minimal traffic and usually it is very easy to get to work, except for the odd chance of hitting the local 'traffic jam' at school pick-up and drop-off times.

Housing and the cost of living are much cheaper than living in the big cities. There is also the option to become a producer and grow your own food, in your garden, farm or even open up a pub!

Workplace

Regional hospitals vary in size and bed numbers, and many regional centres have both public and private hospitals with varying degrees of capability. In hospitals that are more remote, medical staff numbers are usually low and there is some freedom from the medical politics and competition that often occurs in major hospitals in larger cities.

Relationships between nursing, midwifery and medical staff is usually very positive and respectful, as there is an understanding of the need for close collaboration in providing care for rural and remote women. Relations between specialists, GPOs and other health-care providers is also important and again more likely to be very positive compared to larger centres and services.

Whilst working and living in regional areas, there are many opportunities to offer outreach services to even more isolated areas. This allows you to further use and extend your skills in providing services to these remote women. Many regional areas also have large populations of Indigenous women, with regional O&G doctors able to become involved in providing culturally appropriate services.

There can still be some bureaucratic problems that emanate from health departments although relationships with hospital administrations do tend to be more amicable and more personal than in the larger cities. Working in regional areas does involve risk management as well as being able to arrange transfers to larger centres when needed. Ongoing collaboration and communication with other specialists such as anaesthetists and paediatricians is also very important.

Teaching

Most regional hospitals are involved in teaching at all levels, from university students through to advanced FRANZCOG trainees. Teaching students is an important way in which we can assist in recruiting doctors to rural and regional areas and hence the current proliferation of rural clinical schools.

It can be a symbiotic relationship with students asking questions and reminding you to brush up before giving a tutorial or lecture; RANZCOG trainees may even be able to teach you about the latest developments and techniques. There is also the ability to get involved in nursing, midwifery and community education programs.

Practice profile

One of the advantages of regional/rural practice is that you can become more involved with your patients as many become friends or acquaintances and you often see them socially. It is also possible to look after them 'from womb to tomb'. Understandably, it can be more difficult to deal with any adverse outcomes because of the closeness within the community.

The range of services depends very much on what you would want to do within your skill set and the hospital capabilities. It is often possible to arrange for assistance from a colleague or a GP. Many regional cites will have an older or 'veteran' Fellow who is more than willing to assist and mentor you.

Conclusion

Life in a regional city has many advantages and the odd disadvantage. As I said at the start, though I have written this from the perspective of a specialist, I have a great deal of admiration for GPOs who have the benefit of being able to look after the whole family and who provide an essential service to women in regional, rural and remote areas. I also have a great deal of respect for the hospital and community midwives and other health-care workers who make it possible for us to all work in a team to care for the rural and remote women of Australia, providing a safe service close to their home and support network.

GPOs in regional, rural & remote Australia

Dr Sarah Moore
MBBS, DRANZCOG, FRACGP, FARGP, FACRRM

Dr Carly Roxburgh
MBBS, DRANZCOG Adv, FRACGP, DCH

Dr Anne Karczub
MBBS, FRANZCOG

General practitioner obstetricians (GPOs) provide the backbone to many rural and remote maternity services across Australia. They are involved in preconception care, antenatal, intrapartum and postpartum care, and provide care to the woman, her infant and family across the lifespan. They are in for the long haul.

The number of GPOs is in decline, due to factors including retirement of older doctors, maternity unit closures and substitution of GPO roles by midwives or junior doctors (Figure 1). We have been actively working to reverse this trend. In this article, we will discuss the importance of GPOs, consider barriers to GPO training, then share some ideas that we are using to bolster GPO training and retention in Western Australia.

Defining GP obstetrics and GPOs

For the purpose of this article, we define GPO as a GP who is involved not just in antepartum and postpartum care but also participates in the delivery of intrapartum care.[1] In Australia and New Zealand, there are two levels of GPOs: those with a basic DRANZCOG, whose scope of practice includes non-complex deliveries more advanced gynaecological procedures, and those with an advanced DRANZCOG, whose scope of practice extends to complex deliveries, advanced gynaecological procedures and performance of basic early-and late-pregnancy ultrasound scanning.[2]

The current state of play

As of March 2021, there are 2070 basic diplomates and 561 advanced diplomates registered with RANZCOG; however, it is unknown how many are actually working to their full scope of practice. As a group, diplomates make up two-thirds of College membership.

Why we need GPOs

They provide holistic, integrated care of the woman and her family

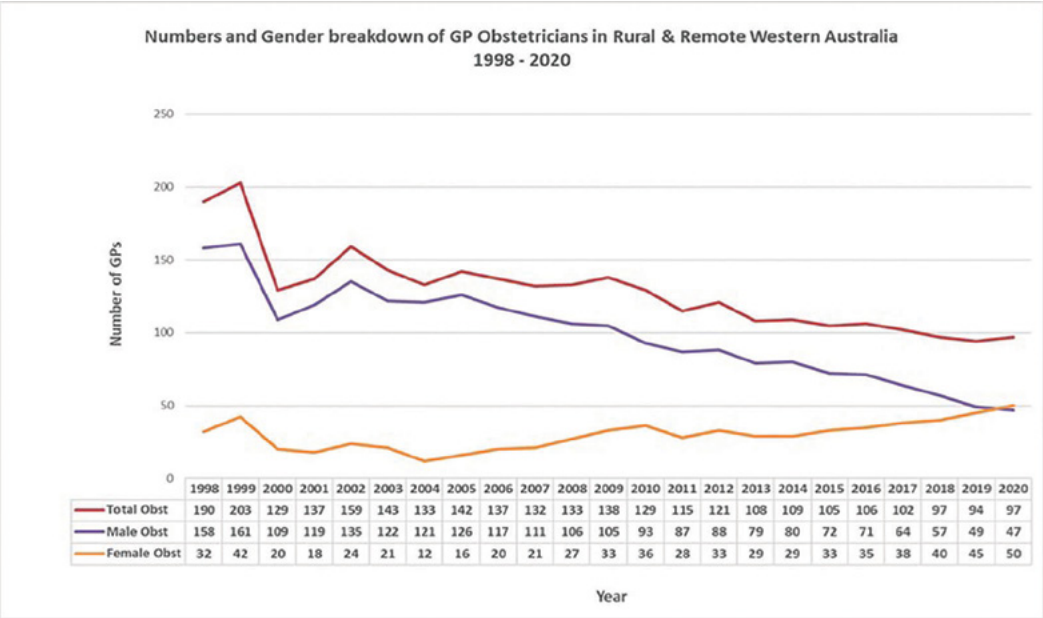
GPOs are in the privileged position where they are able to provide not only obstetric but also medical and mental healthcare to women and their families. GPOs understand the individual, their family and their community, allowing them to provide unique, holistic support to the entire family unit.

They provide longitudinal continuity of care

As evidenced by the literature around midwifery continuity-of-care models, women value receiving their care from a known healthcare provider throughout their pregnancy, birth and postpartum, and their outcomes are improved as a result.[3,4] GPOs often provide an extension of this longitudinal care, providing care from preconception to far beyond the six week postpartum check, ensuring that women and their baby receive true continuity of care.

They support maternity units close to where women live

It is well documented that women value being able to give birth close to home, particularly Aboriginal and Torres Strait Islander women.[5] Maternity units supported by GPOs extend the range of services that can be provided on-site, ensuring that birthing women have access to effective analgesia, obstetric input during labour for more complex deliveries, and medical presence in the event of an obstetric emergency and/or neonatal resuscitation, optimising safety while maintaining access to local support networks.



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Obst	190	203	129	137	159	143	133	142	137	132	133	138	129	115	121	108	109	105	106	102	97	94	97
Male Obst	158	161	109	119	135	122	121	126	117	111	106	105	93	87	88	79	80	72	71	64	57	49	47
Female Obst	32	42	20	18	24	21	12	16	20	21	27	33	36	28	33	29	29	33	35	38	40	45	50

*** Peel Region GPs removed from the dataset from 2017 onwards due to changes in rural classification boundaries**
**** 2020 data is yet to be published and yet to be verified. Retrieved 26/3/2021**
Source: Rural Health West Workforce Analysis Datasets 1998–2020

Figure 1. Numbers and gender breakdown of GPOs in rural and remote WA 1998–2020.

They support their specialist obstetric and paediatric colleagues

This is particularly relevant to regional centres where there may only be one or two specialists covering the roster over a large geographical area. GPOs make up an integral part of the maternity team antenatally, intrapartum and postpartum, allowing sustainable rostering and service provision.

They provide general practice services to their communities

GPOs have a broad skill set in addition to maternity care. A single practitioner can concurrently provide essential general practice and emergency services in rural and remote locations.

So why is training GPOs so difficult?

Uncertainty about future job prospects

Lack of clear career pathways and exposure to negative stories of rural maternity unit closures or exclusion of GPOs results in anxiety about career prospects. Doctors in training require clear training pathways with viable job options upon completion, without having to relocate again and again.

Overlapping scope of practice with midwives

Unfortunately, there is a perception that GPO and midwifery care is competitive rather than complementary. In some instances, midwives may take over antenatal care to the exclusion of GPOs and liaise directly with their specialist obstetric colleagues when support is required. This results in a loss of access to holistic, integrated and continuity of care that GPOs can provide to women in collaboration with midwives.

Competition with specialist obstetric colleagues

Again, it is unfortunate that GPOs and specialists sometimes see one another as rivals rather than part of the same team. Some specialist obstetricians have concerns regarding standards of GPO practice, which leads to an unwillingness to back up their GPO colleagues. Further, some GPOs are hesitant to refer moderate-risk women to their specialist colleagues due to concerns that this may result in care being taken over unnecessarily, resulting in late requests for support that can compromise patient care. Mutual distrust is a significant barrier to providing woman-centred care.

Financial concerns

In order to be sustainable, GPO models of care must be financially viable. This is becoming increasingly difficult due to the competition that is arising between midwifery and specialist colleagues. On-call arrangements and salary versus fee-for-service models add complexity.

Lifestyle concerns

Many GPOs are now seeking positive work-life balance, which can be a challenge when juggling regular on-call services, family demands and their partner's career. This can be compounded by lack of flexibility of maternity units to accommodate GPO's unique needs.

High community expectation and litigation in obstetrics

Communities have expectations for obstetric care to be of a very high standard. When adverse obstetric outcomes occur, litigation is becoming more common. This is on a background of increased obstetric risk associated with higher rates of older women, obesity and assisted fertility (to name a few).

Fitting DRANZCOG training into GP training

GP registrars are required to demonstrate that they have performed sufficient diversity of skills during their training. GP registrars who complete their

DRANZCOG training prior to commencing their GP training are under pressure to maintain their obstetrics skills while also acquiring new clinical skills during their GP training. This can be difficult to achieve and may lead to obstetric de-skilling.

Concerns regarding experience when newly qualified

With increasing competition for practical experience during hospital training, many newly graduated diplomates do not feel competent or confident to work autonomously as a GPO, particularly in rural towns with limited back up.

Feminisation of workforce and lack of re-skilling mechanisms

Rural Health West data indicates that the number of female GPOs is on the rise (Figure 1). Many newly qualified female GPOs take time off for their own maternity leave then need to regain confidence and skills when returning to clinical practice. Access to financially viable and family-friendly options for re-skilling are limited and can be a major barrier to GPOs returning to the workforce after a period of leave.

Credentialling issues

GPOs are increasingly scrutinised with regards to recency and frequency of experience in obstetrics skills when applying for hospital credentialing. These skills can be difficult to maintain in maternity units with smaller birth numbers and access to upskilling is limited.

The case for GPOs with basic and advanced DRANZCOG

There is a perception in some jurisdictions that all GPOs need to have advanced skills in order to provide the services required in regional and rural maternity units. We argue that there is also a place for basic diplomates for a number of important reasons. In small rural units, where rosters require GPOs to be on-call frequently, basic diplomates can be first on-call for non-complex obstetrics, allowing advanced diplomates to be second on-call for complex deliveries, which are less common. Further to this, basic diplomates can provide neonatal resuscitation in the event of complex deliveries. Finally, having a balance of basic and advanced diplomates ensures exposure to complex deliveries is not diluted and advanced diplomates have the opportunity to maintain these important skills.

How can we encourage and support GP obstetrics?

The continuation of GP obstetrics is predicated on a conviction that GPOs are an essential part of the delivery of obstetric care, particularly in regional, rural and remote Australia. For GP obstetrics to thrive, it needs the advocacy and support of its specialist O&G colleagues. O&G specialists must promote GP obstetrics as a career choice, actively participate in GPO training and upskilling, and work as supportive colleagues to GPOs.

There has been much discussion and indeed implementation of various strategies to encourage and support a career in GP obstetrics. These strategies need to be evaluated and successful strategies shared between jurisdictions. Funding for GPO training and support programs must be available, targeted and flexible.

Exposure of medical students and young doctors to successful models of GP obstetric care and inspiring GPOs is key to planting the idea of a career as a GPO.

Once trained, measures to build confidence and competence and maintain skills are required. With the feminisation of the GPO workforce, and time taken off for family, reskilling programs are vital to retain female GPOs in this career.

The following are examples of initiatives undertaken in WA to encourage GP obstetrics and support GP obstetricians in WA

GP Obstetric Western Australian Advisory Group (GPOWAAG)

This group was created in 2007 to oversee the GPO mentoring program. The program provides funding and individualised support to newly qualified GPOs by nominated experienced GPO mentors in the first six to 12 months of GPO life. Evaluation of this program indicates success in building confidence and competence. There have been high rates of retention of GPOs in towns where they undertake their training and mentorship. GPOWAAG has also strengthened communication and relationships between the many stakeholders who train and employ GPOs.

Supervised upskilling placements

Rural Health West, WA 's rural workforce agency, co-ordinates an extensive GPO upskilling placement program in high volume obstetric units. This program supports GPOs to attend tertiary and secondary maternity hospitals for one to two weeks of intensive upskilling to maintain GPO skills.

Rural GP Obstetric & Gynaecology forum

This new professional development program, run annually over a weekend, is designed to provide GPOs with the opportunity to fulfil their CPD requirements and maintain credentialing with WA Country Health Services.

GP Obstetrics Think Tank

An annual evening event held in Perth that brings together a range of stakeholders invested in supporting GPOs. This allows networking, presentation of relevant information to GPOs and discussion about potential solutions to issues.

WA GP Obstetric Network

WAGPON was established in 2011 to provide a safe and nurturing space for GPOs to support one another and maintain strong morale amongst the GPO workforce. WAGPON has a website (www.wagpon.com.au) and sends a monthly email newsletter with relevant educational events, upskilling opportunities, job opportunities and locum work. WAGPON also aims to inform medical students and junior doctors about training and career opportunities.

In summary, GPOs are an essential part of Australian maternity services, providing integrated, continuity of care to women and their families in both country and city settings. GP obstetrics must continue and it is incumbent upon us all to find and implement solutions to the issues that confront it.

References

1. Donnolley N, Butler-Henderson K, Chapman M, Sullivan E. The development of a classification system for maternity models of care. *Health Inf Manag.* 2016;45(2): 64-70.
2. RANZCOG. Certificate in Women's Health & DRANZCOG Melbourne: College House; 2019. Available from www.ranzcog.edu.au/training/certificate-diploma
3. Sandall J, Soltani H, Gates S, et al. Midwife-led continuity models versus other models of care for childbearing women. *Cochrane Database Syst* Rev 2016;28(4):CD004667.

Full reference list available online.

Waiting houses: birth in the Torres Strait Islands

Hannah Bettison
Clinical Midwife
Bachelor of Midwifery
Queensland Health Queensland Government

I would like to begin by acknowledging the Muralag people, Traditional Custodians of the land and surrounding seas of Waiben, and pay my respects to their Elders past, present and emerging. I thank the Muralag people, big eso, for letting me live on their land and be part of their community. I extend that respect to all Traditional Custodians of the land and surrounds seas of all the Islands throughout the Torres Straight and pay my respects to their Elders past, present and emerging. I also extend that respect to all Aboriginal peoples and Torres Strait Peoples with whom we all live and work with throughout Australia.

