# Taking precauti

**Dr Wendy V Norman** has specialised in women's health and family planning for two decades. She aims to improve access to pregnancy planning and up-to-date contraceptive options among marginalised women and health professionals

Can you provide a synopsis of your primary research interests and goals?

Having practised as a family physician for more than 20 years, I have been involved in the difficult decisions faced by so many marginalised and vulnerable women and their families throughout Canada when they find themselves with an unintended, unexpected pregnancy. I have been appalled by the general lack of accurate knowledge, not only among women, but also among health professionals, in understanding modern approaches for planning and spacing pregnancies. Nearly five years ago, I began research aiming to prevent unintended pregnancies. My colleagues and I have now brought together a nation-wide team with impressive skills and expertise to conduct this research. We hope the programme will achieve improved access to high quality family planning knowledge, services and methods for women and families throughout Canada.

How have the demographic patterns of women seeking induced abortions in Canada changed since detailed records began in 1974, when abortion became legally available?

We found that 31 per cent of Canadian women have an abortion at some time in their lives. The number of women seeking abortion in Canada has been pretty stable since records began in 1974, particularly since the 1988 Supreme Court decision allowing provision of service outside hospitals, which enabled data collection for this large group of procedures. Affordability of contraception and access to the most effective methods is a big issue here. Unlike most developed countries, Canada does not provide a universal subsidy for contraception. However, around the world, countries have proven this approach is cheaper for a health system than paying for the care of unintended pregnancies and abortions.

What are the main problems associated with repeat abortions? Are these mainly socio-economic or are there additional implications for the patient's mental/ physical health?

by qualified health professionals ir accredited facilities (ie. legal abortions in developed countries) has shown that risks for subsequent adverse reproductive and mental health outcomes after an abortion are very similar to those among women who have a miscarriage at the same stage of pregnancy. The risks are also very much less than the same adverse outcomes among women who have a pregnancy that continues to delivery. The main difficulty among women seeking abortion is that we know they are very fertile and they have a high likelihood of conceiving another pregnancy soon after the abortion. For all the reasons that they found themselves with an unwanted pregnancy when they first came for the abortion, they are at risk of having the same event happen again.

Have you faced any challenges in your studies?

Our two main challenges are with recruitment and knowledge translation. In recruitment we offered women two types of intrauterine contraceptive (IUC): levonorgestrel and copper. We found that the levonorgestrel IUC was so much more popular that we were unable to recruit our full complement for the copper IUC groups. We held the latter groups open for five months after completion of the levonorgestrel groups but eventually closed with only 27 per cent of our planned sample, with just over 100 women in those groups instead of nearly 400 as initially planned.

In terms of knowledge translation our study team can already see that when free IUCs are offered to women seeking abortion, many find this acceptable and experience highly effective prevention of repeat abortions.



How important is collaboration to your work?

The Better Contraceptive Choices (BCC) randomised controlled trial collaborated with every abortion clinic providing second trimester services in British Columbia. We found an immense advantage in having all these centres linked and providing feedback.

We also benefit from collaborations with family planning researchers and knowledge users across Canada. We hope to address needs for contraception in Canada, which is one of the only countries in the world not to currently collect this data. We would also like to address the cost-effectiveness for provision of a universal subsidy for all contraceptive methods for all women in Canada, although this will have to be supported by 13 different federal, provincial and territorial health jurisdictions! So, we see an exciting path ahead as we work with partners across the country to develop and translate better evidence on access to high quality family planning knowledge, methods and services.

DR WENDY NORMAN

## New IUC care standards

A study carried out by the Canadian Contraception Access Research Team at the University of British Columbia has been considering the timing of intrauterine contraceptive placement post-abortion. The group's findings have particular implications for vulnerable women on society's margins

**IN CANADA, ROUGHLY** half of women with an unplanned pregnancy choose abortion. Recording and reporting on the type of abortion is inconsistent in the country, but an overall figure of 93,755 surgical procedures were reported in 2009, with around one third believed to be repeat abortions.

Technological advances have led to long-acting reversible contraceptives (LARC) that are safe and reliable, with an annual failure rate of below 1 per cent. This is a better success rate than oral contraceptives, which have a typical failure rate of up to 9 per cent per year. Intrauterine contraceptives (IUCs) are the only LARC method available in Canada.

