CHAPTER 2 – Key Considerations

Chapter Two references are located in a separate section of the Baby Steps Help Guide e-resource.
Participant handout references are not included, but are available upon request by contacting the tru@ahs.ca.

Contents

This chapter provides

- an overview of the health effects of tobacco consumption and barriers to quitting that are related to sex and gender
- principles for care providers to keep in mind when delivering interventions, taking into account these gendered risks, influences and barriers related to girls' and women's use of tobacco and tobacco-like products

Please note that detailed information on the prevalence and health impacts of tobacco use by girls and women may be found in Tobacco Women's Health and Cessation.

Women and Tobacco Use [1]

Overall Effects

Tobacco use affects the health of women and girls differently than it does for men and boys. The risks of smoking and other forms of tobacco use are greater for women than men. Women are at greater risk of becoming addicted to nicotine, and become addicted at lower levels of use.[1,2] The full extent of the effects of tobacco use on women is not fully understood, because of current gaps in research. However, smoking is known to cause many health risks for women.

Women are at greater risk of developing respiratory illnesses. Both women who smoke and non-smokers who are exposed to second-hand smoke are more vulnerable to developing chronic obstructive pulmonary disorder (COPD) compared to men, due in part to hormonal differences and women's smaller airways and lung volumes.[3-5] Women are also more likely to develop chronic bronchitis rather than the emphysema form of COPD.[5] Among COPD patients, women report greater lung function decline and more severe disease compared to men,[4] and early onset of severe COPD is more common among women than men.[6] There is evidence that COPD-related mortality in Canada is declining faster among men than women.[7] Women also experience greater susceptibility to smoking-related lung cancer, including squamous cell, adenocarcinoma and small-cell carcinoma.[8,9]

Women who smoke experience an increased risk for coronary heart disease compared to men who smoke.[10] There is some evidence that female smokers may be more susceptible to developing elevated blood lipids, a precursor to atherosclerosis, compared to men.[11] Among women and men who smoke and who have experienced a heart attack, women experience greater reductions in life expectancy.[12]

Both women who smoke and women who are exposed to second-hand smoke are at an increased risk for breast cancer compared to women who do not smoke or who are not exposed.[13-15] Smoking among women is also linked to lowered fertility, an increased risk of osteoporosis and a range of reproductive health issues.[16,17] Compared to men, women who smoke also experience higher rates of asthma and urinary incontinence.[18]

Tobacco use during pregnancy not only affects the health of the mother, fetus and newborn, but also continues to affect the health of her child over time.

There are gender-related differences in the functions of and reasons for smoking and using tobacco products. There is some evidence that nicotine may have a more calming, anti-anxiety effect for women compared to men, and women may be more likely to use tobacco products to manage negative emotional states.[19,20] Women as a group have also been targeted by the tobacco industry, which has portrayed smoking as a means of achieving empowerment and beauty.[21]

Effects of Nicotine on Pregnant Women

The effects of tobacco use and exposure for pregnant women include increased risks of ectopic pregnancy, miscarriage, preterm labour, premature rupture of membranes and placental problems (including previa and abruption).

For more information on the effects on tobacco on women and fetal health, see:

- the “Getting the Facts on Tobacco and Pregnancy” module found in this guide
- Smoking, Vaping and the Reproductive Years

Pregnant women metabolize and clear nicotine from their bodies faster than non-pregnant women do, making quitting more difficult.[22] The physiological adaptations in pregnancy that accelerate nicotine metabolism may also cause morenegative feelings of so-called “nicotine hunger” and other unpleasant symptoms associated with nicotine withdrawal.[23,24] As a result, some pregnant women who use nicotine replacement therapy (NRT) indicate they need a higher dosage to help them manage withdrawal symptoms.

For more information about the use of NRT, see:

- the “Aids to Quit” module found in this guide

Health Effects of Nicotine on Adolescent Girls

Given the high rate of tobacco consumption among adolescent girls in Alberta it is important to understand the health effect of nicotine on girls, and girls who are pregnant.

Nicotine exposure in all adolescents: A key feature in adolescence is developing executive cognitive functions such as decision-making and impulse control.[25] Underlying these behavioural changes are changes in the brain. The adolescent brain shows dramatic changes in neurochemical transmission. The dopamine system is changing rapidly and stimulation from nicotine may alter the healthy development of key brain structures, especially the limbic system, which is associated with mood and impulse control. There is promising evidence that the rewarding effects of nicotine may be enhanced during adolescence, and aversion to nicotine may be reduced. [26] Behavioural studies have suggested a unique role for adolescent nicotine exposure in the development of mood disorders, and that tobacco use in adolescence may lead to lifelong mood disorders.[27]