The care provided in rural and remote Australia to First Nations women who require birthing services is just as complex and multifaceted as the waterways that the Torres Strait Islands inhabit.

A helicopter lands on the helipad just outside the maternity doors of Thursday Island Hospital (TIH). The blades thud and seem palpable. The midwives and doctors jump in and within minutes the sound fades into the distance as the chopper moves towards the islands that make up this breathtakingly beautiful region of Australia.

The midwives are heading off to the outreach clinics on the outer Islands for booking in appointments, routine antenatal care, pathology collection, birth preparation and postnatal visits. Jammed into their small bag are all that they may need, including the GP Obstetrician's on-call roster. This will ensure they have the means to contact them for support if required. The list of women needing their maternity care swells and contracts, just like the bellies of the mothers within this unique and remote area. The women are strong and their connection to land, water, and Country is ever present.

The continuity model of care midwifery group practice (MGP) utilised at TIH covers an area of roughly 48,000 square kilometres, from the edge of Papua New Guinea down through the northernmost cape of Queensland. The Torres Strait Islands comprise more than 270 small islands, of which 18 are inhabited. Our midwifery team regularly visits 14. Our service also covers five of the closest communities in the Northern Peninsula Area (NPA).

Torres Strait Islander women here have been required to relocate from their home communities to Thursday Island since the early 1940s when hospital-based maternity services became available in the region. Relocation means leaving their families behind, from 36 weeks, to stay in a hostel to await labour and birth. Their room will have a bed and they will share a fridge and some simple cooking facilities. Young children can accompany their mother (usually under two years of age); however, issues can arise if the expectant mother goes into labour before their support person arrives two to three weeks later (38–39 weeks). The tragedy of this relocation lies in the fact that one's sense of community is gone. Women may become isolated, especially for those who do not have extended family on the Island. Often the women have only one elected support person by their side during their intrapartum and initial postpartum journey.

Commuting to the hospital for ultrasounds and GP obstetric appointments is not as simple as a 20-minute drive down the road. For some women, their day starts with a 6am ferry ride from the NPA, followed by appointments and a mad dash back to the wharf to return home that evening. For others, it's an early morning flight, a bus ride to the wharf and a ferry ride to make it to Thursday Island for their appointment. Often this is followed by a night's stay, as the flight timetable doesn't allow for day trips if multiple appointments are required. Available accommodation is often full with other women expecting a baby, and also with other individuals dealing with complex medical challenges who require higher-level facility reviews and treatments that are not available in the community and local primary healthcare facilities (PHC). During very busy periods, the hostels' ability to ensure cultural safety by keeping separate male and female areas, can become impossible and in said instances women may need to stay the night in the hospital.

As noted above, maternity services within the Torres and Cape Islands were established many years ago; however, it was not until June 2017 that the MGP model took hold. The vision was to create a standard where 100% of women accessing maternity care

through TIH would have a known midwife. The midwife would be inclusive of the cultural support of our Aboriginal and Torres Strait Islander health workers and our assistants in midwifery. Cohesive relationships between medical and midwifery models have led to the success of the service, where women are held at the centre of their care and each of their respective and unique experiences is held by their own known primary midwife.

Medical officers, midwives and diabetic educators meet weekly to coordinate and collaborate on the care of all women (including those who are high risk) and seek support and guidance from the closest referral centres that are at least 800 km away. Cairns is the closest, but Townsville and Brisbane may also be used depending on the particular need and acuity.

At times, clinical context gets lost, with tertiary facilities unable to conceptualise the fastest possible way to transfer care that is not an RFDS service. It can be days away, not hours. Decisions are made to activate retrievals from outer Islands. This can happen when preterm labour occurs, or any number of other significant obstetric emergencies. In these instances, consults via telehealth occur between TIH and the relevant PHC that are supported by on-the-ground remote area nurses; many of which are not obstetric trained. The outcome of these retrievals is obviously clinically dependent, and in some circumstances, the woman may be required to travel down south to a larger tertiary facility and remain there until birth; yet again removed from their community and support networks, often alone. As the tides shift and change, so does the care planning and delivery of services. Yet one key philosophy remains unwavering: women of the Torres Strait Islands are entitled to receive the best care possible, regardless of the difficult circumstances.

Telehealth for rural and remote patients

Michael Williams
Queensland Paediatric Telehealth Service
Brisbane

Telehealth consultation should now be an integral part of outpatient care, especially for rural and remote patients.[1,2] It offers convenience and benefits in providing clinical support, with maintenance of quality and safety standards.[3]

For patients, telehealth consultation:

- enables better access, especially for rural patients, avoiding the need to travel long distances with young children or where transport is difficult
- is time and cost efficient, especially for rural patients, reducing loss of time at work or school[4]
- ensures safety, avoiding the risk of car trips in rural sites and cross infection[5]
- reduces pollution through less travel[4]
- enables inclusion of family members and health care professionals (HCPs), to join a consultation, perhaps from different sites. This enables development of the most efficient management plan with a local focus
- brings a specialist to a patient in a rural hospital or clinic, addressing the inequity of medical care experienced by rural and remote patients.

For the clinician, telehealth consultation enables:

- flexibility to consult from any site at convenient times, which is suitable for those working part-time and with other responsibilities
- better interprofessional connectivity and relevant learning opportunities, for regional specialists and rural GPs
- maintenance of local professional capability through supervised local management, boosting confidence in local services
- efficient use of time and cost compared with outreach clinics
- better social interaction and observation compared with a phone.

Specialty outpatient clinics delivered to rural or regional sites, involving HCPs with the patient, are an efficient and effective model of care and is appreciated by rural patients.[6] Ideally the specialist will visit the site occasionally to build their relationship with the local HCPs and patients, and the community. Providing clinical tutorials via telehealth with the rural HCPs also helps build rapport.[7]

Telehealth should be the default option for the follow up of patients who live at a distance. It is best with a local HCP who can help with the assessment and enable handover of continuing care. New patients may be seen via telehealth[2,8] where a history is provided, an examination may be supported by a rural generalist and a follow-up planned including the need for tests and in-person assessment.

For a specialist responding to a rural doctor asking about a patient with an acute problem, telehealth video consultation enables better assessment, with all involved and better meets quality and safety standards compared to a phone call.[3] An urgent telehealth consultation is recommended for all requests for transfer or advice about rural patients.[9] This reduces unnecessary transfers of acute patients, while enabling safe care in the local hospital, supervised by a specialist.[8,9] A telehealth follow up of the rural inpatient, especially if there is a change of staff, is supportive for both the patient and HCPs and easily provided.

The choice of video-conferencing platform depends on experience and availability at either end. A simple and quick form of telehealth may be via FaceTime or WhatsApp, but a platform designed for telehealth, such as Attend Anywhere or Coviu, will work on any device with a click on a link and is preferable for regular use. It is a benefit to have a platform that has a virtual waiting room, so that if the clinician is late or the next patient early, there is no interruption to a consultation, the patient knows they are successfully linked, and the clinician knows the next patient is waiting. Screen sharing facility allows for showing of X-ray or other documents.

Practical points

It is important that telehealth bookings allow adequate time for consultations so they do not run into the next appointment. The clinician needs to be on time to avoid causing the patient frustration and uncertainty. Having time to prepare before consultations enables a confident and positive introduction and contributes to a successful and efficient telehealth exchange. This is especially true when the clinician is commencing to consult via telehealth.

Medicare supports telehealth to rural sites with the specialist fee plus an extra loading for the telehealth item 112. The Medicare website describes eligibility

criteria and sites.[10] During the COIVD pandemic Medicare eligibility for telehealth consultation to urban sites was introduced.[11] Gathering patient details and providing information about logging in and fees is important at the time of booking a telehealth appointment. If a patient is to be billed, the credit card details should be sought before the consultation with a view to debiting it after the consultation. Having a co-ordinator who understands the telehealth process is important to the success of telehealth consultations, enabling the clinicians to concentrate on clinical issues.[12]

The site for the patient to best connect from will depend on a number of factors, including internet connectivity, patient confidence and if a GP or other professionals are involved. It may also depend on what equipment is used, which can be a laptop, tablet, phone or personal computer. If there is a delay linking via the expected platform, switching to FaceTime or WhatsApp may avoid loss of time. If there is difficulty with the audio in a videoconference, using a phone call for the audio while retaining the video link can work well.

The patient and clinician should be facing light or a window to ensure good visibility, avoiding illumination from behind. Ideally the camera should be at eye level, which may mean elevating a laptop. Looking at the camera when speaking to the patient establishes good eye contact. For the clinician providing regular telehealth, use of cordless headphones, or an external USB speaker and microphone, will ensure a better audio connection. Having two screens allows typing of digital records while maintaining vision of the patient. The audio, video and internet connections are best checked before consulting.

For after-hours or adhoc telehealth sessions, having an email template document can help and save time if there is no access to digital records. This ensures all patient information is recorded, which often does not occur with a phone response. This documentation can be emailed immediately to the referring HCP, patient, and others.

Scripts arising from the telehealth consultation are best scanned and emailed to the patient's pharmacy, enabling same day medication, with a digital copy saved and the original posted to the pharmacy.[13] Factsheets, lab forms, or website links may be sent to patients after the consultation.

Telehealth consultation is covered by medical insurance organisations to the same degree as an in-person consultation.[14] Studies have demonstrated that safety and quality with telehealth consultation is achieved to the same level as in-person consultation.[2] Much examination can be achieved via telehealth, such as gait and respiratory effort, and a clinician with the patient can undertake examination and clinical measurements requested by the telehealth consultant. Photos can help better visualise skin lesions or other features. Clinicians will consider what they may not achieve with telehealth and whether there is a need for in-person consultation.

Providing specialist support to patients in their communities with their HCPs reinforces the role of local rural generalists, upskilling them and thus reducing the workload within a specialist centre. [9,15]

Some First Nations people may feel more comfortable with telehealth especially if they are supported by a health worker and family. This may be less threatening for them than having to travel to a regional site for a consultation in an unfamiliar hospital.

Telehealth specialist consultation is the preference for most rural and remote patients, especially if supported by a local HCP. Specialist outpatient consultation should incorporate telehealth, with regional on-call specialists providing the same availability for acute telehealth consultation to their catchment hospitals as they provide at their hospital. Providing access to telehealth is an important means of addressing inequity of healthcare for rural and remote patients.[1,16]

References:

1. Bradford NK, Caffery LJ, Smith AC. Telehealth services in rural and remote Australia: A systematic review of models of care and factors influencing success and sustainability. *Rural Remote Health*. 2016;16(4):3808.
2. Lee S, Hitt W. Clinical Applications of Telemedicine in Gynecology and Women's Health. *PubMed Obstet Gynecol Clin N Am*. 2020;47(2):259-70.
3. National Safety and Quality Health Service Standards, Second Edition. Australian Commission on Safety and Quality in Health Care. 2017: Available from: www.safetyandquality.gov.au/sites/default/files/2019-04/. National-Safety-and-Quality-Health-Service-Standards-second-edition.pdf.
4. Dullet NW, Geraghty EM, Kaufman T, et al. Impact of a university-based outpatient telemedicine program on time savings, travel costs, and environmental pollutants. *Value Health* 2017;20(4):542–6.
5. Australian Medical Association. Expanded Telehealth Vital to Containing COVID-19 and Protecting Doctors and Their Patients. Canberra; The Australian Medical Association; 2020. Available from: www.ama.com.au/sites/default/files/documents/230320%20-%20Expanded%20Telehealth%20Vital%20to%20Containing%20Covid-19.pdf
6. Williams M. Using telehealth for rural paediatric diabetics? Does it deliver good care? *J Paed Ch Health*. 2021;57(1):109-13.
7. Smith B, Sward BL, Ellis Sk. Telemedicine and Distance Learning for Obstetician/Gynecologist Provider Education. *Obstet Gynecol N Am*. 2020;47(2):353-362.
8. Brown HL, DeNicola N. Telehealth in Maternity Care. *Obstet* Gynecol *N Am*. 2020;47(3):497-502.
9. Desai S, Williams M, Smith A. Teleconsultation from a secondary hospital for paediatric emergencies occurring in rural hospitals in Queensland. *J Telemed Telecare*. 2013;7(7):405-10.
10. Services Australia. MBS and Telehealth. Canberra: Australian Government Services Australia; 2020. Available from: www.servicesaustralia.gov.au/organisations/health-professionals/services/medicare/mbs-and-telehealth.
11. COVID-19 Teleheatlh Items Guide. Australian Government Department of Health; 2020. Available from: www.health.gov.au/sites/default/files/documents/2020/12/coronavirus-covid-19-telehealth-items-guide.pdf
12. Edirippulige S, Armfield NR, Greenup P, Bryett A. Telehealth coordinators in hospital based telehealth services: Who are they and what do they do? J.Telemed *Telecare*. 2016;22(8):447-52.
13. Prescriptions via telehealth - State and Territory Rules. Australian Government Department of Health; 2020. Available from: www.health.gov.au/sites/default/files/documents/2021/03/prescriptions-via-telehealth-state-and-territory-rules.pdf.
14. Telehealth – What you should know. MIGA; 2020. Available from: www.migabulletin.com.au/article/telehealth-what-you-should-know/
15. Ferrer RL, Hambidge SJ, Maly RC. The essential role of generalists in health care systems. *Ann Intern Med*. 2005;142(8):691-9.
16. Rural & remote-health. Australian Institute of Health and Welfare; 2019. Available from: www.aihw.gov.au/getmedia/918ae1b7-eeaf-4e64-9b88-36b887100a9e/Rural-remote-health.pdf.aspx?inline=true

Considered, careful and competent country care

Dr Jared Watts
MBBS(Hons), MHM, MIPH, MPHTM, MRMed, FRANZCOG
Co-Director of Obstetrics and Gynaecology
WA Country Health Service
Medical Coordinator and Senior Lecturer,
Rural Clinical School of WA, UWA

Dr Sara Armitage
MBBS, FRANZCOG
Co-Director of Obstetrics and Gynaecology
WA Country Health Service
Head of Department of O&G,
Geraldton Regional Hospital and SJOG Geraldton

Jessica is a 44-year-old G2P2 who has had one previous caesarean section and then a VBAC. She has had painful and heavy periods for the last three years that has failed to respond to a Mirena or ablation. Her uterus has been described as '10-week size, and well supported.' With her gynaecologist's advice, she agrees to a total laparoscopic hysterectomy (TLH). Jessica lives in a rural town, 1200km from the closest city. Her gynaecologist informs Jessica that she performs about eight TLH per year, and there is the option of her travelling to the city to have the surgery performed by a dedicated advanced laparoscopic surgeon.

Should Jessica consider staying locally, or should she go to the city? During the consent process, how should the gynaecologist inform Jessica regarding their surgery numbers and complication rates?

The medical world is becoming more subspecialised. We joke that sometime soon, you'll only be credentialed to operate on either the left or right ovary. This push towards subspecialisation is based on the assumption that if you do the same thing over again, you will become better at it, hopefully an expert. Complication rates and outcomes will therefore be better for the patient. We appreciate and agree that there is medical literature to support this in surgery and gynaecology, and this concept has become famous in contemporary literature by Malcolm Gladwell in his book *Outliers*. Gladwell argues to become an expert, you need to do something for over 10,000 hours.[1]

One area in which subspecialisation has not thrived is rural and remote medicine. You have to do a bit of everything, because often the closest or next O&G is hours away, sometimes by plane. Even if all high-risk cases were transferred out, others may become perilous very quickly during surgery and present as an emergency, requiring immediate action.

