SOGC Presidential Presentation

Dr. R Douglas Wilson June 2022

Can the impact of serendipity or just 'doing the right thing' contribute to better health-care outcomes?

Land Acknowledgement: I would like to begin by acknowledging that the land on which this material was created is the traditional, unceded territory of the Coast Salish Peoples, including the territories of the Musqueam, Squamish), and Tsleil-Waututh Nations.

I would also like to acknowledging that the land on which *we gather* is the traditional, unceded territory of the Huron-Wendat people.

It is an honor and a privilege to stand before you today as your new SOGC President. I will do my best to meet all the expectations of the SOGC membership and the requirements as defined by the SOGC governance and by-laws.

It is my personal opinion and belief that the greatest gift, in this world, is the ability to give a family, a healthy baby and a healthy mother in the right place with the right provider. An additional personal belief is the value or opportunity presented by serendipity or being given the chance 'to do the right thing'.

I have thought many times about my medical career choice for complex care obstetrics, reproductive genetics, fetal diagnosis and surgery, the incredible privilege to share the personal emotions of childbirth, being up all night and driving home as the sun rises, but my passion-directed choice would never change.

Serendipity is defined as a NOUN, the occurrence and development of events by chance in a happy or beneficial way: "a fortunate stroke of serendipity" ·

synonyms:

chance · happy chance · accident · happy accident · fluke · luck · good luck · good fortune · fortuity · fortuitousness · providence · coincidence · happy coincidence

There are moments in life, when the world stops, you react, you ponder, you cry, and after that moment, your world is never the same.

That moment happened to me recently, on an Air Canada flight watching a movie called 'A Mouthful of Air'. I sat in my seat, tears in my eyes and wondered what my life would have been like, if my wife had taken her life postpartum, leaving me to care for my young family.

There are other times in life when the moment is more orchestrated and deliberate. 'Doing the right thing', in the clinical context, is defined as making clinical priority-based decisions, using ethical evidenced-based tools with sustainable implementation processes.

Maternal death was always my greatest obstetrical fear and nightmare and while this tragic outcome never happened to me personally, the movie 'A Mouthful of Air' emphasized to me the important message, that the maternal risk of morbidity and mortality is not over as you are experiencing with the family that moment of birthing happiness and joy, great APGARS, all the fingers and toes are there, and the maternal relief that the baby is safely delivered.

In the role as SOGC President, there is an expectation for advocacy and contribution. It starts with considering the 2021-2025 SOGC Strategic Plan and the framework *Vision of 'Healthy women. Healthy professionals. Excellent care'* along with *two of the five Priorities 'Collaborating to improve women's health beyond clinical practice and Partnering with women'.*

My focus, as your President and Past President for 2022-2024, is to lead in two prevention and equity themes and contribute to two other prevention and equity themes.

Within these themes, it is important to understand and support, that *patient autonomy, choice, and risk acceptance* are part of the ***informed choice process***. Informed choice requires that an individual has the mental capacity, adequate information, and freedom from undue influence to understand the current situation, understand the options available and their likely consequences, be able to reasonably choose from among those options, and to be able to communicate that choice.

The informed consent principles are important for each of the clinical risk prevention and equity themes:

Theme 1 Risk Prevention - Maternal Mortality:

Maternal mental health, postpartum depression, and suicide are areas that we need to embrace, recognize, understand if we can, and take the time to explore as one of the important components for a healthy family is a healthy mother. If you have not seen the movie 'A Mouthful of air' or read the book by Amy Koppelman, it takes your breath away, the fear and desperation in the mother and in her family cannot be understated. The SOGC is driving and partnering a collaborative Maternal Mortality process for Canada with leadership and stakeholder expertise from all provinces and territories. While we, as clinical providers focus on the prevention of severe maternal morbidity, adverse events, and close calls, the postpartum time period is dangerous and many times the risks signs are unrecognized or missed.

Maternal mortality is defined as the death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication. The maternal mortality ratio (MMR) is a key performance indicator for efforts to improve the health and safety of mothers before, during, and after childbirth per country worldwide. *The MMR, it is the annual number of female deaths per 100,000 live births from any cause related to or aggravated by pregnancy or its management.* It is not to be confused with the maternal mortality rate, which is the number of maternal deaths in a given period per 100,000 women of reproductive age during the same time period.