Nicotine exposure in adolescent girls: There is some evidence that tobacco use is associated with more depressive symptoms in adolescent girls.[28] Girls who smoke report more depressive and menstrual symptoms.[29] Heavy smoking has also been associated with lower bone development among adolescent girls.[30]

Smoking during pregnancy for adolescent girls: Women under the age of 20 are at higher risk of having preterm and low-birth-weight infants, and pregnant adolescents under the age of 15 who use tobacco have twice the risk of stillbirth during labour and delivery than pregnant women who use tobacco and are 15 years or older.[31] Adolescent pregnant women also experience higher rates of maternal anemia than older women during pregnancy.[32]

Gendered Barriers to Quitting

There are numerous studies that indicate women face unique barriers to quitting tobacco.[18,33,34] Gendered barriers and issues that may be relevant include:

Women may be concerned about the potential for weight gain.[18,35]

- Women are more likely to experience interpersonal violence and depression and may see tobacco use as a way of coping.[36]
- Male partners have been shown to provide less effective support to women than women give to men.[37]
- Women may be more susceptible to environmental cues (e.g., friends and moods) associated with the tobacco-use ritual.[20]
- Women have more non-pharmacologic cues/motives that reinforce tobacco use (e.g., for socialization, as a break from care-giving stress).[38,39]
- Some women enjoy the feeling of control associated with tobacco use. [40]
- Some adolescent women may fear having a bigger baby that is harder and more painful to deliver.[41]

There are also gender-based influences for women attempting to stop using tobacco:

- Women experience greater rewarding effects from nicotine and more intense stress produced by withdrawal than men do.[20]
- Nicotine replacement therapy (NRT) (especially gum and patches) may not be as effective for women, due to hormonal, physiological and pharmacokinetic differences that exist and become more prevalent in pregnancy.[42]
- Tobacco withdrawal symptoms and responses to tobacco cessation pharmacotherapy vary by menstrual cycle phase (women experience greater withdrawal symptoms during the luteal phase).[43]

Using a Principle-Based Approach[2]

There is no one approach that will work for all women. Overall, best practices around tobacco must always reflect each woman's context. At the same time, there are certain overall influences on girls' and women's tobacco use and common health effects that are important to raise to normalize clients' experiences and generate ideas for making changes.

Principles
1. *Woman-centred*
2. *Harm-reducing*
3. *Trauma-informed*
4. *Equity-informed*

Here are four principles for practice that are recommended when working with women who are planning a pregnancy, pregnant women and new mothers, as well as their partners and support networks.

Woman-Centred Approach

A woman-centred approach recognizes sex- and gender-related influences on tobacco use and cessation, and offers interventions to address these influences and the client's preferences for action. In the perinatal period, a woman-centred approach prioritizes women's health before, during and after pregnancy. Woman-centred approaches build a woman's sense of value, confidence and self-efficacy, support her health and social priorities and support her ability to improve her own health and the health of her family.

Health providers who use a woman-centred approach

- *discuss the gendered effects of tobacco on girls' and women's health*
- *focus on the woman's health, as well as her strengths, interests, needs and self-efficacy*
- *consider a woman's life circumstances, and her ability to influence these circumstances*
- *help women identify how stigma directed to pregnant women who smoke affects them*
- *identify the woman as being the agent for change (for whatever she deems achievable)*

There are important gender-specific health effects and influences on using tobacco and tobacco-like products that are important for all girls, women and health practitioners to understand and address together. If health practitioners focus only on the risks for fetal health during pregnancy, there is less incentive for the woman to maintain cessation after her baby is born. A pregnant woman's inability to quit that focuses only on the fetus can cause guilt and shame, and can diminish the woman's self-esteem and confidence as a "good mother."[44] It is important to recognize that byfocusing on the woman, the fetus and her other children will also benefit.

One aspect of a woman-centred approach is to focus on the harmful judgements directed toward women who use tobacco while pregnant or caring for children. These stigmatizing attitudes can erode a woman's self-image and her confidence in asking for help, can cause women to hide their tobacco use from their health providers, or resist discussing it in a productive way.[1,45,46] When providing support to women, health-care providers are encouraged to be sensitive to this stigma, and recognize the ways it can manifest itself in patient-caregiver relationships.