In the case mentioned above, the rural Fellow has performed eight TLHs in the last year, likely a lot less than their subspecialist laparoscopic colleagues in metropolitan areas. However, as generalists it is highly likely they have performed at least another 10 total abdominal hysterectomies, more than 20 vaginal hysterectomies and repairs, as well as many other laparoscopic cases that include endometriosis resections. They have most likely lost count of the number of caesarean sections they have performed, many of them complicated. All the skills required for each of these surgeries cross over, such as tissue handling, anatomy and troubleshooting.

Rural Fellows often have to rely on themselves when things go wrong. In a rural hospital, they become experts at picking high-risk cases that are beyond their skillset and are able to ensure that the patient go elsewhere for surgery and care.

These concepts have also been made famous more recently in contemporary literature by the book *Range: How Generalists Triumph in a Specialized World* by David Epstein.[2] The foreword to this book was written by Gladwell from *Outliers* who stated, 'I enjoyed the experiences of being told everything I thought about something was wrong.'

For the case in discussion, we very much agree that the regional surgeon should tell the patient the number of surgeries they have performed throughout the year as well as the complication rates. We do this ourselves when consenting our patients and in particular, discuss our conversion to open rate, comparing this to our dedicated advanced laparoscopic metropolitan colleagues. Our experience is that the patients often choose to stay where they are, even if a procedure is needed, as they want family to be close for visits and for after care.

There are significant costs associated with needing to travel and stay in larger cities, both for the health system and the patient. Patient travel assistance schemes rarely cover all added costs. This includes lost employment time which can incur further expenses if multiple trips are needed for pre-operative, anaesthetics and surgical requirements.

Fitch et al previously found that rural patients in a tertiary hospital oncology unit would make informed decisions to elect treatment in the country where cancer outcomes may be poorer, but where they were able to have other needs met.[3] Furthermore, if a complication occurs postoperatively, it is preferable that the patient is seen by their surgeon who will be aware of any difficulties encountered during the operation and have a higher index of suspicion of the likely cause. This becomes problematic if the patient has had their surgery at another location and then returned home. Being able to provide local continuity of care is emotionally and financially beneficial for the patient during the long-term postoperative period.

If a high mandated number of cases were required to remain credentialed for each procedure, our most vulnerable patients will miss out and be excluded from treatment. This would inevitably become one of our greatest concerns for the future. We know that some First Nations and rural women, for many reasons, do not want to and will not travel to a city, and will continue to suffer instead. We have seen this with the loss of tension-free vaginal tape in many rural areas. For women with lower socioeconomic means, the expense associated with travel to a high-volume surgeon excludes them from access to treatment.

We therefore agree that high volume surgeons have lower complication rates. However, rural gynaecologists often perform high numbers of all types of cases combined, but have low numbers for each individual procedure. They may have experience outside of gynaecology, as there is never a vascular surgeon or bowel surgeon easily accessible if difficulties are encountered. Their case selection is carried out very carefully in conjunction with their anaesthetic colleagues. Often more complicated surgery is booked when two consultants are in attendance to further minimise any risk. Therefore we would both be happy to offer local surgery to Jessica, ensuing she is well aware of our complication rate, and the alternative to travel to the city to see highly specialised and skilled doctors there.

In our opinion, most patients will want to stay with their family and support networks. They have faith in their regional O&G generalist 'general' skills. Their O&G most likely delivered their babies and may have even performed surgery locally. The town and regional area benefits from the surgeon retaining their skills and being able to offer the treatment to women who cannot afford, or don't want to travel to the city.

We therefore urge policy makers, now and into the future, to look at the whole picture when credentialing surgeons. Considering a surgeon's numbers for one procedure is like operating on just one ovary!

References

1. Gladwell M. Outliers: The Story of Success. *New York: Little Brown and Company* 2008.
2. Epstein D. Range: Why Generalists Triumph in a Specialized World. *UK: Macmillan*. 2019.
3. Fitch M, Gray R, McGowan T. Travelling for radiation cancer treatment: Patient perspectives. *Psycho-Oncology: Journal of the Psychological, Social and Behavioural Dimensions of Cancer*. 2003;12(7):664-74.

Termination services in rural & remote Australia

Dr Catriona Melville
MSc, MBChB, FRCOG, FFSRH, FRANZCOG, DipGUM

Awakening

My alarm startles me at 3.20am as it has done every other Tuesday morning for many months. I swiftly silence it as I'm determined not to rouse the rest of the family. One would think I might become accustomed to the rude awakening but it's always a shock. This is the beginning of my regular 2500km round trip to deliver abortion care and other reproductive health services to regional, rural and remote Australians.

For most of the last 12 months, provision of abortion care in Australia has been even more challenging than usual due to the lack of commercial flight availability caused by movement restrictions in the COVID-19 pandemic. There is a long-term shortage of local abortion providers in regional and rural areas and we have regularly relied on fly-in, fly-out clinical staff to guarantee service provision. Since the start of the pandemic, we have been travelling to our regional clinics on a weekly charter flight supported by a grant from the State Government.

Barriers to access

Approximately 29% of Australia's population live in rural and remote areas,[1] and in general these people have poorer health outcomes and a shorter life expectancy when compared with people living in metropolitan areas. Access to sexual and reproductive health (SRH) services such as contraception and abortion is hampered by several factors. Geographical remoteness from specialist services is compounded by conservative attitudes and conscientious objection to the provision of contraception and abortion.[2] Most regional public hospitals do not routinely provide abortion care except in the case of fetal anomalies, and often the only local alternative for healthcare is a faith-based private provider, where neither contraception nor abortion are offered as part of women's healthcare services.

The challenges of providing early medical abortion

Early medical abortion can be provided up to 63 days gestation by clinicians including General Practitioners (GPs) who are certified prescribers of medical abortion. The dispensing pharmacist must also be certified with MS Health. Often these doctors provide services 'under the radar' for fear of repercussions should they become known as the local abortion provider. I have great sympathy for these clinicians as they are torn between providing holistic essential healthcare whilst protecting their own and their family's privacy in small communities.

On my travels I've met some incredibly passionate women's healthcare providers who are determined to provide a quality service. One such clinician told me they had jeopardised their career by attending the educational session hosted by the primary health network which I was speaking at. Another feared they would be 'run out of town by anti-choice zealots' if they openly provided medical abortion.

Of the 37,000 GPs in Australia, only 1491 are certified to prescribe medical abortion[3] and not all of these clinicians will be actively delivering a medical abortion service. In mid-2021, Children by Choice, a Queensland service offering information, referrals, counselling and education on all pregnancy options, will be launching a publicly accessible online database of abortion and contraception providers, pharmacists and sonographers across the state. The interactive map will be searchable by postcode, provider type and fee information.[4] This should improve reproductive healthcare access in Queensland by providing clear pathway information for individuals.

Telehealth models of care

A helpful change in recent years in Australia is the development of medical abortion via telehealth at home. Our service launched in 2015 as an access model to provide care for regional women in Australia. Since the start of the pandemic, many other organisations and individual practitioners have developed telehealth models of medical abortion delivery. Reassuringly, these services have been shown to be safe, efficacious and acceptable to both providers and women internationally and in Australia.[5]

In July 2020, access to telehealth MBS item numbers was restricted to the patient's own GP or practice which impeded SRH care. A welcomed change in mid-2021 temporarily exempts SRH consultations such as provision of medical abortion from the previously required pre-existing relationship with a doctor. These item numbers will be further reviewed by the Federal Government in late 2021. We are hopeful that changes are afoot which will ensure that provision of this service remains a permanent and viable option for practitioners.

Accessing surgical abortion and abortion beyond nine weeks gestation

When the gestation advances beyond 63 days, or a medical abortion is contraindicated, the situation becomes even more challenging for our regional and rural women. Some public hospitals will offer late medical abortion (medical induction), but this is often limited to patients with pregnancies affected by fetal anomalies. Surgical abortion is currently the only option available to women over 63 days gestation who cannot access abortion within the public

Photo taken from the window of a charter flight at sunset.

system. Surgical abortion is generally provided by specialist services in a day surgery outpatient setting. Unfortunately, regional and rural Australians may have to travel vast distances to the nearest surgical abortion provider.

This hardship is compounded if the woman has complex medical or psychosocial needs. Most day surgery settings are not suitable for women with complex requirements, and it can be incredibly challenging to find a hospital provider who will help. These same women who are denied abortion care will then have to undergo a high-risk pregnancy and be cared for in the local maternity setting; the irony of this situation is not lost on me. Although women presenting in the late 2nd trimester are in the minority, they will often have to travel to a city (either intra- or interstate) to access later surgical abortion because there are very few services equipped to offer this.

Women's voices

What we must remember is the real women and their families at the heart of this issue. I am frequently in awe of the resilience and resourcefulness of my rural patients. I recall the woman whose nearest surgical abortion provider was 300km from her home but she would have been over their gestational limit by the next available appointment, so she drove right past this clinic for a further 700km to access care. Also, the woman who arrived at the clinic with her partner and several young children in the car having left home in the small hours of the night for a five-hour drive through the tail end of a cyclone. Her partner drove her home the same day as they had to tend to their livestock. I feel ashamed of my sporadic whinges about the length of my commute when I hear of the hardships these women and their families encounter.

So what now?

It's clear that decriminalisation doesn't equate to access and even more so outside metro areas. So how can we level the playing field for our regional, rural and remote patients seeking abortion care? Internationally, early medical abortion at home has been extended to 70 days gestation with very reassuring safety data.[6] Other models of abortion care including nurse or midwifery-led have been shown to be safe and efficacious and are recommended by the World Health Organization and key Australian bodies.[7,8]

As clinicians, we need to destigmatise abortion through education starting in medical school and continuing through general and specialist training. Abortion should be considered a matter of health and not politics or religion. After all, aren't we all working for the same aim? To provide essential reproductive healthcare services to our patients with compassion and without judgement.

Coming home

As the sun sets, we begin our long journey home. The only light pollution is from our little Cessna and we are captivated with glimpses of shooting stars and satellites. The team are weary but hopeful that our service has made a positive impact on our patients' lives.

References

1. Australian Institute of Health and Welfare. Rural & remote health. 2019; Available from: www.aihw.gov.au/reports/rural-remote-australians/rural-remote-health
2. Doran F, Hornibrook J. Barriers around access to abortion experienced by rural women in New South Wales, Australia. *Rural and Remote Health.* 2016;16:(3538).
3. MS Health (2021). Impact Report 2020, Melbourne, Australia: MSI Reproductive Choices. Available from www.mshealth.com.au
4. Children by Choice: Mapping Access Pathways Project (MAPP); Windsor, QLD 2021. Available from: www.childrenbychoice.org.au/forprofessionals/mapping-access-pathways-project
5. Fix L, Seymour JW, Sandhu MV, et al. At-home telemedicine for medical abortion in Australia: a qualitative study of patient experiences and recommendations. *BMJ Sex Reprod Health.* 2020;46(3):172-76.
6. Abortion Care. Nice Guideline 140. National Institute for Health and Care Excellence. 2019. Available from: www.nice.org.uk/guidance/ng140.
7. WHO Health worker roles in providing safe abortion care and post-abortion contraception. 2015. Available from: www.who.int/reproductivehealth/publications/unsafe_abortion/abortion-task-shifting/en/
8. Marie Stopes Australia Nurse-led medical termination of pregnancy in Australia: legislative scan. 2020. Available from: www.mariestopes.org.au/advocacy-policy/nurse-led-care/

RFDS optimising maternal outcomes for rural Australians

Dr Carly Roxburgh
MBBS DRANZCOG Adv, FRACGP, DCH
Lead Medical Coordinator
Rural Clinical School of Western Australia, Albany

Dr Fergus Gardiner
Public Health Specialist
PhD Med. Director of Public Health & Research
Royal Flying Doctor Service of Australia

Polly presents to our regional maternity service one evening with a history of vaginal clear fluid leaking for six hours. She has driven herself to the hospital from a farm located three hours away. It's her third baby, she's 28 weeks and it's the middle of harvest. There's no paediatrics or nursery in our town; we are rated to manage low-risk pregnancies beyond 37 weeks.

Our medical student has taken the history when I arrive. A 30-year-old G3P2 with two previous caesareans. Pregnancy normal so far, dates confirmed with early scan. Normal morphology, posterior placenta, cervical length at anatomy scan and low-risk antenatal investigations.

We do a sterile spec and confirm there is clear fluid and swabs are taken. The cervix looks soft, erythematous and floppy. It's difficult to know if she is dilating. We don't do a vaginal examination. With bedside ultrasound I discover that the baby is breech. I can't see any cord presenting. The CTG has been on since she arrived baseline 145, good variability, no decelerations and no accelerations. She has started tightening 3:10. The midwife is already commencing the transfer paperwork. We give nifedipine, 20mg orally and I chart two more doses. Our medical student puts in an IV. I chart intramuscular betamethasone and oral erythromycin as I start making my phone calls. The midwife is nervous, 'should I draw up the salbutamol?' We know the tertiary centre is not keen on it, but the converse is that intrauterine transfer is preferable at 28 weeks. I advise her to have it ready, especially if we require aeromedical transfer.

I call the tertiary centre obstetrics registrar, 'Yes, of course, send them up. Just give celestone, antibiotics, tocolysis.' I mention salbutamol. 'You need to give the nifedipine time to work.' I think I'd prefer hypotension and tachycardia right now over a 28-week newborn.

I call the Royal Flying Doctor Service (RFDS). There is a familiar, reassuring script 'RFDS operations, how can I help you?'

'I have a patient with preterm ruptured membranes who needs to be transferred to Perth.' Name and date of birth are duly given. Then I am derailed. They ask, 'how much does she weigh?' This question always surprises me. It's in the script but seems out of place when we are so accustomed to an ISOBAR handover: introduction, observation, situation, background, assessment and recommendation. It reminds me of the different priorities that we have. I need to get this high-risk patient to a safer place as soon as possible. RFDS need to triage and coordinate their retrievals, calculate load, fuel and distance. A different world of problems to mine.

We find our tiny Neopuff *TM* masks and plastic wraps to keep a preterm baby warm if needed. I refamiliarise myself with the umbilical line kit. I'm filled with adrenaline and my heartrate of 130 matches the CTG.

The obstetrics registrar was right, the tightenings settle without salbutamol. Polly is a bit teary as the situation sinks in. I explain what is going on and I try to mentally prepare her for the days and weeks ahead. The baby is going to be born preterm. They'll need intensive care, breathing support and IV lines for 10 weeks or so.

She has been on the phone. Their neighbours will help with the harvest. Her husband will set off to Perth now and meet her there. Her kids will stay on the farm with her in-laws. Her car can stay in the hospital car park for now. The standard-issue red RFDS bag is all she can take with her.

Table 1. In-flight diagnosis of pregnancy-related aeromedical retrievals from rural and remote Australia (2015–2017).[1]

Description	Number (%)
All pregnancy-related diagnoses	2171
Primary evacuations	152 (7.0)
Secondary evacuations	2019 (93.0)
Threatened preterm labour and delivery	883 (40.7)
Premature rupture of membranes	344 (15.8)
Antepartum haemorrhage	172 (7.9)
Pre-eclampsia	143 (6.6)
Ectopic pregnancy	77 (3.5)
All others	552 (25.4)

RFDS will be on the ground at 10.45pm. A midwife will escort her to the airport. After all the drama, I almost forget to write the transfer letter.

Two days later we hear that she had a non-elective lower uterine segment caesarean section of a 1.7kg baby boy. The baby is in the nursery and doing well. ten weeks later, he is discharged. Polly comes to see me at the GP practice on her original due date. Baby Toby is doing well, he is now 3.2kg. The family were provided accommodation in Perth over Christmas. Everyone was kind, the service was amazing. They are grateful to have access to healthcare, despite the geographical distances.

Polly's experience is not unique, with the RFDS between the years 2015–2017 conducting 2171 aeromedical retrievals for pregnancy-related diagnoses from remote Australia (Table 1).