How well is Canada doing in risk prevention for the **Maternal Mortality Ratio** (modeled 2021 estimate, per 100,000 live births). The documented MMR in Canada and other countries must be presented, in the context of the country, with **China** 33.0; **USA** 16.0; **Canada** 10.0; **NZ** 9.0; **France** 8.0; **UK and Germany** 7.0; **Australia** 6.0; **Sweden** 4.0; **Finland** 3.0; and **Norway** 2.0. There is more work for us to do in Canada for decreasing further our maternal mortality outcomes.

Theme 2 Risk Prevention – Birth Defects:

A reproductive teratology resource in Canada is being newly branded as **First Exposure** through the DLSPH / University of Toronto and the Vohra Miller Foundation with the goal to prioritize and develop a digital platform to host and enable access to the toxicology database, with aims to mobilize interactive knowledge generated from the toxicology database to populations and service providers nationally and internationally. Through Dalla Lana faculty and stakeholder relationships, a collaborative approach is being taken to establish governance, project management, research and culturally safe community engagement processes.

The risk of a major anatomical / structural birth defect, for any baby, is estimated at four-five per cent, regardless of the circumstances during pregnancy. Minor anomalies can add an additional 1-3% but Important functional impacts may not be recognized until early childhood or school age. Teratology surveillance needs to extend well beyond birth to school age and requires the provincial health system(s) to 'look, count, and listen longer' just like crossing a busy street or highway.

Evidenced-based medication / drug use and exposure, for women planning a pregnancy, requires a benefit – risk determination for maternal advice and consent decision especially for women, requiring chronic medication use or requiring acute medication use, during pregnancy.

Birth defect categories, consider the primary pathogenic mechanisms for the definitions of:

- malformation (primary developmental genetic / multifactorial genetic -environmental):
- disruption (medication / teratogen related to interference with the normal programmed development)
- deformation (mechanical intra-uterine factors)
- dysplasia (disorganized cell interaction/ the abnormal growth or development of a tissue or organ)

For people of reproductive age, there are commonly prescribed medications or 'over the counter' drugs or anatomically -related drug treatments that may cause structural or functional birth defects in the developing fetus or identified later in childhood. With the increasing co-morbidity associations in pregnancy, those anatomical treatment medications may be directed to the cardio-vascular system, central nervous system (anti-convulsant, anxiety-depression), bone and joint system (anti-inflammatory or rheumatology), hematology or thrombosis management, excess vitamin A, hormone management, and cancer treatments.

The dosing amount and gestational age at exposure for the embryo-fetus has a significant impact for risk and prevention.

The drug and medication safety classifications include:

- **A –** Drugs that have been taken by a large number of pregnant women without any proven increase risk of birth defect.
- **B** – Drugs that have been taken by only a limited number of pregnant women. Human data is lacking and they are further categorized based on available data from animal studies.
- **B1** – animal studies have not shown any increased risk.
- **B2** – animal studies are limited, but there does not seem to be any increased risk.
- **B3** – animal studies show an increased risk, but it is not clear if this risk applies to humans.
- C – Drugs that, due to their effects, may cause harm to the fetus without causing birth defects. ***These effects may be reversible.***
- **D –** Drugs that have caused or may cause birth defects; however, the health benefit may outweigh the risk.
- **X –** Drugs that have a high risk of birth defects and should not be used during pregnancy.

Many 'natural / organic' non-prescription products are not required to have reproductive risk assessment but some have been found to have major impact.

It is important to ask the reproductive teratology question, preconception or as early in the pregnancy as possible, *'can you please list all the non-food items or things that you inhale, take orally, or apply to your skin so we can determine if there are any fetal exposure risks, thanks'.*

The risk -benefit outcomes, for both mother and infant, must be discussed and

understood by the patient and provider for the informed consent process to be complete and First Exposure evidence will be an important resource for patients and providers going forward.

Theme 3 Equity of Care - Rural Collaborative Care and Access for Obstetrics and Surgery:

Twenty percent of Canadians live in rural Canada, using definitions of populations groups < 20,000 people. Remote populations will include many indigenous groups accessible by air only or by water and ice bridges in winter. The rural health care discussion has been repeated, for at least three decades and continues to show the rural health care service need for obstetrics and surgical collaboration as there is negative population health care impact with continuing the 'status quo'.

An important priority issue to understand is that the provincial health care systems has political oversight with directed service management by the Minister of Health in each Province with limited outcome reporting of provincial health service activity. The rural health care budget considerations are generally lost in the annual urban-rural health care budget debate as the 'urgent health care burning platform' requires the attention for political necessity or damage control.

