## Infertility rates in present-day canada

Health & Medicine, Obesity



Infertility Rates In Present-Day Canada Phase Five Amanda Fischer Ms. Thiel Due: December 12, 2012 Introduction In the last ten to twenty years there has been an increase in infertility among women. This report is being designed to answer the following question: What are the causes of infertility in present-day Canada? The purpose of answering this question is to make women aware of the possible causes of infertility so fertile women can reduce their chances of becoming infertile. Another purpose to this report is to make myself aware of the possible causes of infertility because I am hoping to have children of my own someday. In Phase One I had planned to do secondary research by using the internet and books, I ended up only using the internet. For my primary I had planned to do surveys. Instead of doing surveys I had interviewed two biology teachers from F. E. Madill. The four possible answers that were developed are: decreasing health in women, hereditary, birth control, and the environment. Decreasing Health In Women Having a healthy lifestyle is essential to one's lifespan, but it is also very important when trying to conceive a baby. Through secondary and primary research I had found that being unhealthy can decrease a woman's chances of becoming pregnant. Most people when thinking about being unhealthy picture a person who is obese, the reality is being unhealthy does mean being obese but also, overweight, underweight, not having a healthy diet, or not exercising. Using secondary research I had found from 2003 to 2011 studies have shown that obesity among women has rose from 14. 5% to 16. 8% (Statistics Canada, 2011). This is a problem because women who are obese have a 43% less chance of bearing a child. Being overweight also carries risks of infertility because hormone levels become out of balance

(Fertility Factor, 2012). I had also found that being underweight, and dieting could also risk fertility. In order for a woman's menstrual cycle to be regular she needs at least 22% body fat (Fertility Factor, 2012). Dieting can be a cause of being underweight. Some foods that women should avoid to reduce their chances of becoming infertile are excessive amounts of sugar, low fat milk, MSG, trans fats, high fructose corn syrup and soda (Baker, 2010). In my primary research I had found that too much exercise can cause infertility because it can cause amenorrhea (Sawchuck, 2012), while extreme dieting makes extreme changes in hormones, because there will not be enough fat cells (sex cells) being produced (Cronin, 2012). My interviewee's both had not touched on being overweight or obese, but more focused on being underweight. When talking about being underweight my secondary research had mentioned a lot about having an irregular cycle. It was twice where my secondary and primary research connected. It connected when talking about insulin (insulin is a hormone), and low-fat milk products. When eating sugar, the body needs to release insulin, to bring sugar levels down. When insulin goes through one's body other hormones tag along. Hormones and the endocrine system are connected, making a chain effect. When one hormone can not be regulated, it can not regulate others including sex hormones. Low-fat milk can also have an effect on sex hormones. Since hormones rely on lipids, when there is an imbalance there is a failure to ovulate or produce a healthy egg (Baker, 2010). This connects with my primary research because when Mrs. Sawchuck had talked about amenorrhea she had said that it reduces body fat levels, so the body can not make the same amount of hormones because sex hormones are lipid based (Sawchuck, 2012). Mr.

Cronin had said that extreme dieting makes extreme changes in hormones because there will not be enough sex cells being produced (Cronin, 2012). With these two methods of research I had found that even though the information had came across in a different way, both had ended up saying that it is crucial to have a healthy body and lifestyle, so that the sex cells in a woman's body are reproducing properly. I believe that the information that I had found on the internet is reliable because it is not outdated, and I had saw it repeatedly throughout my research process. The information that had been gathered from my primary research is also valid in my opinion. I believe this because even though it was not much information, it still connected with my secondary research. Through this process I have found that it is not so much being healthy, but making sure the sex cells are, and to maintain healthy sex cells, a woman's body has to be healthy. Hereditary A woman taking care of her body is the first step when trying to avoid becoming infertile. There are some cases in which it is possible to still be infertile. Both secondary, and primary research stated that infertility can not be hereditary because if a woman was infertile, she can not bear children which means she would not have a child to pass the infertility trait down to. However infertility problems can be passed down. Endometriosis is an example of a generic trait that can be passed down. Instead of the endometrial tissue growing on the inside of the womb, it grows on the outside (Baby Hopes, 2012). Most infertility problems are not hereditary such as, the quality of eggs due to aging, or blocked fallopian tubes (Baby Hopes, 2012). Mr. Cronin and Mrs. Sawchuck had agreed that infertility problems can be passed down. Mrs. Sawchuck gave two examples of genetic infertility