Threatened preterm labour is defined as labour prior to 37 weeks and is the most common reason for the RFDS to retrieve pregnant women in Australia.[1] A large proportion of women reside in rural and remote Australia, and while early transfer is preferable, these women can still experience sudden complications and require emergency transfer. Management depends upon the capacity of the maternity unit to manage the preterm neonate. Tocolysis is employed to delay labour to facilitate transfer. In almost all cases, intrauterine transfer is preferable to transferring a preterm neonate.

A major challenge facing rural and remote families is limited availability of O&G services. Between the years 1992–2011, there was a 41.0% reduction in the total number of maternity units in Australia from 623 to 368, with remote areas experiencing more rapid declines.[2] This is consistent with the RFDS finding that the majority of women requiring aeromedical retrieval for pregnancy (n=1204; 55.5%) from a rural or remote area, did not have access to a local O&G service.[1]

The loss of local hospital-based obstetric care may be a key contributor to the increased maternal health challenges we are facing in remote Australia, with aeromedical retrievals for pregnancy growing from 3.1% (of all RFDS transfers) between 2015–18 to 3.5% in 2018–19 (p-value 0.01).[3] Women and infants who require an aeromedical retrieval have higher rates of low-birth weight, preterm births and infant mortality, as compared to Australian rates.[1] This is consistent with findings from America, which found that loss of hospital-based obstetric services was associated with increased out-of-hospital preterm births.[4]

Women like Polly are geographically, and often socially isolated. Pregnancy can be a stressful time for many women, regardless of remoteness. This includes worrying about the fetus, labour, delivery, and broader family and social responsibilities. Rural and remote areas have higher rates of socio-economic disadvantage, poverty with reduced access to services, lower educational attainment and poorer health. These disparities increase with remoteness.

The RFDS retrieved 658 Indigenous mothers from remote Australia, representing 30.3% of total pregnancy-related retrievals between the years 2015–2017. Many of these were for preterm labour,[1] which is twice as common for Indigenous women.[5]

While retrieval does bring women to essential medical care, the psychological burden of relocation away from land and community is significant. Indigenous women, who represent 25%–45% of the remote population, can exhibit extreme levels of post-traumatic stress disorder symptoms during their pregnancy, with a major contributor being a fear of preterm birth.[5]

High rates of pregnancy complications such as preterm birth and increasing rates of retrieval reveal a gap in rural and remote pregnancy care. Stable, local and community-based O&G services are essential to provide services to the people in most need.

References

1. Gardiner F, Richardson A, Roxburgh C, et al. Characteristics and in-hospital outcomes of patients requiring aeromedical retrieval for pregnancy, compared to non-retrieved metropolitan cohorts. *ANZJOG*. 2021;In press
2. Kildea S, McGhie AC, Gao Y, et al. Babies born before arrival to hospital and maternity unit closures in Queensland and Australia. *Women Birth*. 2015;28(3):236-45.
3. Gonzalez-Chica D, Gillam M, Williams S, et al. Pregnancy-related aeromedical retrievals in rural and remote Australia: national evidence from the Royal Flying Doctor Service. *BMC Health Services Research*. 2021;In press
4. Kozhimannil KB, Hung P, Henning-Smith C, et al. Association Between Loss of Hospital-Based Obstetric Services and Birth Outcomes in Rural Counties in the United States. *JAMA*. 2018;319(12):1239-47.
5. Mah B, Weatherall L, Burrows J, et al. Post-traumatic stress disorder symptoms in pregnant Australian Indigenous women residing in rural and remote New South Wales: A cross-sectional descriptive study. *ANZJOG* 2017;57(5):520-25.

Training the rural generalist

Prof Michael Permezel
Dean of Education, RANZCOG

RANZCOG's vision of excellence in women's health underpins the approach of the College to all of its training programs. Issues of workforce distribution represent the single greatest challenge to reaching the highest possible standard of healthcare in Australia.

RANZCOG has long made it a high priority to ensure, excellence in women's health is not confined to the suburbs of our capital cities. However, maldistribution of the O&G workforce remains a problem in many jurisdictions and the College must continue to strive toward equitable healthcare for all women.

Training for rurality

The education directorate of RANZCOG has long prioritised an improvement in workforce distribution. Strategies begin with selection for FRANZCOG training, continue during FRANZCOG training and further with post-FRANZCOG training support.

Before FRANZCOG training

Selection for FRANZCOG training

The first strategy in addressing the workforce maldistribution is to select a cohort of trainees who are more likely to practice in regional centres. While other colleges may reward the trainee who does the most research, RANZCOG rewards a variety of attributes that will enhance specific areas of the women's health workforce. There is very good evidence that a childhood spent in a rural location substantially increases the likelihood of a medical graduate choosing a rural location for practice.[1] In consequence, applicants for FRANZCOG training with evidence of a rural upbringing are awarded substantial selection points, more than double the maximum selection points attainable through multiple research publications. Furthermore, selection points can also be gained for attending a rural clinical school, time in general practice in a rural area and time spent in a rural prevocational O&G position.

During FRANZCOG training

The compulsory rural rotation during basic FRANZCOG training

All trainees must spend at least six months in a rural location during the minimum four years of Core FRANZCOG training. Many of the most successful rural rotations encourage trainees to spend 12 months rather than six months at their hospital. My own observation is that these trainees are more likely to ultimately practice rurally, albeit not necessarily in the same centre.

Paradoxically, a 12-month rotation can be less disruptive, especially when considering issues like childcare, schooling and partner employment. It is sometimes easier to manage in a 12-month block than for six months. Unfortunately, there are insufficient rural positions for all trainees to spend 12 months in a rural centre.

The success of the Integrated Training Program (ITP) rural rotation is in part attributed to the excellent surgical opportunities referred to later but also to the efforts made by many regional Fellows to ensure the trainee has an enjoyable term. Those efforts have been historically rewarded with a reputation that ensures sufficient new Fellows want to work in that environment. Those that ultimately choose a subspecialist career in a capital centre, often retain their links to the regional centre to the ongoing advantage of the regional centre, the subspecialist and the patients.

The Regional Integrated Training Programs

The College now has four approved Regional Integrated Training Programs (RITPs): Dubbo, Orange, Bendigo and Mackay. Trainees still spend at least twelve months in a tertiary centre but spend the remaining three years of their ITP rurally.

The RITPs are the result of the vision and hard work of many regional Fellows with a particular need to acknowledge the vision of Dr Tony Geraghty during his term as Chair of the Provincial Fellows Committee. It is too early to determine the probability of rural practice of RITP new Fellows, but it would be very surprising if it were not higher than for urban-based ITPs.

Rural advanced training

Observational data quickly reveals that most of the new regional O&G specialists spent one or both of their advanced training in the same or another regional centre. Of course, the decision for future rurality may already have been made before selecting a rural advanced training position but it also speaks to a very positive experience in rural sites at later stages of training.

The generalist O&G Advanced Training Module (ATM) is expected to incentivise advanced trainees seeking rural positions. The obvious fact is that the elective gynaecological surgical training obligated in the ATM can be difficult to attain in urban centres where a small volume of available surgical training must be shared amongst a large number of trainees. Average elective major gynaecological surgical numbers per six months for Core FRANZCOG trainees by hospital type are as follows:

- Tertiary 12.7
- Suburban 18.0
- Rural 26.7

While the above figures reflect only Core FRANZCOG training data, the same almost certainly applies to Advanced FRANZCOG training. If trainees need elective gynaecological surgical experience, it is obvious where they should go to train.

Gynaecological subspecialty and laparoscopic surgery training programs need to become aware that an advanced trainee who has spent time in a regional centre is likely to be much better equipped for further surgical training than another trainee from a tertiary hospital who has been working on research papers.

Specialist Training Program funding

Funding for regional training positions has been greatly enhanced through the Specialist Training Program (STP) which, according to its website, seeks to extend vocational training for specialist registrars into settings outside traditional metropolitan teaching hospitals, including regional, rural and remote and private facilities.' RANZCOG has been maximally utilising this funding for its regional training positions.

After FRANZCOG training

Continuing Professional Development

It is absolutely critical that the College is pro-active in assisting regional Fellows in meeting Continuing Professional Development (CPD) requirements. For many urban Fellows, CPD points come from everywhere, they fall from the sky and some examples include teaching sessions, unit audits, case reviews, morbidity and mortality meetings as well as participation in research studies, which can make CPD very easy for a Fellow in an urban teaching hospital. Little of this is readily available to the regional Fellow. There is more work to be done by the College to attain equity in this area.

COVID-19 taught us physical presence is not actually needed for most of these CPD activities. Let us learn from that and ensure our regional Fellow colleagues find it just as easy to attain CPD points as those in big city hospitals.

Training the generalist

Generalism versus subspecialisation

Subspecialists are often keen to point out that by focusing on a narrow scope of practice, they can sometimes get quite good within that narrow field. However, a workforce consisting entirely of subspecialists would not serve all women well.

Women with multiple gynaecological problems would need a separate specialist for each. Women in rural areas would be particularly disadvantaged, having to travel sometimes considerable distances at great cost and time, perhaps to multiple different people, when all could have been managed locally by a competent generalist.

The College is graduating approximately 80–100 FRANZCOGs annually. Approximately 25% or 20–25 of these will become subspecialists.[2] The balance between generalists and subspecialists is largely determined by the availability of subspecialty training posts, the number of applications for those posts and the number of applicants 'deemed suitable' by the relevant subspecialty training committee.

While some jurisdictions have deficiencies (even absence) of a specific subspecialty, there is not such a perceived shortage of generalists. The bigger issue is equipping the generalist trainee with sufficient surgical experience to enable them to confidently take up a position in a regional centre as a new Fellow.

Impact of variable gynaecological surgical training on the generalist

If maldistribution of the medical workforce is the number one issue in health in Australia today, the number two issue is the decline in gynaecological surgical opportunities, both in training and as a new Fellow. As can be seen on the College website, there is enormous variation in surgical training by hospital, ITP and region.[3]

Many trainees are not getting the volume of gynaecological surgical training that they need to become confident generalists. Reasons are many but two factors are particularly notable: a) medicalisation of gynaecology; and b) reduced opportunities to train overseas.

In attempting to make 75% of trainees into generalists but without the necessary volume of surgical training, the College risks creating a generation of trainees that lack the confidence in their surgery to embark on a rural generalist career. The large number of new Fellows embarking on obstetric-only careers and referring out all gynaecological surgery may partly reflect the remuneration for private obstetrics alluded to above, but also may reflect a lack of confidence in taking on major gynaecological surgery.

Strategies to improve generalist gynaecological surgical training

As far back as November 2013, the AMC referred to improved surgical training volume as a priority for the College in the forthcoming accreditation cycle. A number of strategies have been developed with a particular focus on the linkage between training performance and hospital accreditation by the College. If a hospital needs FRANZCOG trainees for obstetric service delivery, then in turn it must provide the necessary FRANZCOG training, taking particular note of ultrasound training and gynaecological surgical training.

One possible unexpected strategy that is being considered, is the creation of an 'Obstetric Pathway to Fellowship.' By not obligating that every non-subspecialist must be a generalist, there would be more gynaecological surgical training available for the true generalist. In the hope that they will then have the confidence to undertake a generalist O&G career in a regional centre.

RANZCOG has been a leader in taking steps to address the workforce maldistribution, but the task is far from complete. Strategies to increase rural generalists must begin with selection of FRANZCOG trainees, continue during training and beyond. Trying to make every non-subspecialist into a generalist is not working because there is simply not enough elective gynaecological surgery to train them all.

The obstetric pathway offers a strategy to meet the urban workforce needs in obstetrics whilst developing a cohort of true generalists who are confident in their surgical abilities and able to embark on a career as a regional generalist.

Full reference list available online.

Models of public care in regional settings

Dr Rosemary Buchanan
MBBS,FRANZCOG, AFRACMA

In October 2008, I moved to Winchester in England. I moved there to undertake my final year of FRANZCOG training, and accidentally stayed for five years, got married and had a baby. Regional Australian medicine was where my heart lay so I persuaded my husband, who was happy to live in the outback, to move to beautiful Mildura. During the course of my training, I worked throughout regional Victoria, Geelong, Bendigo and Wangaratta. I now live in Warrnambool.

I also trained in urban hospitals in Melbourne and worked in the UK's National Health Service. This gave me experience across a large number of different service provision methods. I worked in both public outpatients and private clinics as well as mixed service providers.

In this piece, I contrast my experiences working within health settings that operated under a public and private partnership model with a mixed funding model. I reflect on what I found to be their strengths and weaknesses. The opinions presented are my own.

Conception of the public and private model for healthcare in Victoria-Mildura Base Hospital

The Kennett-led coalition, 1992–1999, has been described as adopting economic rationalist ideology more aggressively and with more enthusiasm than any other state government in Victoria's history-or in any other government of an Australian state.[1]

In 1995, the Kennett government set out to privatise many previously state-run community services. Sectors under the spotlight included prisons, emergency services, social services, and healthcare.

By 1998, the Kennett government had their eye on the Port Macquarie NSW experience of hospital privatisation. They had their foot on the accelerator and appointed private companies to build and operate several public hospitals; Knox, Berwick and La Trobe Valley, as well as the accident and emergency services in Rosebud. They made their next focus the building and management of Mildura Public Hospital, which they placed into the hands of private companies. The eventual successful tenderer for this hospital's management (as separate to the building contract) was Ramsay Health Care. Ramsay's appointment was initially for a period of 15 years, with various review points and extensions possible, they would operate the newly built hospital of 156 beds.[2] Apart from filling the gaps in the government coffers, the Kennett coalition contemplated greater benefits from the public and private partnership model.

The private sector is said to be more flexible in how it can adapt and respond to changing service provision needs, with a greater scope for increased investment. There was no doubt it attracted talented, skilled workforce members and gave them access to a private provider's network, that could offer or match commercial employment contracts.

Ramsay Health Care's tenure as operator of the Mildura Base Hospital outlasted both the Kennett coalition and most of the other private and public partnerships developed during their term.

Return of Mildura Base Hospital to public ownership

In 2013, the Napthine Victorian state government acquired back the Mildura Hospital buildings from their private owner, the MTAA Super fund.[3] In September 2020, after a lengthy political campaign, Mildura Base Hospital management returned to Victorian state government hands under the Andrews government.[4]

Providing outpatient care to obstetric and gynaecology patients: the Mildura Model

When I arrived in Mildura in 2008, many outpatient services in rural and regional Victoria were already provided for in the private setting, following closure of hospital outpatient services. This allowed cost sharing between federal and state governments and the consumers. This was the model in which I started my Australian consultant career. All antenatal and gynaecology fertility patients were seen in the private rooms, but the births were public and provided at Mildura Hospital. All the obstetricians were visiting medical officers (VMOs) on an on-call roster for the hospital. In some cases the midwives worked across both settings but were largely employeed by the public hospital sector.

Subsequent to my arrival, Ramsay did build their own private rooms and more patients were seen in a bulk billing setting, but the majority of care was still in the private sector.

The Mildura Model worked well from a continuity of care point of view. The care was shared between the medical and midwifery practitioners.[5] This was possible in a significant number of cases, even in the hospital setting. The roster was 1:4 nights and weekends on call. We offered easy access or referral to holistic antenatal and postnatal care. As required, we saw all our booked postnatal women in the rooms at six weeks. The practice was geographically close to the hospital which helped to improve safety. This service has become more fragmented as more doctors have moved in to work in the Mildura Hospital clinic, and care has spread across public and private sites.

However, the workload was significant, and the lines could become blurred particularly regarding birth attendants, as the antenatal care was essentially private. We had ultrasound in the rooms, but no CTG monitoring or induction of labour equipment, so we had to outsource some antenatal investigation to the hospital ward. We used handheld patient records and Genie printouts, but access to a contemporaneous healthcare record was sometimes an issue.