Trauma-Informed Approach

Trauma-informed approaches recognize how common trauma and violence are in the lives of girls and women, and identify the need for physical and emotional safety, choice and control in their decision-making. In trauma-informed services, disclosure of trauma is not required; instead, services are provided for all clients in a way that supports safety, empowerment and strengths and avoids re-traumatization.[47,48]

Trauma-informed approaches are characterized by

- *trauma awareness (understanding trauma responses and the likelihood that clients who access health services have experienced trauma)*
- *an emphasis on safety (avoiding potential triggers for re-traumatization, providing physical and emotional safety and not requiring disclosure of trauma histories)*
- *empowering environments (giving clients choice and personal control over their goals for and pace of change)*
- *emphasizing clients' strengths and supporting basic skill building in self-calming and self-soothing*

There is a strong correlation between smoking and experiencing violence and trauma in childhood, or exposure as adults to sudden loss, environmental disasters, violence and other overwhelming experiences. The prevalence of smoking among women who have experienced violence and trauma is 2–4 times higher than that of women who have not.[49-51] Trauma affects both a woman's physical health and how trauma survivors interact with health providers and the health system. It is recommended that health providers use non-confrontational approaches, so that women who have experienced trauma can make a safe and supportive connection with them. Service providers can make a positive difference in client engagement, retention and outcomes by making services emotionally and physically safe and by creating opportunities for learning and building coping skills, and providing clients with choice and control.

Awareness and recognition of the historical and intergenerational trauma experienced by Indigenous people in Canada is essential in trauma-informed approaches. Colonization, loss of lands and cultural practices, removal of children to residential schools, ongoing high rates of child apprehension, and ongoing high rates of violence against Indigenous women all have an effect on smoking rates, and make culturally safe and trauma-informed approaches critically important.[52-54]

For specific practice-oriented ideas on implementing trauma informed approaches,three helpful Canadian resources are:

- www.womenshealthmatters.ca/health-centres/mental-health/trauma/
- www.jeantweed.com (Trauma Matters guide)
- www.bccewh.bc.ca (Trauma-Informed Practice guide)

Harm-Reducing Approaches

Harm-reducing approaches recognize the importance of providing support to women who do not have immediate goals for cessation. They are non-judgmental and non-coercive, and help women reduce the harm to their health, as well as have agency in the type and extent of change they make in their tobacco use and overall health. When it is clear that a woman is not ready to quit tobacco, the emphasis should be on helping her identify any steps she can take right away to reduce the negative impacts of her tobacco use. These could include helping reduce her tobacco use, improving her nutrition or reducing the impact of second- and third-hand smoke in her environment. It may also include helping her determine whether nicotine replacement therapy (NRT) would help her reduce the harmful impacts of her tobacco use.[1]

Harm-reducing approaches [1]

- *give women the opportunity to define their own needs, ideas for change and readiness (e.g., reducing her tobacco use, improving her health in related life areas like nutrition, housing and safety)*
- *respect women's choices, and trust in their ability to make positive life decisions*
- *help women access the range of treatment/support options that are feasible for her*
- *help woman reframe their experiences in a positive way (e.g., seeing a failed quit attempt as a learning experience that can be built upon)*
- *help her identify how stigma directed to pregnant women who smoke also affects her*

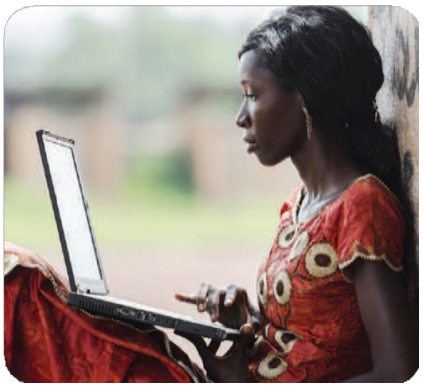
Despite their best efforts, some women are not ready to stop using tobacco, or feel they cannot quit when a brief tobacco intervention is offered. Quitting may be a low priority for some women for a variety of reasons, including stressful life events like being pregnant or having a new child at home, heavy tobacco use, other substance abuse or mental health issues, vulnerability in an abusive relationship, poverty or homelessness. It is important to respect a woman's right to decide what she can and cannot take on, and when.[1]

A woman's support systems are not always free of harms.[1,55,56] She may be influenced by her partner continuing to use tobacco or the prevalence of tobaccouse in her immediate social circle. It is important to acknowledge these circumstances in the lives of pregnant women and to recognize how tobacco influences those relationships. The research on tobacco-related interaction patterns shows how relationships can be supportive, disengaged or a source of conflict, thereby adding to or reducing harm, as the case may be.[55,57]

Equity-Oriented Approaches

Equity-informed approaches recognize how factors such as poverty, racism, social isolation, violence and trauma, and gender affect vulnerability to tobacco-related health problems and a client's capacity for change. It is important to consider how these factors may affect women's strategies for reducing or stopping their use of tobacco, the supports they need and their success in making effective change. The social determinants of health have equal, if not greater, impact on health as do changing personal health behaviours or making "healthier choices."[58] Barriers to quitting are closely related to the social determinants of health, which include

- income
- education
- physical environment (e.g., healthy workplaces, safe housing)
- social support networks
- Aboriginal status
- gender
- access to health services



It is important to consider how these determinants of health may affect women's strategies for reducing or stopping use of tobacco, the supports they need, and their success with making effective change. Three examples (income, education and Indigenous status) are provided to show how they may be addressed.

