

November 8, 2018
(October Letter)

Dear Samantha,

Fran was putting together some newspaper materials for the young grandkids and this week it was about polio. I don't know if you have heard the stories of the Shaver's encounter with this nasty disease, so I thought I would provide you with some of the details that go with it. I will ask Fran to help me out since she knows more about it, of course.

Polio (poliomyelitis) is a virus that spreads through contaminated water and food. It grows in the intestines but occasionally attacks the central nervous system and destroys the nerve cells that control muscles. Most people who get the virus experience only a mild fever, but if it attacks the nervous system it can paralyze or kill – depending on the nerves affected. For example, if it destroys the nerves to the diaphragm the patient can die since they are no longer able to breathe.

Up until 1955, there was no way to deal with it since there was no cure and the vaccines had not been identified or prepared. In 1954, the Canadian government conducted a huge field trial with a vaccine developed by Dr. Jonas Salk and in spite of problems with it in the USA, the use of the vaccine in Canada seemed to be very successful.

Young children were particularly vulnerable to polio and its methods of contagion were not well known when the epidemic spread. As a result, it created a great deal of apprehension and panic among the population. Stories and images of children in "iron lungs", sick, paralyzed, and dying spread quickly and parents lived in fear of their children contacting the disease. At the peak of the epidemic (1953) there were about 9,000 cases and 500 deaths in Canada.

That summer, the Shavers were in Fort William (now Thunder Bay) visiting Dorothy's parents (Gladys and William) during Jack's August holiday. All four of the kids (Peter was not born yet) came down with a fever. Fran and John's fevers were mild and they recovered without problems, but Jim and Wilma became sick enough that they were hospitalized. Jim was about 6 years old and Wilma was 2 ½.

Fran recalls coming upon her mother and grandmother crying in the kitchen as they tried to cope with the anxiety and fear of the ailment. Since she was only 8 at the time, Fran's queries about why they were crying were dismissed with few details.

By the time that Jim and Wilma were released from the hospital, it was clear that Jim had escaped a serious impact, but Wilma was favouring her right leg in a way that was worrying. She did not seem to be able to move it in the same way she could move her left leg.

When they returned to Winnipeg, the four children returned to their lives in a normal manner. This was not particularly comforting to their neighbours, however.

Fran tells the story of how they went to play with their friends with a stack of comic books to trade. However, half-way through the exchange, they were sent home by their friends' parents for fear of contagion. She mostly remembers that they not only had to keep the comics they took for trading, but their friends' comics as well since any of them might have been contaminated.

Similarly, they were not allowed to kiss their cousins hello and goodbye.

As Wilma grew, it became clear that she had not escaped the long-term effects of the disease. She was unable to control the knee or ankle joints on her right leg. She was given a half-brace to manage the problem. This one supported her ankle joint below her knee. She used her hand to hold her knee joint locked when walking or moving.

Once she had grown a bit more, Wilma was fitted with a longer brace to support her leg. It was a heavy and clumsy thing – made out of metal and leather with a special hinge at the knee which allowed her to lock the joint and another to hold

her foot up so that she could swing her leg forward when walking. She strapped it on to her thigh with a long lace. You can see it in the accompanying photo taken in Winnipeg about 1953 or 1954.



At that time, the design and construction of braces was primarily controlled and directed by war veterans who had lost limbs in the war. Most of the patients were male adults and there was little attention paid to the weight or aesthetics of the equipment. Wilma faced the associated embarrassment of being measured, handled, and instructed mostly by older men who had little experience dealing with young children.

In 1959, the family moved to Vancouver since Jack had secured a job as the United Church Chaplain to UBC. This was the first time that the United Church had a designated chaplain on a university campus. It was an exciting and challenging posting for Jack since he had plenty of room to design the job as he felt was necessary, but at the same time, he knew that the United Church administrators would be watching things closely.

Wilma functioned for several years with the full brace since it allowed some adjustment for height, but was soon faced with the problem of unevenness in the growth of her legs. Her left leg was growing in a normal fashion, but her right leg was not keeping up. The doctors advised Dorothy and Jack that they could perform an operation on her good leg to slow it down – so that when she was full grown, her legs would be about the same length. This was a difficult decision – not only because it was unclear whether slowing the good leg was a good strategy in general, but also – if the strategy were taken – how much length to anticipate for the operation?

Fran recalls being called in to the doctor's office so he could measure her leg as an estimate for how tall Wilma would be without the operation. She also remembers the meetings which Jack and Dorothy attended with other parents of polio patients as they sought insights and support regarding how to deal with the challenges.

After much heart-rending deliberation and discussion, Jack and Dorothy decided to take the doctor's advice and go ahead with the operation. Unfortunately, infection set in as a result of the operation, so they had to conduct a second one to clean it up. It was successful in that it slowed down the growth in Wilma's good leg, but it is still unclear whether the decision was a good one – and the scar left by the operation remains unattractive.

It was only a few years later that Dr. Salk's vaccine became generally available. Polio was essentially wiped out within Canada by 1994.

Polio still exists in some parts of the world. Pakistan, Afghanistan, and Nigeria, for example, have continued to experience polio outbreaks since they do not have extensive programs of immunization. This means that children in other places are at risk of contracting the disease since the virus can be easily transported where the population is not immunized. Since there is no cure for polio, the only effective action to prevent it is immunization. Unfortunately, there are many people who fear (unreasonably) that all forms of immunization are dangerous and refuse to have their children protected. By doing so, they put other children at risk as well as their own.

As you can see, I have told the Shaver early story of polio in a general way. It is up to Wilma and her siblings to tell the stories about how it has affected their lives. John probably has some additional stories to add, but you can ask him about those when you see him.

The eradication of polio is in general a good news story since thousands of children have been saved as a result of the vaccine. For most children in North America, it is Fran and Wilma's generation which have had to suffer the terrible consequences of this virus.

Love,