Access to the private clinic for the postnatal patients was a particular benefit, allowing appropriate birth debriefing, assessment of physical recovery, access to breastfeeding assistance and contraception care as an ongoing element of holistic pregnancy care.

The Warrnambool Model

South West Healthcare Warrnambool has always remained a publicly funded state government healthcare service. When I moved to Warrnambool, the outpatient care model comprised of a Medicare Billing Service (MBS) and a public outpatient antenatal clinic for all antenatal women intending to birth in Warrnambool. It ran on a rotating basis by the local VMOs and one staff specialist. Most gynaecology patients were seen in private and booked as required to the public or private hospitals.

After five years in that model, I moved to a full-time staff specialist role and significantly increased access to MBS and public gynaecology. There was no private obstetrics in Mildura when I lived there, and none in Warrnambool to date.

Many issues are easier to manage in the Warrnambool setting, with shared access to digital health records and access to all antenatal services including the radiology department on site. There is less medical continuity of care, in that most women end up seeing multiple different consultants and trainees. This is offset by the fact that midwives from the maternity ward work in the clinic as well, improving continuity, and we offer a continuous midwifery program as well. There are a limited number of practitioners involved in the Continuity Midwife Program and it is not available to all women who would like to be cared for in this model.

Caring for the region

When I worked in Mildura, care for the outlying communities was provided in some cases via the private practice, with various clinics attended in surrounding towns, across three states; Berri, Robinvale and Broken Hill. Women and families also travelled long distances from these places to be seen in Mildura.

This model also exists in Warrnambool, with clinics in Hamilton, and operating lists in various regional hospitals allowing care closer to home. There is access to maternity services provided by GP obstetricians in several local areas. Camperdown Hospital is a rural hospital managed by South West Health Care Warrnambool, allowing GP obstetrics, and gynaecology operating in the public setting.

The future of regional and rural obstetric and gynaecological services

I prefer the mixed funding model that I currently work in, although acknowledge that some of the benefits of continuity my patients and I experienced both in Mildura, and in my private practice in Warrnambool, are less apparent in this setting.

A public obstetric and gynaecology service provides accessibility and equity of care, and good opportunity for training junior doctors, midwives and registrars. Clinical governance is an inherent component of the public system. It is an ongoing challenge and debate for the public system to provide funding and resources to facilitate better continuity of care.

Private obstetric and gynaecology services are much valued by communities to provide choice, particularly for continuity of care. Private gynaecology services in particular are able to provide good service for women's healthcare and make up for the shortfalls in access in the public system due to limited funding. Much of our care in gynaecology can be provided in the clinic setting and private clinics can be an important part of care provision to the community.

In summary, I feel that the best option is a combination of public and private services, particularly in regional and rural areas. In recruiting future regional specialists, the option of a combination of public and/or private work is beneficial and sought after. A private practice has the rewards of autonomy as a practitioner, both in terms of medical skills and the close patient relationships that become established. A public appointment for equitable care provision and teaching is also attractive. The system works best for patients, communities and specialists when these options work together to provide the best care and outcomes.

Refrences

1. Dixon R, Mahmood M. The Victorian Economy in the 1989/90-1992/93 Recession. *Australasian Journal of Regional Studies*. 2008;14(2):155-166.
2. Martin B. Victoria, Privatisations and colocations. Available from: www.documents.uow.edu.au/~bmartin/dissent/documents/health/victoria.html
3. Cook H. Napthine government to buy back Mildura Base Hospital. *The Canberra Times*. 2013. Available from: www.canberratimes.com.au/story/6153706/napthine-government-to-buy-back-mildura-base-hospital/
4. Duckett S. Public-private hospital partnerships are risky business. The Grattan Institute. 2013. Available from: www.grattan.edu.au/news/public-private-hospital-partnerships-are-risky-business/
5. Pregnancy Care Guidelines. Australian Government Department Available from: www.health.gov.au/resources/pregnancy-care-guidelines/part-b-core-practices-in-pregnancy-care/providing-pregnancy-care-services

Q&A

For the broader *O&G Magazine* readership, balanced answers to those curly-yet-common questions in obstetrics and gynaecology.

Dr Mary Elizabeth Schramm
OF, FRCOG, FRANZCOG (Hon)
Consultant, CWM Hospital Suva (Retired)

Q Are there any evidence-based management protocols for uterine inversion – how could they be developed for such a rare, yet dangerous, complication?

A As the incidence of uterine inversion is of the order of 1/20,000 cases,[1] only a nationwide effort to report all relevant facets of every case, especially the sequence and outcome of each intervention, from second stage through to final resolution, could generate enough data.

The recent report, *Axillary Traction: An effective method of resolving shoulder dystocia*,[2] shows how, from the pooled experience of many operators, evidence-based management protocols can be developed.

I handled possibly 10 cases of uterine inversion over 30 years practising in Fiji. Of these, only one was detected when incomplete and replaced manually. One patient died. She died undiagnosed while the chartered relief flight was in the air. All others were successfully resolved using O'Sullivan's hydrostatic method (OSH), so I never had occasion to consider using either of the invasive Haultain or Huntington procedures.

Although manual replacement is the obvious and effective management when the inversion is incomplete, I want to stress that the OSH method is effective, minimally invasive, requires no special apparatus, and can be performed, if required, in less-than-ideal situations. It never failed my patients, my colleagues, or me.

O'Sullivan's Hydrostatic Reduction method

You will need to have 4–5 litres of warmed electrolyte fluid on hand, the bladder catheterised, and the patient sedated.

Sterile water is the wrong fluid. Some of the infused fluid will enter the circulation via the uterine vessels as the hydrostatic pressure builds up. Isotonic fluid is required and why look beyond the normal saline 'for IV infusion', which can be run in through ordinary IV tubing sets? If blood-warming sets are not available, immerse the intact bags in bowls of hot water.

You will need patience. It will take 3–5 litres to distend the vagina and build up the pressure to the point where the constriction ring relaxes enough to let the uterus 'pop up' in the manner of the fingers of a surgical glove, and becomes palpable above the pubis.

I used twin infusions, from a height of not more than 1 meter above the pelvis, with the fluid outlets as high as possible in the vaginal fornices.

Sealing off the Vagina. I found this could be done by either placing the whole hand inside the vagina; or, if the vagina and perineum were very lax, by inverting the labia and pressing hard against the whole introitus with both hands and surgical packs/pads. In one case, I inserted tight, but temporary, perineal sutures.

In the absence of personal experience, I cannot envisage a balloon that would adequately seal off the progestogen-stoked passage, traversed, within the hour, by the neonate! Seeing might be believing!

Anaesthesia is desirable; but morphine, and local infiltration around the introitus, serve well. In any case, morphine is indicated, in small incremental doses, to mitigate the neurogenic shock which is commonly present.

Oxytocic administration should be suspended as soon as inversion is recognised, and restarted when it is corrected, at the same time as manual removal of the placenta (if required) is underway. The uterine cavity must be rechecked after the placenta is removed.

Manual replacement

If the inverting fundus can be identified before a constriction ring has formed, seize the moment, suspend oxytocic infusion, and push it back. Give the patient whatever analgesia is readily available; a judicious dose of morphine is helpful in preventing/treating neurogenic shock; separate and remove the placenta; restart oxytocics infusion.

Post-procedure

- Continue oxytocics infusion and bladder drainage for up to 12 hours, with frequent monitoring to confirm the uterus remains normally palpable per abdomen.
- If large volumes of electrolytes have been infused IV during resuscitation, the patient may have become hypervolaemic; especially if blood transfusion is required to correct anaemia. Consider giving a small dose of frusemide (no more than 10mg) to trigger diuresis, and preclude circulatory overload.

Note: I have dealt only with the specific treatment; resuscitation, analgesia, monitoring, preparation and use of blood products must of course proceed concomitantly. And an indwelling catheter to keep the bladder empty.

The PROMPT algorithm is an excellent general guide: Identify the problem, signal Code Red, resuscitate as needed, reverse the inversion ASAP, then separate the placenta; keep the bladder empty; monitor closely for at least 12 hours to ensure the uterus remains contracted and eumorphic.

Some notes on diagnosis of uterine inversion

This is easy enough when uterus, +/- placenta, is protruding from the introitus, but when the uterus lies within the vagina, it has been missed.

It will not be missed if a digital exploration of the birth canal is routinely made:

- whenever bleeding is excessive, whether the placenta is expelled or not; and/or
- when there is abnormal pain, and/or disproportionate shock; and/or
- you cannot feel a normally-firm fundus per abdomen.

If the placenta has been expelled, and the uterus is inverting, you will feel a firm, fibroid-like mass just inside the cervix, or in the vagina, and passing your finger around the upper vagina, you will confirm that it is emerging through the cervical os. The inverted uterus itself is firm, similar to a fibroid.

References

1. Witteveen T, van Stralen G, Zwart J, van Roosmalen J. Puerpural uterine inversion in the Netherlands; a nationwide cohort study. *Acta Obstet Gynaecol Scand*. 2013;92:334-7.
2. Ansell L, Ansell D, McAra-Cooper J. Axillary Traction: An effective method of resolving shoulder dystocia. *ANZJOG*. 2019;559:627-33.

Case reports

Stoma, placenta praevia and caesarean section

Dr Violet Kieu
DRANZCOG, FRANZCOG trainee

Dr Sanyogita Tara
FRANZCOG

Dr Penelope Sheehan
FRANZCOG

A/Prof Chris Georgiou
FRANZCOG

Prior surgery to the abdomen presents access challenges for the obstetrician. Our patient had complex anatomy due to repeat laparotomies for Crohn's disease. Advances in other fields, such as colorectal surgery and IVF, may result in high-risk obstetric patients, with medical, surgical and neonatal considerations.

Case Description

Mrs KB was a 35-year-old (G2P0) woman at 34+6 weeks, who presented with threatened preterm labour and antepartum haemorrhage in the setting of major placenta praevia. This was an IVF pregnancy for tubal factor infertility. She had a significant surgical history of Crohn's disease, with peri-anal and vulval involvement, currently in remission. In 2005, Mrs KB had a procto-colectomy and permanent end-ileostomy. In 2018, a repeat midline laparotomy involved partial small bowel resection, appendicectomy, revision ileostomy and de-roofing of large bilateral hydrosalpinges.

Her other active medical conditions were rheumatoid arthritis, asthma and chronic pain, with medications including vedolizumab and azathioprine. She had a previous miscarriage, was O Rhesus positive, antibody negative and serology negative, with a normal booking BMI of 25. The gastroenterology team ordered an antenatal MRI (Figure 1) at 19 weeks for fever and abdominal pain, which subsequently resolved.

Her 20 week ultrasound showed normal morphology, but identified grade 4 placenta praevia, posterior and extending 1cm across the internal os. A repeat scan at 25 weeks demonstrated estimated fetal weight (EFW) 86th centile with multiple left ovarian cysts and loculated fluid in the right adnexa.

She had a major antepartum hemorrhage (APH) of 250ml at 28+4, necessitating a paediatric infant perinatal emergency retrieval transfer to a tertiary hospital and celestone loading. CTG was normal after a period of observation, then the patient self-discharged against medical advice. At 31 weeks, the EFW was 51st centile, with persistent free fluid in POD measuring 66x47x52mm and right adnexal fluid measuring 51x59x38mm. At 33 weeks, the EFW was 77th centile.

At 34+6 weeks, she had her second presentation of APH, with palpable tightenings and an otherwise reassuring fetal CTG trace. An emergency caesarean section was performed, under general anaesthesia as per patient request. On the external abdomen, there was dense scaring of the midline, with a left lower quadrant ileostomy (Figure 2a). A Pfannenstiel incision was made after discussion with the colorectal team, who suggested no advantage to midline entry.

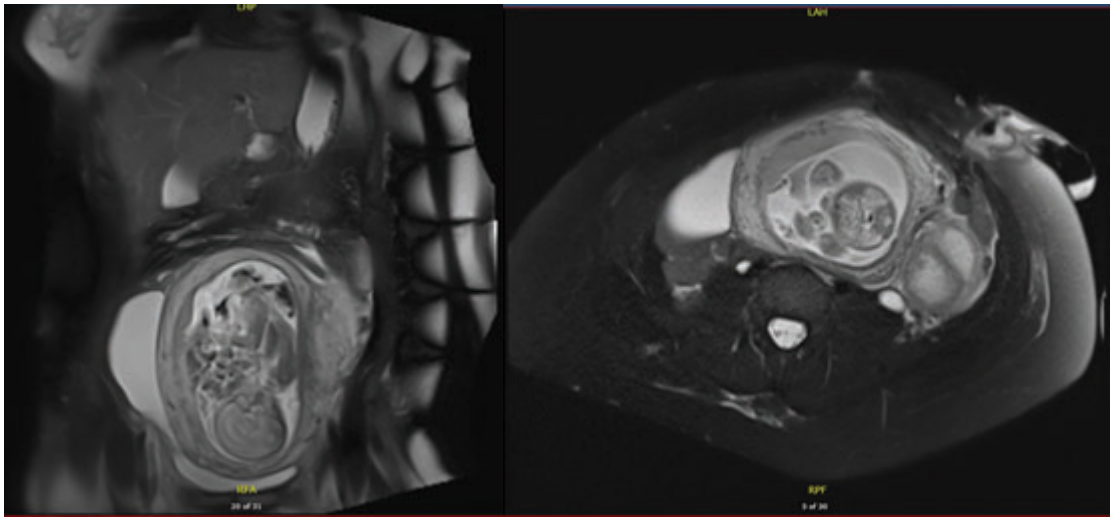


Figure 1. Antenatal MRI at 19 weeks shows coronal and transverse MRI views of the abdomen and pelvis, with a complex multi cystic 5.9cm mass in the left pelvis, may be ovarian in origin. Moderate amount of free fluid, partly septated, in the pouch of Douglas and along the right side of the gravid uterus. No bowel wall thickening. Previous colectomy with left iliac fossa stoma.

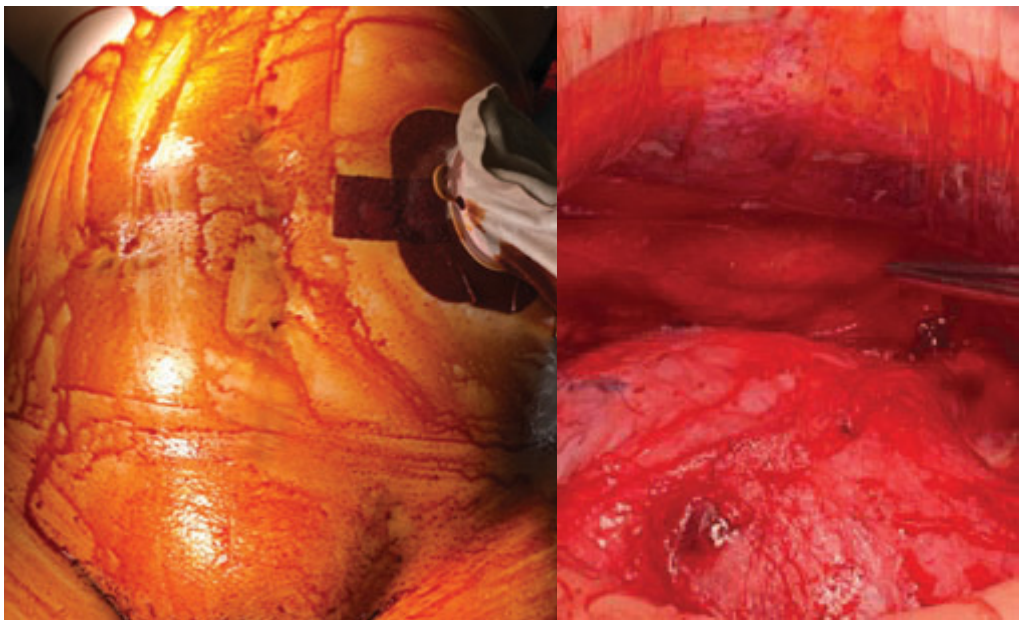


Figure 2. Intra-operative photography shows **a)** Left iliac fossa ileostomy, previous repeat midline laparotomy scar. **b)** Abdominal findings: uterus (inferior), walled off from undersurface of ileostomy (superior, pointed to by forceps).