problems, the first is some women have too much testosterone, and some women may not have ovaries (Sawchuck, 2012). This information is reliable because all of the information that I was given, and researched matched with each answer. Therefore, infertility can not be hereditary, but infertility problems can be. Birth Control In our society, teenagers and young adults are becoming more aware of birth control. There are very different methods of birth control, and all try to do the exact same thing - prevent unwanted pregnancies. The forms of birth control can include, barrier methods (condoms), hormonal methods (birth control pill, patch etc.), or an intrauterine device (IUD). Research has shown that using barrier methods such as, condoms, sponge, or diaphragm does not affect fertility. Neither do hormonal methods such as a contraceptive ring, injections, and implants. As well as barrier and hormonal methods. IUD's do not increase chances for a women to become infertile (Fertility Factor, 2012). Mrs. Sawchuck did not think that birth control methods could affect fertility, however Mr. Cronin did think that an IUD could contribute to infertility if left in too long because it can create scar tissue, and also thought that hormones could be a factor (Cronin, 2012). I feel that the information that I received about birth control online is valid. This is because it had proved how many women believe that using devices and hormones will cause problems later on in their life, but they actually do not (Attain Fertility Health Desk, 2012). Another reason I feel my secondary research is reliable is because it is not outdated. My primary research is not as valid as my secondary research. This is because the teacher's that I had interviewed seemed flustered when answering, and had said "I don't really know... " when answering this question. Overall, birth

control methods do not impose a threat on a woman's fertility. Environment As well as contraceptives, the use of harmful chemicals are being used more and more frequently in everyday life. I had found that many chemicals have harmful effects on fertility. These chemicals include, pesticides, chlorpyrifos (Fertility Factor), dioxins (EPA, 2012), phthalates (Fertility Factor, 2012), and xenoestrogens (Barton 2011). Mr. Cronin and Mrs. Sawchuck both said that BPA was a big cause of infertility. BPA is an endocrine disrupter (Cronin, 2012) and can be found in tin cans, beauty products, shampoos, and a lot of other products that women use such as make-up (Sawchuck, 2012). The research that was conducted is legit because even though my interviews did not hold a lot of information, my secondary research supported the interviews. In my opinion this is the most common cause of infertility because women can not escape it. Chemicals are now used everywhere and infertility did not start increasing around the 1950's because of the chemicals that we as humans have produced (Cronin, 2012). Conclusion In the past 40 years, infertility has been rapidly increasing. Through this report I was in hopes of finding the best possible answer to the question: What are the causes of infertility in present day Canada? I believe that the best answer is the environment. This is because no matter where women go, or how hard they try to get away from pesticides, chances are they are not going to. Human beings now use many chemicals to enhance their crops, or animals so that they are able to make more profit. Chemicals are not only used in food but also used in golf courses, tin cans and are used a lot in beauty products. The limitation that I had experienced with this report, is the biology teachers only had limited knowledge on infertility. They were still a great

help for this report though! I would suggest before going into this report, to really look at the due dates, and use time wisely. Do not hand Phases in late, and really put everything you have into it. This report is not as much work as it seems as long as the work is done efficiently. Another thing that I would have improved if given another chance, is using time wisely for interviews, and put a lot of thought into who to interview, so that they can provide you with a lot of information for Phase Four. Now that the answers to the causes of infertility are uncovered, what are somethings that we can do to get rid of chemicals?