#### **WOMEN AT RISK**

The Canadian Contraception Access Research Team (CART) at the University of British Columbia (UBC) is the first pan-Canadian multidisciplinary group to lead a national family planning health services research programme in Canada. The CART team is led by Dr Wendy V Norman, Assistant Professor in the Department of Family Practice, UBC, and a Scholar of the Michael Smith Foundation of Health Research. With more than 20 years involvement in family planning, Norman has a great deal of real-life experience with women who are confronted with difficult decisions when dealing with unwanted pregnancies.

### CART-GRAC: The Core Team



Unfortunately, marginalised members of Canadian society are the most heavily affected by unintended pregnancies. According to Norman, women seeking abortion for a second trimester pregnancy (ie. 12 weeks or more) are often very young and/or may experience one or a number of the following issues: mental health problems, substance abuse, living in remote rural areas of the country, or violent relationships. Other atrisk groups include recent immigrants as well as First Nations and Aboriginal populations. Norman explains: "Women in these disadvantaged groups do not have equitable access to high quality up-todate knowledge, methods and services to support planning and spacing of their pregnancies".

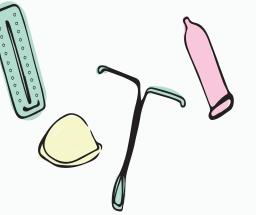
As principal investigator of CART, Norman presently sees three main areas of concern in terms of optimal family planning knowledge and services in Canada: the cost of contraceptives; the limited availability of high quality family planning services; and a lack of current knowledge about contraceptive methods.

In terms of cost, the most effective methods such as IUCs are the most expensive to women, but as Norman elaborates, "conversely, because they are effective, these would be the least expensive methods for the health system to provide". Therefore, her team has research underway to determine which policy is most cost-effective: universal subsidy for contraception or the current

situation in Canada (payment by the health system for all costs related to unintended pregnancies).

Another issue the CART team is researching is the availability of family planning methods and services in Canada. At present, these services can only be accessed through family physicians, midwives or nurse practitioners. The investigators believe that task-sharing to use the skills of pharmacists and nurses could improve availability of highly effective contraceptive methods, and so enable more women to plan and space their pregnancies.

Then there is the issue of the lack of up-to-date knowledge about family planning and contraception among members of the population and, even more surprisingly, among medical staff themselves. Norman



Access to high quality knowledge and services to prevent unintended pregnancies will help women to plan for optimal pregnancy timing and will lead to improved health among Canadian women and their families

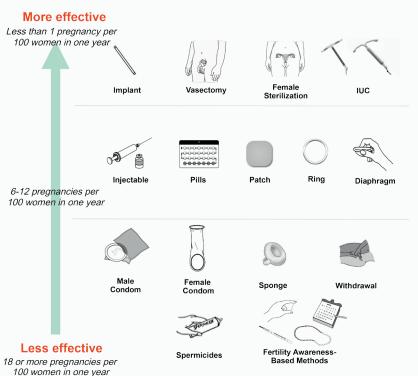
clarifies: "We wish to determine the best way to put high quality information and access to current knowledge into the hands of both healthcare professionals and women and their families from all sectors of society, throughout Canada".

#### **REFINED TIMING**

Women can become pregnant almost immediately following an abortion and those having an abortion past 12 weeks are at high risk of having another unwanted pregnancy. Immediate insertion of IUDs is known to be highly effective, safe and desirable as post-abortion contraception. To this end, the CART project instigated the Better Contraceptive Choices (BCC) study in 2010, with support from the Canadian Institutes of Health Research (CIHR) among others.

The BCC study is a randomised controlled trial that aims to determine the most suitable time to place intrauterine contraception after an abortion for a second trimester pregnancy. IUC packaging currently indicates delaying insertion by four-six weeks or until the uterus has returned to a nonpregnant size. However, Norman and her team wanted to ascertain if immediate insertion of the IUC could lower pregnancy rates in the five years following the procedure.