On entering the pelvis, the peritoneal planes were poorly differentiated. The pelvic cavity was walled off posteriorly, with the round ligaments identified bilaterally but unable to visualise tubes or assess ovaries. The abdominal cavity was also walled off superiorly, with the underside of the ileostomy seen and no bowel visible (Figure 2b). Manipulation of the uterus was not possible, as it was plastered towards the left.

At transverse uterine incision, there was clear bloodstained liquor with no overt abruption, and a massive postpartum haemorrhage with an estimated blood loss of 1.5L. The male baby was born with poor respiratory condition and a neonatal code blue was called with appearance, pulse, grimace, activity and respiration 2 at one minute and 8 at 10 minutes, after intermittent positive-pressure ventilation for resuscitation. He was treated for presumed sepsis, jaundice and prematurity.

Mrs KB's postoperative course was complicated by recurrent medical emergency calls for pain, tachycardia and hypotension on day 1 post operation. She was prescribed patient-controlled anaesthesia and was admitted to ICU on day 2 for observation.

A CT abdomen pelvis (Figure 3) demonstrated two large collections superior/right and anterior of the uterus. Whilst described as likely infective, the colorectal team advised against immediate return to theatre as it could be postoperative changes and had been pre-existing on prior imaging. She was conservatively managed with nasogastric tube, peripherally inserted central catheter line for IV tazocin and bowel rest.

On day 3, Mrs KB was hypotensive and noradrenaline was commenced for persistent tachycardia. A CTPA demonstrated left lower lung collapse and bilateral atelectasis, but no pulmonary embolism. Noradrenaline was ceased day 4, abdominal pain improved, and antibiotics were stepped down to oral Augmentin Duo Forte on day 5. Septic screen revealed ureaplasma on a high vaginal swab and a course of azithromycin, as per the ID team, was given in the setting of a potentially immune-compromised patient with Crohn's Disease. A transabdominal ultrasound on day 8 demonstrated ongoing pelvic free fluid that appeared simple in nature (Figure 4) prior to discharge.

Discussion

Multi-disciplinary team

This case highlights the importance of a multi-disciplinary team (MDT) approach. The Victorian hospital capability framework[1] provides guidance to the severity of obstetrics cases recommended per level 1 to 6, pertaining to the site of surgery. The patient presented at 34+6 weeks to our outer-metropolitan level 5 general hospital with threatened preterm labour and APH, just prior to an MDT meeting scheduled for 35 weeks. Of note, communication had already occurred between medical, surgical, and high-risk obstetrics teams. Ideally, we would have extended involvement to our anesthetics, paediatric, ICU and radiology colleagues, to ensure best planning and awareness of the case.

Inflammatory bowel disease, pregnancy and ileostomy

A recent 2019 gastroenterology guideline stated that the risks of inflammatory bowel disease (IBD) to a pregnancy are 'significant and manifold', including 'miscarriage, intrauterine growth restriction, premature delivery, poor maternal weight gain, and complications of labour and delivery, such as preeclampsia, placental abruption, and increased probability of cesarean delivery'.[2]

They recommended consultation with a maternal-fetal medicine (MFM) specialist, particularly for those with 'prior laparotomy, ostomy or ileal pouch-anal anastomosis surgery'.[2] While the MFM specialist can 'determine the type of monitoring needed, in most cases it will be the general obstetrician who attends the delivery.'[2]

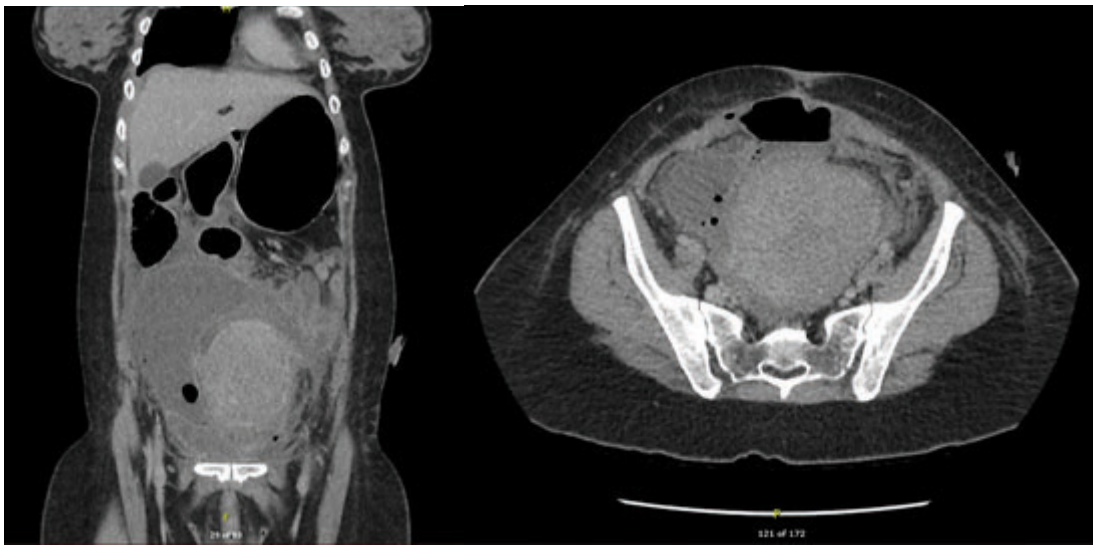


Figure 3. Day 2 post emergency caesarean section. Coronal and transverse CT, demonstrating two large collections of the superior and right side of the uterus (15x14x9cm) and at the anterior aspect of the uterus (9x6x3cm), presumed infective. Small to moderate ascites. Distended proximal loops of small bowel, which taper distally without a transition nor point of obstruction demonstrated.

Specifically, in regards to ileostomy and caesarean section, early case reports have been published over 60 years ago.[3] Review of the literature is usually associated with good outcomes.[4] Some novel complications, such as a compressed ileostomy by gravid uterus in the third trimester, have been reported.[5] Whilst caesarean section was indicated due to the major placenta praevia in our case,[6] it should be noted that per se an ileostomy itself does not preclude a vaginal delivery[2-4] and that a caesarean has specific risks in IBD, including adhesions, pelvic sepsis and bowel/viscus perforation.[4]

The postoperative patient who decompensates requires clinical judgement. Specifically in this case, the necessity and advisability of return to theatre given the CT findings of presumed infective fluid. Given her abnormal vital signs of tachycardia and hypotension, she was closely observed in the ICU. She had successful conservative management of her intra-abdominal collections, which appeared pre-existing in nature, with a nasogastric tube as part of bowel rest for ileus.

Intra-peritoneal anatomy

In terms of anatomy, we identified a second peritoneal cavity, defined by the uterus posterior/inferiorly, and walled off by the ileostomy anterior/superiorly. This presented difficultly identifying the location of fluid on the CT abdomen. Particularly, the accumulation of fluid anterior to uterus, difficult to interpret query infected fluid from pre-existing abdominal free fluid.

Conclusion

The approach to the patient with IBD and a stoma requires specific attention to anatomy, stoma function and postoperative imaging changes. The Pfannenstiel incision was made away from the stomal site to avoid potential devascularisation injury to the ileostomy. This patient's course was complicated by presumed sepsis, pain and admission to ICU. Timing of the MDT is also important, as the patient went into threatened preterm labour prior to the combined meeting. It poses the question: when is it best to triage complex cases and consider referral? Furthermore, what should be done in the emergency setting to determine the suitability for continued care at the presenting hospital in order to ensure best practice?

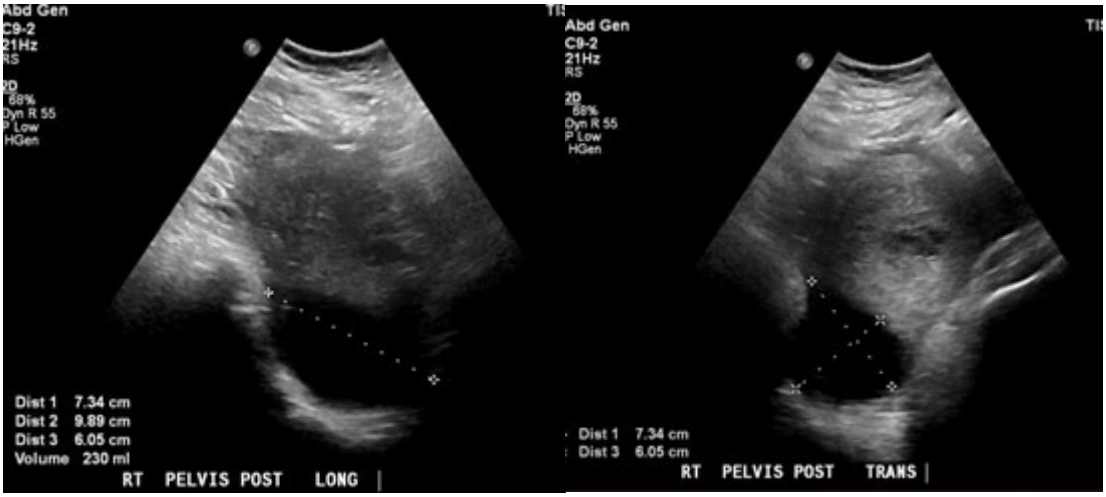


Figure 4. Day 8 post emergency caesarean section. Ultrasound showing 230ml free fluid, anechoic, within the pouch of Douglas/posterior pelvis.

References
1. Department of Health and Human Services. Capability frameworks for Victorian maternity and newborn services. Maternity and newborn care in Victoria; 2019. Available from: www2.health.vic.gov.au/hospitals-and-health-services/patient-care/perinatal-reproductive/maternity-newborn-services/maternity-newborn-care
2. Mahadevan U, Robinson C, Bernasko N, et al. Inflammatory Bowel Disease in Pregnancy Clinical Care Pathway: A Report from the American Gastroenterological Association IBD Parenthood Project Working Group. *American Gastroenterological Association*. 2019;220(4):308-23.
3. Priest F, Gilchrist R, Long J. Pregnancy in the patient with ileostomy and colectomy. *JAMA*. 1959;169(3):213-15.
4. Madu AE. Subtotal colectomy and ileostomy in early pregnancy and review of relevant medical literature. *Gynecol Obstet Case Rep*. 2016;2(2).
5. Porter H, Seeho S. Obstructed ileostomy in the third trimester of pregnancy due to compression from the gravid uterus: diagnosis and management. *BMJ Case Report*. 2014. doi: 10.1136/bcr-2014-205884
6. Placenta Praevia and Placenta Accreta: Diagnosis and Management. *BJOG*. 2019;126(1):1-48.

Pheochromocytoma in pregnancy

Dr Jignal Bhagvandas
MBChB, PGDipOMG
Department of O&G Waikato Hospital

Mr Richard Foon
BSc, MPhil, FRCOG, FRANZCOG
Consultant O&G Waikato hospital

Mrs Sylvia Lin
BHB, MBCHB, FRANZCOG, MMedSc, Consultant O&G, Waikato hospital

Mrs T, 24-year-old, G1P0 presented at 33+2 weeks with nausea, vomiting, hypertension, anxiety and intermittent oedema of the hands and feet. She denied headache, blurry vision and abdominal pain.

Her blood pressure was 206/90 mmHg (repeat measurements were 125–135/80–88 mmHg) and pulse was 113–131 bpm. She had no oedema, no clonus and reflexes were normal. Her blood investigations were normal but her protein creatinine ratio (PCR) was elevated at 134.9 mg/mol.

The working diagnosis was preeclampsia. She was started on labetalol 100 mg TDS. She required multiple stat doses of nifedipine for labile blood pressure and was eventually controlled on labetalol 200mg mane, midi and 300mg nocte. An oral glucose tolerance test later confirmed gestational diabetes and the fetus plotted above the 95th percentile.

The patient was discharged home on labetalol with a follow up appointment made to see in clinic.

Mrs T was re-admitted at 35+0 weeks with worsening blood pressure (175/101 mmHg) and symptoms of sweating and vomiting.

The patient had systolic blood pressures between 200–210 mmHg (unresponsive to nifedipine) and an intermittent sinus tachycardia. Further questioning revealed a history of nausea, vomiting, anxiety, palpitations, fainting episodes and episodic headaches for close to a year. As a result, further imaging was requested, with strong clinical suspicion for pheochromocytoma by the visiting endocrinologist. (Endocrinology were reviewing the patient routinely for management of gestational diabetes). An urgent ultrasound scan revealed a right sided 9x8x11cm suprarenal mass and further blood investigations showed elevated plasma metanephrines (184396 pg/mL). Mrs T was transferred to the high dependency unit and started on intravenous hydralazine and labetalol for blood pressure control and magnesium sulphate infusion for eclampsia prevention. She had slightly deranged liver function tests (ALT 69 U/L, AST 73 U/L). The patient was advised to stay in the left lateral position and plan was made to avoid unopposing B blockade.

The working diagnosis at this stage was pheochromocytoma with superimposed preeclampsia. She was transferred to the intensive care unit (ICU) overnight for alpha blockade with Doxazocin and closer monitoring.

The multidisciplinary team decided to deliver the next day via emergency lower segment caesarean section under general anaesthesia at 35+6 given suboptimal control of blood pressure in pregnancy.

The procedure was uneventful and great care was taken to reduce the pressure exerted on the catecholamine secreting tumour. The patient was transferred to ICU for ongoing transition to oral alpha blockade. The neonate required continuous positive airway pressure immediately after delivery for tachypnoea. The fetus continued to have episodes of desaturation and bradycardia. It was thought this may be due to the doxazocin from the breastfeeding mother. The episodes resolved once the neonate was switched to formula feeds.

Mrs T was transitioned back to the ward and eventually discharged on oral Doxazocin 7mg twice daily. She was advised to increase fluid and salt intake.

Two months later, she had an uncomplicated elective transperitoneal laparoscopic excision of the pheochromocytoma. The histology confirmed the presence of a right adrenal gland tumour–pheochromocytoma (stage-pT2 NX). Mrs T reports immense relief and the anxiety she experienced for close to a year has since resolved.

Discussion

Hypertension is a common complication in pregnancy, occurring in 5–10% of all cases.[1] It is difficult to differentiate more common causes of hypertension in pregnancy such as chronic hypertension and pregnancy related hypertension (preeclampsia and gestational hypertension) from pheochromocytoma that has a much lower incidence of 0.007%.[2]

Advancing pregnancy intensifies symptoms of pheochromocytoma due to the increased pressure on the abdomen, fetal movements and uterine contractions. Oestrogens may also act as a growth factor for adrenal tumors.[3]

Associated features such as hyperglycemia and cardiomyopathy along with headaches, palpitations and sweating may direct the clinician towards pheochromocytoma over hypertension accompanied by proteinuria and oedema which is more in keeping with preeclampsia.

Our patient developed superimposed preeclampsia, which complicated her initial presentation and delayed diagnosis of the pheochromocytoma. She did not exhibit signs of preeclampsia such as, brisk reflexes, or clonus however she had a raised PCR and later, mildly elevated liver function tests. Careful history taking may have led to an earlier diagnosis of pheochromocytoma, though we appreciate the complexity in our patient's presentation and difficultly to differentiate the two conditions.

In normal pregnancy, metabolism of catecholamines is unaltered. In those with preeclampsia, plasma catecholamine levels can be slightly elevated. If patients are using methyl dopa or labetalol, these medications can lead to false positive results.[4] For this reason, imaging studies such as magnetic resonance imaging and ultrasound scans are useful to confirm diagnosis and localise the tumour in pregnancy.

Genetic testing is considered after diagnosis and can be considered during follow up. As patients diagnosed in pregnancy are typically young, they may be more likely to carry a genetic mutation.