There are national infrastructure processes for hospital accreditation, professional medical training, pharma-care planning, cannabis roll-out, and when the provinces need more medical money (waiting lists; surgical care for an aging population; COVID-PHAC). The Canadian-based rural and remote health care service needs recognition though a federal-national collaboration but requires a strong

message to the provinces that rural maternity and surgical care are mandatory service needs. These obstetrical-surgical services require long-term 10-20- year sustainable-accountability agreements and annual oversight with analytical reporting of the services and their outcomes to a national professional health care management system. These rural service outcome reports would be required and should be associated with the availability of federal-provincial transfer payments.

Obstetrical, surgical and anesthesia providers and patients are ready to implement innovative and collaborative care but the federal government needs to make the call in this area, as most provinces are not answering the phone.

Theme 4 Equity of Care– The Political and Professional Leadership for Health Care Policy dialogue (provincial-federal):

Requires the need for a political process using sustained evidenced-based clinical care priority setting, the recognition for better professional quality and clinical health care outcomes and cost-effective professional fiscal spending to improve Canada's present, average care -high cost outcome from the 14 provincial-territorial health care systems when compared to international and economically comparable countries.

A scoping review of the Canadian health care system identifies the political and provider need for recognition of important health care deficiencies, new processes to determine appropriate clinical priorities for directed support, new models of care (team-based; remuneration innovation), and

quality improvement strategies, as Canada's low- care quality comparison and high levels of inappropriate care have been clear evidence identified. The OECD based cumulated health outcomes for the Canadian surrogate of fourteen provincial -territorial health care systems have Canada ranking in areas of lowest quality measurement for four of the five quality comparisons (access to care, administrative efficiency, equity, health care outcomes) with the only higher quality ranking for the care process, once hospital access had occurred.

More recognition from the leadership and members of federal-provincial political groups, professional administrative health care groups (CMA/ Royal College/ Provincial), the self-interested clinical provider silos, and the public to initiate questioning, debate, and understanding of this data-supported health care dilemma, in Canada, is required.

It is important to get involved in the SOGC, there is a need for multi-generational thinking, at all levels, from the medical student to the Professor Emeritus. The only things that you need are **character, capability, and courage** as you never have enough time. You will be rewarded with confusion, experience, excitement, frustration, insight, knowledge, pride, responsibility, success, understanding, and lifelong friendships.

Finally, I would like to end by thanking and acknowledging the work and dedication of last three SOGC Presidents, Dr Anthony Armson (Atlantic), Dr E Dario Garcia (Quebec), and Dr Maggie Morris (Central) as the corona virus has minimized the ability and opportunity for the SOGC membership and others, to really appreciate their focus, passion, and leadership. Please take a

moment now or if you meet them during the meeting, to say thank you as the SOGC is better organization due to their activity and commitment.

President Presentation References:

1. Serendipity definition: Definition from Oxford Languages ·
2. A Mouthful of Air: Through the sparse and elegant prose of Amy Koppelman, she reveals a brutally honest portrayal of family and self, which shows the reader that real problems are indiscriminate of money or birthright. A Mouthful of Air brings to light the complexity and fragility of the human psyche.
3. Theme 1: SOGC Maternal Mortality directed program
4. Theme 2: First Exposure Dalla Lana School of Public Health University of Toronto

Theme 3

5. Miller KJ et al. Rural Obstetrics J Obstet Gynaecol Can 2017;39(12):e558–e565 https://doi.org/10.1016/j.jogc.2017.10.019
6. Stirk L, Kornelsen J. No. 379-Attendance at and Resources for Delivery of Optimal Maternity Care J Obstet Gynaecol Can 2019;41(5):688–696 https://doi.org/10.1016/j.jogc.2018.12.003
7. Wilson C R, Rourke J, Oandasan IF, Bosco C. Progress made on access to rural health care in Canada. Canadian Family Physician 2020; 66:31-36

Theme 4

8. Wilson RD. Fourteen health care systems versus COVID-19: are these the best systems for future health care decisions and needs? Can J Physician Leadership 2020;7(1):27-30; https://doi.org/10.37964/cr24725

9. Wilson RD. What could Canada do to Improve their Healthcare Process and Patient Outcome? - A Scoping Review. Canada Healthcare Policy Journal (in press)

(Short Title: Canada Healthcare Process and Outcome)