Taking place at all abortion clinics in British Columbia, the BCC study offered participants two types of IUC: a copper intrauterine device (copper IUD) or a hormonal IUD (a levonorgestrel-releasing intrauterine system sold under the Mirena brand name). Still ongoing, the investigation compares the pregnancy rate from one-five years between the groups of women who were assigned to have IUC inserted immediately after their abortion to those who were assigned to have IUC inserted COMPARING TYPICAL EFFECTIVENESS OF CONTRACEPTIVE METHODS (Source: Adapted from WHO 2007)



four weeks after their abortion. All follow up in the BCC study will be concluded by 2016.

As the BCC investigators have access to government health administrative data to assess the primary outcome (pregnancy rate at one year in the group with the immediate insertions of IUDs compared to those who following usual care where they wait for their insertion), they expect to have follow up data on nearly 100 per cent of participants at one-five years after enrolment. Other studies of this type have found very low rates of follow up and return in this patient population. As Norman reveals, the team is "very hopeful that the quality of the BCC study and the strength of the evidence we are beginning to see produced will be sufficient to alter the package labelling on all IUC products, so that in the future, immediate placement at the time of second trimester abortion will become the care standard anywhere in the world".

#### **ALLEVIATING ANXIETY**

The researchers made another particularly interesting discovery during the BCC trial: "We found more than half of women were interested in using an IUC when there was no cost for the device," asserts Norman. "As the latest evidence in Canada shows, only 4 per cent of women currently use IUC. This is an amazing gap, which we think relates to the access to both knowledge and cost-free contraception."

Access to high quality knowledge and services to prevent unintended pregnancies will help women to plan for optimal pregnancy timing and will lead to improved health among Canadian women and their families, especially those in the most vulnerable and marginalised sections of the society. "We know that offering high quality counselling and free provision of the woman's choice of contraceptive method at the time of abortion is highly acceptable to women," Norman adds, "and that this will improve their chances to avoid a subsequent unintended pregnancy."

Highlighting one of the central pillars of CART, Norman concludes that she and her colleagues are working with health system decision makers to analyse cost-effectiveness and to examine strategies where all women seeking abortion could be offered their choice of contraception for free.

In refining the timing of IUC placement postabortion for increased effectiveness, the studies will help to alleviate stress caused by the prospect of unwanted pregnancy, especially among marginalised women. It also seems likely that CART's highlighting of the relationship between health system costs and use of IUCs will lead to positive changes in Canada's healthcare policy.

The most effective methods such as IUCs are the most expensive to women, and are the least used, but these would be the least expensive methods for the health system to provide

#### INTELLIGENCE

#### BETTER CONTRACEPTIVE CHOICES FOR MARGINALISED WOMEN: IMMEDIATE VS INTERVAL INSERTION OF INTRAUTERINE CONTRACEPTION AFTER SECOND TRIMESTER ABORTION

#### **OBJECTIVES**

To address disparities among women who lead marginalised and vulnerable lives through an innovative collaborative project examining the use and cost-effectiveness of intrauterine contraception (IUC) immediately following second trimester abortion.

#### **CO-INVESTIGATORS**

Canada: Dr Stirling Bryan, Professor, Director, Centre for Clinical Epidemiology & Evaluation; University of British Columbia (UBC) • Dr Janusz Kaczorowski, Professor, Département de médecine familiale et médecine d'urgence, Université de Montréal • Dr Rollin Brant, Professor, Department of Statistics, UBC • Dr Judith Soon, UBC; Director, Community Pharmacist Research Network • Ms Lyda Dicus, Senior Counsellor, CARE Program, BC Women's Hospital

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**DR WENDY V NORMAN** is a Scholar with the Michael Smith Foundation for Health Research. She is also Assistant Professor and Director of the Clinician Scholar Program in the Department of Family Practice, and Associate Member of both the School of Population and Public Health, and the Department of Obstetrics and Gynecology, Faculty of Medicine, UBC. She has been a family physician since 1985 and has practised exclusively in the area of family planning since 1997. She leads the national Contraception Access Research Team – Groupe de recherche sur l'accessibilité à la contraception (CART-GRAC) as Principal Investigator, within the Women's Health Research Institute of BC Women's Hospital.