Alpha adrenergic receptor blockade with Phenoxybenzamine or doxazocin for 10–14 days before surgery is advised to reduce perioperative and postoperative complications.[5]

Doxazocin is now preferred over Phenoxybenzamine because there is less reflex tachycardia and postoperative hypotension. Neonatal hypotension and respiratory depression have not been described (though it may cross the placenta). One case report testing for doxazosin levels in human breast milk has been conducted with low levels recorded.[6] We are unsure if the bradycardia and desaturations described in our case were related to doxazocin.

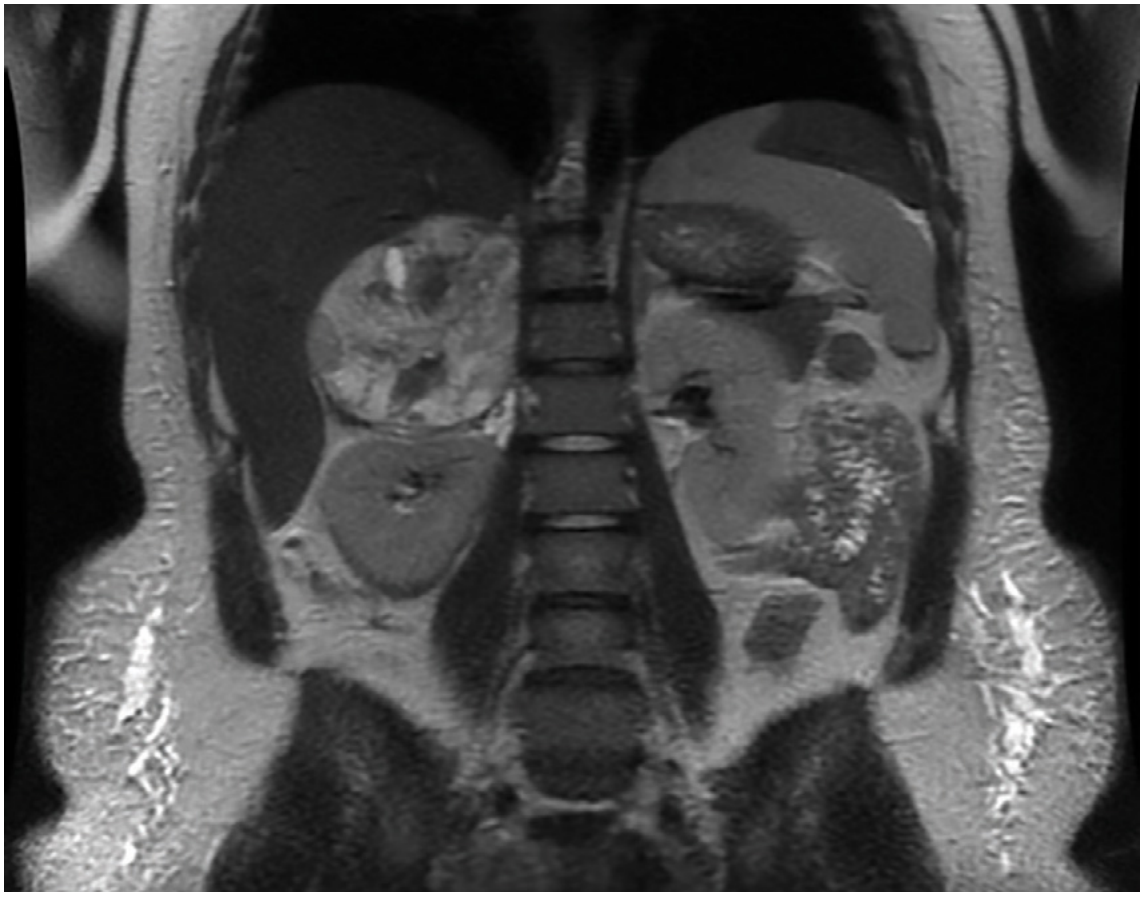


Figure 1. Postpartum MRI of neck, chest abdomen and pelvis, showing a large mass arising in the region of the right adrenal gland (consistent with a phaeochromocytoma). It abuts a number of adjacent structures but does not obviously appear to be invading any of these structures. No evidence of any metastatic disease identified within the abdomen. No obvious evidence of any other masses identified other than the patient's physiologically enlarged postpartum uterus.

Table 2. Differentiating preeclampsia from pheochromocytoma.

	Preeclampsia	Pheochromocytoma
Symptoms	• Headache • Blurry vision • Abdominal pain • Swelling of hands, feet and face	• Nausea • Sweating • Palpitations • 'Spells'
Onset	• Gradual • After 20 weeks gestation	• Sudden • May have symptoms prior to pregnancy or in first 20 weeks • Worsens with pregnancy
Signs	• Clonus • Brisk reflexes • Pitting oedema	• Tachycardia, paroxysmal hypertension, orthostatic hypotension
Associations	• Intrauterine growth restriction	• Gestational diabetes • Superimposed preeclampsia • Cardiomyopathy
Investigations	• Raised liver function tests • Raised creatinine • Raised protein creatinine ratio • Lowered platelets • Lowered haemoglobin	• Raised plasma metanephrines • Ultrasound scan or MRI reveals adrenal mass

Our patient developed hypertensive crisis as treatment with labetalol alone led to unopposed alpha adrenoceptor stimulation. Beta adrenergic receptor blockade should be considered after alpha blockade to counteract catecholamine-induced tachyarrhythmia and alpha receptor blockade induced reflex tachycardia.[5]

If diagnosed in the first 24 weeks and there is sufficient alpha blockade, surgery should be undertaken laparoscopically to remove the tumor in the second trimester.[5] In the third trimester, it is advised to wait until after delivery as the gravid uterus makes accessing tumor difficult.

A transperitoneal approach is advised in pregnancy. A left lateral approach is advised if right sided tumor. If left sided tumor, a right lateral approach should be undertaken with care given compression to the vena cava and a theoretical risk of uteroplacental hypoperfusion. Our patient was diagnosed in the third trimester when it was not advised to perform a resection. She was positioned in the left lateral side during cesarean delivery and care was taken to avoid manipulation of the tumor.

Mrs T had general anaesthetic with deep total intravenous anaesthetic and bispectral index monitoring. A central venous pressure line was inserted while under anaesthetic. Gentle oxytocin was given while ergometrine, carbaprost and misoprostol were avoided. Literature reports epidural, spinal and combined anesthetic techniques are safe.[5] Postsurgical complications involve hypotension and hypoglycaemia, which our patient fortunately did not experience.

Most reports advocate for caesarean delivery; however, recent case studies have shown safe vaginal delivery is possible when adequate epidural analgesia is administered. It may be more favourable in multiparous women whom have had a prior successful vaginal delivery and experience a shorter second stage of labour.[5] There is no clear evidence to guide the best time and mode of delivery. A multi-disciplinary team approach should be adopted in determining mode and timing of delivery.

Conclusion

Pheochromocytoma in pregnancy is a potentially fatal condition. With increasing awareness and understanding of safe management options, outcomes have improved over the last decade.

Acknowledgements: Dr Richard Foon, Dr Sylvia Lin, the Waikato Women's Health department and the Waikato Anesthetic department

References:

1. Vest A, Cho L. Hypertension in Pregnancy. *Curr Atheroscler Rep.* 2014 Mar;16(3):395
2. Harrington J, Farley D, van Heerden J, Ramin K. Adrenal tumors and pregnancy. *World Journal of Surgery.* 1999;23(2):182-6.
3. Isoda H. Phytoestrogens genistein and daidzin enhance the acetylcholinesterase activity of the rat pheochromocytoma cell line PC12 by binding to the estrogen receptor. *Cytotechnology.* 2002;40(13):117-23.
4. Feingold KR, Anawalt B, Boyce A, et al. Endotext 2013. Available from: www.ncbi.nlm.nih.gov/books/NBK278970/table/pheochromocytoma.table4drug/
5. Prete A, Paragliola R, Salvatori R, Corsello S. Management of catecholamine secreting tumors in pregnancy. *Endocr Pract.* 2016;22(3):357-70.
6. Jensen B, Dalrymple J, Begg E. Transfer of Doxazosin into Breast Milk. *Journal of Human Lactation.* 2013;29(2):150-53.

Global Health

Providing essential SRH services during the pandemic

Nate Henderson
Family Planning Australia

Matelita Seva-Cadravula
Reproductive and Family Planning Association of Fiji

Lono Leneuoti
Tuvalu Family Health Association

Loren McDonald
Family Planning Australia

This article was originally published in the *Pacific Journal of Reproductive Health.* 2020;1(12):626–8 and is reproduced here with permission.

Sexual and reproductive health (SRH) services have been significantly impacted by the COVID-19 pandemic globally including in the Pacific. The responses to the pandemic by these services have also been affected by the number of cases in different countries. There have been reports in the Pacific of resource reallocation and reprioritisation, fear-based decision making, and the closing of family planning programs due to resource limitations and in response to COVID-19 transmission.[1]

During crises such as COVID-19, services provided by local health providers such as the Reproductive and Family Health Association of Fiji (RFHAF) and the Tuvalu Family Health Association (TuFHA) are essential. This is because during a crisis, vulnerable populations, particularly women and girls, are disproportionately affected.[2]

Furthermore, travel bans and border closures, such as those that have occurred in both Fiji and Tuvalu, contribute to supply chain issues and stock outs of contraceptive supplies and the social and economic impact of physical distancing and lockdowns in these countries have prevented people from accessing the essential services during this crisis.[3]

Yet, the pandemic has also provided an opportunity for these services to reach new clients, and trial new ways of operating such as providing outreach services, and the use of social media to attract new clients. This article will focus on the impacts of COVID-19 on service delivery, and explore how, even with severe restrictions, local non-government organisations have been able to continue serving their communities.

Fiji

Fiji has recorded limited cases of COVID-19 since it closed its borders in March 2020. With assistance from Family Planning Australia through the Australian NGO Cooperation Program, RFHAF has worked with government agencies to ensure that sexual and reproductive health and rights information and services were offered during the pandemic.

One particular area of focus for RFHAF since March 2020 has been mobile outreach clinics. This model has ensured that service delivery is brought to communities rather than requiring then to access a fixed clinic. This is because many people are unable to travel to receive services, partly due to COVID-19 lockdowns, but also because of the devastating impact of Cyclone Harold on much of the country in March 2020.

Since March 2020, RFHAF have used mobile outreach clinics to visit districts where services are hard to reach. This has led to an increase in the number of clients receiving positive messages on sexuality education, contraception, cervical cancer and sexually transmitted infections (STI). From these outreach sessions, clinical services have increased both during the outreach services, but also through word of mouth to friends and relatives who may be able to access the fixed clinic.

RFHAF have also utilised social media effectively during the pandemic to reach new clients. For example, a campaign using TikTok and Facebook focused on key messages to vulnerable populations such as young people, who have traditionally not accessed RFHAF services. The messages were focused on creating inviting spaces for key populations to access contraception and STI screening services.

The results from the outreach clinics and the social media campaign have been very encouraging. RFHAF clinical data has shown an increase in the number of vulnerable and marginalised community members accessing these essential services, including adolescent girls, sex workers, LGBTQI and young people. This has led to RFHAF considering how to incorporate these ways of reaching clients into business as usual.

Tuvalu

As at August 2020, Tuvalu had not recorded any COVID-19 cases. While there was an initial lockdown period, the country has self-isolated and no longer receives international flights, which has mitigated the risk of COVID-19.

TuFHA is the main provider of sexual and reproductive health services in the country besides the Ministry of Health run hospital and clinics. TuFHA was included as a member of the government-led National COVID-19 Taskforce and has continued to engage closely with Ministry of Health post-lockdown, particularly in the health subcommittee of the taskforce.

The biggest impact on TuFHA has been on its awareness and education activities. This was because one of the early restrictions imposed when a national state of emergency was declared was a ban on public gatherings. Many of the planned workshops and awareness activities, which were mostly integrated with clinical services, were put on hold.

Clinical services on the main island and the outreach program to the outer islands were also affected due to a massive relocation of the population from the capital Funafuti to the outer islands. This was in line with the recommendations of the National Taskforce and Government. Because TuFHA's clinical services were mostly focussed on Funafuti, the number of people that could be reached by these programs was greatly reduced. Due to fears and uncertainties regarding COVID-19, many of the outer island communities refused visitations from any teams coming from Funafuti.

To counter this, TuFHA incorporated COVID-19 awareness sessions into the program they were able to conduct after the gathering ban and travel restrictions were eased. There is still some hesitation from the outer island communities with regards to travellers from Funafuti. TuFHA, however, was able to utilise a small window of opportunity to visit two outer islands in June and conducted much needed awareness on sexual and reproductive health and rights (SRHR) and COVID-19 to the communities on the islands. The outreach teams were also able to deliver clinical services to these communities during these visits.

Another impact has been on cervical cancer screening. Currently, Tuvalu only has opportunistic cervical cancer screening. TuFHA, in partnership with Family Planning Australia through the Australian NGO Cooperation Program, had planned to roll out a full program in partnership with the Ministry of Health in 2020. The training required to get the program operational however, has not been able to happen due to COVID-19 travel restrictions which has limited the ability to import the required medical equipment and receive training from international trainers.

The program is set to become operational in 2021, with options currently being investigated on how to ensure delivery of both medical supplies and training in light of expected ongoing international restrictions.

Service delivery must continue

SRHR services remain critical in a COVID-19 world. Despite challenges for both RFHAF and TuFHA, including lockdowns and closed or partially-closed borders, both organisations have been able to respond in their own way to the crisis.

This leads us to two main takeaways. Firstly, the demand for these services does not cease in a crisis but in fact increases. Secondly, delivery of health services by non-governmental organisations is an efficient and effective way of reaching communities because these organisations are part of local communities and are therefore trusted to reach these communities during periods of crisis.

The resilience and determination that both RFHAF and TUFHA have shown by continuing to provide services to their communities provide an example of how to approach SRHR during a crisis, and demonstrate the essential nature of these services to communities. It is therefore critical that governments and donors continue to support local stakeholders who have a proven record of delivering healthcare in these environments.

Family Planning Australia acknowledges the support of the Australian Government through the Australian NGO Cooperation Program (ANCP).

References

1. Church K, Gassner J, Elliott M. Reproductive health under COVID-19–challenges of responding in a global crisis. *Sexual and Reproductive Health Matters*. 2020;28(1):1-3. DOI: 10.1080/26410397.2020.1773163
2. World Health Organization. Gender equity in the health workforce: Analysis of 104 countries. 2020. Available from: www.who.int/hrh/resources/gender_equity-health_workforce_analysis/en/.
3. UNFPA. UNFPA supplies COVID-19 update. 2020. New York: United Nations Population Fund. Available from: www.unfpa.org/resources/unfpa-supplies-covid-19-update-16-april-2020.