Income

The positive association between socioeconomic status (SES) and health is well established. There is a significantly higher prevalence of tobacco use in low-income groups. The prevalence of tobacco-related health problems is associated with a person's income level, with the poor having higher rates of lung cancer and COPD.[59] People with a lower SES, limited formal education, or who are homeless. [33,60,61]

- are more likely to use tobacco
- have less access to effective and affordable health-care treatment
- are likely to work, live or frequent environments that allow tobacco use
- are targeted by tobacco companies
- have more stress in their lives, which is often related to tobacco use, as is mental-health issues, alcohol or drug abuse, or a history of trauma

The determinants of smoking among pregnant and postpartum women consistently reflect social disadvantages, including low annual incomes (under $30,000), lack of financial resources, low levels of education, low occupational status, social stress (e.g., psychological, relational and emotional issues), lack of social support and lack of control over their living conditions.[1]

Income-sensitive approaches

- *consider a woman's income level, and connect women to supports that are affordable*
- *involve discussion of the financial benefits of quitting andways of overcoming financial barriers*

Education

A strong independent inverse relationship has been consistently found between a person's smoking status and their education level.[59,62]

Education-sensitive approaches

- *consider a woman's education and literacy level, as well as whether English is her first language*
- *involve discussing her preferences for receiving information and ways she can overcome any barriers in reading and understanding*

Culture and Indigenous Status

When working with Indigenous women, it is important to consider the high rates of tobacco use by Indigenous girls and women, and how cultural beliefs about tobacco may play a role.

Cultural beliefs about tobacco: Many Indigenous groups have longstanding traditions involving tobacco that is very different from current commercial tobacco products. Based on those traditions, women and girls who identify as Indigenous may value tobacco as sacred. Health providers need to be prepared to discuss the difference between traditional and commercial tobacco use.

Traditional tobacco [63]

- is burned as a means of carrying prayers to the spirit world
- is used in medicines and has healing properties
- may be given as an offering to Mother Earth
- is given as a gift to an elder in exchange for the offering of prayer and spiritual guidance
- is used in many ceremonies

High rates of tobacco use: Many historical, social and cultural factors have played a role in leading to the high tobacco use rates seen among Indigenous people in Canada today.[63] Indigenous people in Canada have a higher tobacco use rate and carry a disproportionate burden of smoking-attributed morbidity and mortality compared to the general population.[63,64] In Alberta, 43.4% of First Nations people and 38.8% of Metis people smoke cigarettes daily or occasionally.[65]

Smoking rates during pregnancy are also considerably higher among Indigenous women than among other women. In Canada, roughly 50% of First Nations and Inuit women smoke during pregnancy, compared to just over 10% of women in the general population.[64] A number of social and economic factors are also associated with smoking during pregnancy, including low incomes, low educational levels and social stresses—which are all factors that affect Aboriginal people disproportionately.[64]

When working with Indigenous clients, it is important to understand the history and current developments towards reconciliation in Canada.[66] It is also important that health-care practitioners who work with clients on an individual level recognize the diversity of individuals and Indigenous communities and cultures, and tailor their interventions accordingly.

Culturally safe and relevant approaches involve

- *creating space for discussing women's beliefs regarding tobacco use, where each woman's cultural beliefs are respected, while offering information about the harm of commercial tobacco*
- *learning about the history and current context of Indigenous peoples in Alberta*
- *understanding the links between high rates of smoking and colonization, racism, oppression and discrimination, and the need for trauma-informed and non-judgmental approaches*
- *supporting links to elders and other Indigenous people who are knowledgeable about tobacco*

Age

In spite of the statistics on girls' use of tobacco, there are few resources that specifically describe how to support girls and young women to change their tobaccouse. Most recommend integrating tobacco into other topics, such as alcohol, physical activity and body image, and using an overall focus on empowerment.

For more information on how age, gender, culture and context shape Indigenous girls' experiences of smoking:

- *Hearing the Perspectives of Aboriginal Girls on Smoking (Centre of Excellent for Women's Health)*

For more information on how age, gender, culture and context

- *How Girls' Groups Can Promote Health (Centre of Excellent for Women's Health)*
- *Girls, Smoking and Stress: A Backgrounder for Facilitators of Girls Empowerment Groups (Centre of Excellence for Women's Health)*

Working from these four principles (woman-centred, trauma-informed, harm-reducing and equity-oriented) can be helpful to care providers working with women who use tobacco and who are making changes in their use. It allows providers to see the complexity of the factors associated with women's tobacco use, and to sensitively and effectively assist women to address the unique combination of factors influencing their use.