Letter to the Editor

Dr Joseph V Turner
MBBS, BMedSc(Hons), PhD
DRANZCOG(Adv), FRACGP, FARGP, FACRRM
School of Rural Medicine,
University of New England

Fertility treatments other than IVF: fertility awareness methods

It is pleasing to see dialogue on options other than IVF for people wishing to conceive. As Sutton and Allen point out, infertility is a common condition for which there are numerous treatments other than IVF that are both indicated and available.[1] Non-IVF options are essential given that cost, sociocultural, and psychological factors limit IVF use, and that a minority of couples in Australia, including those who are infertile, access IVF.[2]

Initial management with lifestyle modification is introduced in the article, then ovulation tracking is discussed, noting that cycle awareness is an important aspect of achieving a pregnancy. They recommend ovulation tracking using blood test for luteinising hormone (LH) and then timing intercourse. There is, however, an evidence-based yet less-invasive technique that has been employed successfully for many years. Fertility awareness methods (FAMs) teach the woman to observe her mucus symptom which can then accurately predict the fertile window.[3] Intercourse when there is peak fertile-type mucus present has been demonstrated to achieve higher pregnancy rates than intercourse when mucus is less fertile, or when there is no mucus present.[4,5] A recent Australian study validated the utility of mucus monitoring and targeted intercourse for achieving pregnancy in fertile and infertile women.[6] Given the considerable demonstrated benefit of teaching women how to monitor their mucus and cycle properly, it is unfortunate that this is not done routinely in primary care or fertility clinics.[7]

An area of increasing interest is that of restorative reproductive medicine. In a restorative approach, lifestyle, psychosocial, medical, and surgical deficits are individually addressed in order to restore optimum fertility for the couple. Several studies have demonstrated successful outcomes for management of infertility using this approach,[8-10] however, we look forward to further research broadening the evidence base in this field. Sutton and Allen recommend testing for luteal phase progesterone deficiency,[1] also known as luteal phase defect (LPD). Studies have identified that 67–86% of women diagnosed with unexplained fertility were found to have LPD, which has then been targeted with restorative reproductive medicinal and surgical treatment with good outcomes.[9,10]

The recommendation to test progesterone at seven days after the LH surge requires either serum or urine monitoring of LH. As mentioned above, women trained in FAMs are ideally placed to be able to determine the day of ovulation without the use of blood or urine testing. It is pleasing to note that Sutton and Allen recommend progesterone testing at a defined time after ovulation, rather than 'day 21 in a 28 day cycle.'[11] The latter cycle timing is commonly found in the literature[11] and in clinical practice, and is not altogether helpful due to the variability in duration of women's cycles and their timing of ovulation,[12] particularly in those experiencing infertility.

In summary, the use of FAMs should be more widely encouraged since they are a cost effective, accurate, and non-invasive method of determining ovulation, which can assist timing of intercourse to achieve pregnancy and determine optimal timing of luteal phase investigations.

References

1. Sutton C, Allen M. Fertility treatments other than IVF. *O&G Magazine*. Vol 23. No 1. Autumn 2021.
2. Herbert DL, Lucke JC, Dobson AJ. Infertility, medical advice and treatment with fertility hormones and/or in vitro fertilisation: a population perspective from the Australian Longitudinal Study on Women's Health. *Aust N Z J Public Health*. 2009;33:358-64.
3. Evans-Hoeker E, Pritchard DA, Long DL, et al. Cervical mucus monitoring prevalence and associated fecundability in women trying to conceive. *Fertil Steril*. 2013;100:1033-8.e1.
4. Scarpa B, Dunson DB, Colombo B. Cervical mucus secretions on the day of intercourse: an accurate marker of highly fertile days. *Eur J Obstet Gynecol Reprod Biol*. 2006;125:72-8.
5. Ecochard R, Duterque O, Leiva, R, et al. Self-identification of the clinical fertile window and the ovulation period. *Fertil Steril*. 2015;103:1319-25 e3.
6. Marshell M, Corkill M, Whitty M, et al. Stratification of fertility potential according to cervical mucus symptoms: achieving pregnancy in fertile and infertile couples. *Human Fertility*. 2019:1-7.
7. Hampton K, Newton JM. Assisting women to conceive: a clinical update on fertility awareness. *Australian Nursing and Midwifery Journal*. 2016;24:24-6.
8. Boyle PC, Stanford J. NaProTechnology (Natural Procreative Technology) - A Multifactorial Approach to the Chronic Problem of Infertilty. *Sveikatos Mokslai*. 2011;21:61-8.
9. Stanford JB, Parnell TA, Boyle PC. Outcomes from treatment of infertility with natural procreative technology in an Irish general practice. *J Am Board Fam Med*. 2008;21:375-84.
10. Tham E. Schliep,K, Stanford J. Natural procreative technology for infertility and recurrent miscarriage: outcomes in a Canadian family practice. *Can Fam Physician*. 2012;58:e267-74.
11. Avagliano S, Deans R. Investigation of the couple with infertility. *O&G Magazine*. Vol 23. No 1. Autumn 2021.
12. Wilcox AJ, Dunson D, Baird DD. The timing of the "fertile window" in the menstrual cycle: day specific estimates from a prospective study. BMJ (Clinical research ed). 2000;321:1259-62.

RANZCOG Women's Health Foundation

Scholarship, Fellowship and Travel Grant recipients for 2021

The RANZCOG Women's Health Foundation aims to foster clinical and scientific research in women's health, support global health projects and promote Aboriginal and Torres Strait Islander women's health initiatives.

Under the oversight of the Research Grants Committee, the College supports promising early-career researchers across Australia and New Zealand by annually awarding research fellowships, scholarships and travel grants to those practising in the field of obstetrics and gynaecology. With 24 eligible applications received across Australia and New Zealand this year, the assessment process was once again very competitive.

The RANZCOG Women's Health Foundation is pleased to announce that the following applicants have been offered research and travel awards commencing in 2021:

Brown Craig Travelling Fellowship

Recipient: Dr Alexander Chen
Institution: China Medical University Hospital, Taiwan
Project: Dr Chen will undertake a 12-month Fellowship at the China Medical University Hospital, Taiwan.

Dr Alexander Chen is a RANZCOG Advanced Trainee currently undertaking a 12-month Fellowship at the China Medical University Hospital, Taiwan with an emphasis on gynaecology oncology, endometriosis, and urogynaecology. He will be able to develop his surgical skills in open, laparoscopic, robotic, and vaginal surgery under the mentorship of gynaecological oncology and urogynaecology surgeons in a high-volume, tertiary, Taiwanese surgical unit. Through his Fellowship he also hopes to foster further collaboration in the future.

Glyn White Research Fellowship

Recipient: Dr Teresa Macdonald
Institution: University of Melbourne
Project: Is increased fetal growth velocity during pregnancy associated with perinatal and neonatal indicators of pathological overgrowth?

Dr Teresa MacDonald is a RANZCOG Fellow, and a post-doc Clinician Scientist Research Fellow with the University of Melbourne. Dr MacDonald's project will evaluate the relationships between increasing fetal growth velocity in pregnancy and indicators of pathological overgrowth, including shoulder dystocia. This work aims to determine whether assessment of fetal growth velocity might enable clinicians to better identify pregnancies at higher risk of shoulder dystocia, especially among women with fetuses who are not large-for-gestational-age, for whom few identifiable risk factors exist.

Norman Beischer Clinical Research Scholarship

Recipient: Dr Tegan Triggs
Institution: Mater Mother's Hospital
Project: Reducing emergency caesarean birth for fetal distress in women with small or poorly grown infants using Sildenafil Citrate – The RidStress 2 Randomised Controlled Trial.

Dr Tegan Triggs is a RANZCOG Advanced Trainee at Mater Mothers' Hospital and a PhD Candidate with Prof Sailesh Kumar at Mater Research, University of Queensland. Her project, the RidStress 2 Randomised Controlled Trial, aims to repurpose sildenafil citrate by administering it to women with small-for-gestational age or suboptimally grown infants during labour. Given sildenafil citrate dilates pelvic vessels and increases utero-placental perfusion, the trial aims to demonstrate that the intrapartum use of this drug reduces emergency operative birth for fetal distress in this vulnerable cohort of infants.

RANZCOG NSW State Committee Trainee Research Grant

Recipient: Dr Dave Listijono
Institution: University of New South Wales
Project: NAD (Nicotinamide Adenine Dinucleotide)-raising agent as novel treatment for endometriosis: A pilot study.

Dr Listijono is an AGES Fellow with the Sydney Women's Endosurgery Centre (SWEC) and a CREI Fellow with IVF Australia. His project seeks to investigate the efficacy of pharmacological agents,

with potent anti-inflammatory and antioxidant-augmenting properties, as a novel strategy for treatment of endometriosis.

Recipient: Dr Rahul Chatterjee
Institution: Royal Prince Alfred Hospital
Project: Forces exerted on the pelvic floor and perineum during normal and instrumental vaginal delivery.

Dr Rahul Chatterjee is a fourth-year RANZCOG Trainee at Royal Prince Alfred Hospital, who is also undertaking a Masters of International Public Health. His study is aimed at calculating the forces exerted on the maternal pelvic floor and perineal muscles by different obstetric tools and delivery types in order to reduce perineal trauma rates, optimise operative delivery, and improve training for future clinicians.

RANZCOG NSW State Committee Fellow Research Grant

Recipient: Dr Supuni Kapurubandara
Institution: Westmead Hospital
Project: Improving the diagnostic workup of pelvic floor myofascial pain in women.

Dr Supuni Kapurubandara is a full-time O&G specialist at Westmead and Auburn Hospitals and PhD Student at the University of New South Wales. Her study aims to improve the detection of a muscular cause of pelvic pain in adult women. Pelvic pain is a common symptom which can impact bowel, urinary and sexual function and ultimately affect quality of life and the ability to function on a day-to-day basis. Muscular causes of pain should be ruled out as measures such as pelvic physiotherapy can help manage this cause of pain and avoid unnecessary surgery in the appropriate patient.

Recipient: Dr Amy Feng
Institution: Blacktown Hospital
Project: LigaSure Retractable L-Hook compared with Harmonic Ace +7 as a single instrument for total laparoscopic hysterectomy: Is bipolar energy superior to ultrasonic energy? A randomised controlled trial.

Dr Amy Feng is a RANZCOG Fellow who completed an AGES Laparoscopic Fellowship in Sydney in 2019–2020. Dr Feng's project aims to compare an advanced bipolar device (LigaSure L-Hook) with an ultrasonic scalpel (Harmonic ACE + 7) as a single instrument to complete a total laparoscopic hysterectomy to determine which energy modality is associated with a shorter operating time and less blood loss.

UroGynaecological Society of Australasia Research Scholarship

Recipient: Dr Victoria Buckley
Institution: Royal Prince Alfred Hospital
Project: Prolapse surgery and the overactive bladder. Dr Victoria Buckley is a RANZCOG Fellow and a first year Urogynaecology Subspecialty Trainee. Dr Buckley's project will examine anatomical predictors associated with the improvement in overactive bladder symptoms following vaginal prolapse repair.

Investing in research

With your support, the RANZCOG Women's Health Foundation can make a considerable positive impact on the health and wellbeing of women now and into the future.

Your donation will enable the RANZCOG Women's Health Foundation to invest in clinical and scientific research, as well as initiatives in global women's health and Aboriginal and Torres Strait Islander women's health.

Please contact the Women's Health Foundation if you would like to establish a clinical and scientific research Fellowship, a legacy supporting outstanding young scholars to gain clinical experience or conduct research. For enquiries, please contact the RANZCOG Women's Health Foundation by emailing, foundation@ranzcog.edu.au.

RANZCOG members can also donate to the Foundation via the Payments section of the my.RANZCOG members portal. To login and donate, please go to my.ranzcog.edu.au/login or donate via the RANZCOG website, www.ranzcog.edu.au. Donations over $2 are tax-deductible.

2022 RANZCOG Women's Health Foundation Scholarship applications are now open and will close on 30 June 2021.

Obituary

A/Prof Christine Grace Trevella Tippett
1946–2021

Specialising in high-risk obstetrics for 35 years, A/Prof Christine Tippett made an outstanding contribution to women's healthcare in Victoria, Australia and internationally.

Chris delivered more than 10,000 babies throughout her career and was instrumental in advocating for change in both obstetrics and gynaecology, helping to create a safer environment for women and specifically for both mothers and their babies.

After completing her medical degree, Chris spent two years in general hospital jobs and then took time away from medicine to have her children. She then commenced specialist training at Queen Victoria Medical Centre (QVMC) in Melbourne and met people both supportive and hostile to a woman with three children being appointed to a training position. Chris completed her training in Manchester, before returning to QVMCas a senior registrar (SR)and then becoming a consultant there. It was while she was a SR that I first met Chris - her dedication to the women she cared for stood out for me as well as her outstanding clinical acumen and eye for detail.

Chris's career continued as a consultant at QVMC and then at Monash Medical Centre (MMC), and at this time, she also began an incredibly successful private practice initially in East Melbourne and then in Clayton.

Driven by her commitment to ensure that women from all backgrounds have access to the best possible care, in the 1990s Chris established the Monash Medical Centre Maternal Fetal Medicine Unit, (MFMU) offering care to women with some of the most complex pregnancies in Victoria. At that time, Monash was the only hospital in Victoria with an adult and neonatal intensive care unit together with an adult coronary care unit-hence, the ability to care for such high-risk women.

Chris's achievements, which have been recognised locally and internationally, commenced with her being awarded the Gold Medal for outstanding performance in the Royal Australian College of Obstetricians and Gynaecologists membership exams in 1984, the highest examination accolade to be given by the College.

After the MFMU was embedded and up and running, she became more involved with the activities of RANZCOG, initially through the VRC and then being elected to the RANZCOG council as one of three Victorian representatives, culminating in 2006 in her becoming the first female president of the College.

During her tenure as President of RANZCOG, there were many highlights and achievements, but I would like to mention two of special note.

The first was Chris becoming the lead of the expert panel during Victoria's abortion law debate. As has been written on the Victorian Government website, 'Chris was unwavering in her counsel to ensure that women retained their ability to have a choice, and for doctors to be able to provide women access to an abortion without fear of retribution'.

My memory at that time is of her spending many an hour explaining to politicians on both sides of parliament what the change would bring from a practical perspective, and the sheer joy that she shared with many when the Act was altered and passed.

A/Prof Christine Tippett.

The second highlight involved Indigenous women's health - in continuing Chris's commitment to improving the health of all women, she organised the inaugural conference for Indigenous maternity care providers, under the RANZCOG banner. This occurred in the Northern Territory and was followed by the formation of the Aboriginal and Torres Strait Island Women's Health Committee - a committee which submits recommendations directly to the RANZCOG Council and Board. Chris was especially pleased to learn that on the next Council of RANZCOG, there would be a representative from this group on Council.

To me, both these amazing achievements highlight how she continued championing change for all women.

In 2010, she was deservedly appointed a Member of the Order of Australia, an award which recognised her service to obstetrics and to the women of Australia, an award which she was extremely proud to receive.

Chris's energies then turned to FIGO where she was initially elected as the Australian and New Zealand representative, a role endorsed by RANZCOG. Again, through her ongoing commitment to improve the healthcare of women everywhere, in 2018 at the FIGO congress in Rio, she, together with her FIGO colleagues Lesley Regan and Jeanne Conroy, were nominated and were successful in becoming the first trio of female leaders of FIGO, with Chris being elected as treasurer, a role she reluctantly relinquished 12 months ago due to her recurring illness.

Her clinical role and acumen cannot be overstated. Chris had an ability to 'just be there' helping countless colleagues, junior and senior. She seemed to appear at the right moment and was always the voice of reason when discussing outcomes.

She was also there to celebrate the personal milestones and professional achievements of her many colleagues, marking those achievements in her own way.

Her leadership, wisdom, clinical expertise and advocacy for women from all parts of the globe and from all walks of life will be greatly missed by past, present and future generations of obstetricians

Dr John Regan

Remembering Our Fellows

Our College acknowledges the life and career of Fellows that have passed away:

- **Dr Robert Andrew Osborn,** NSW, September 2020
- **Dr William Alexander Fraser**, NZ, November 2020
- **A/Prof Christine Grace Trevella Tippett**, Vic, February 2021
- **Dr Geoffrey King Bernays**, NSW, April 2021

Do you have experience working or volunteering in low- to middle-income countries?

Share your story in O&G Magazine

RANZCOG is committed to improving the health of women and their families, including in the Pacific region.

The College is seeking contributions for **O&G Magazine** about global women's health. Articles and opinion pieces that highlight women's health issues or initiatives in low- to middle-income countries are appreciated.

Don't have time to prepare a written contribution? We can interview you and write the article for you.

Contributions are welcome from all College members.

For more information about contributing to **O&G Magazine**, go to:

www.ogmagazine.org.au/contribute

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists

Excellence in Women's Health