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Boersma, Vernon Oral History Interview: Polio Survivors in Holland

Matthew Nickel

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Oral History Project 2003
Joint Archives of Holland
Polio

Interviewee:
Dr. Vernon Boersma
(edited)

Conducted by:
Matthew Nickel
22 May 2003

2003 Oral History Interview: Polio
Interview with Dr. Vern Boersma
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Dr. Boersma and I sat in his study, a room well lit with natural light from a window over his desk that faces the front entrance of his home at a right angle. Periodically he clicks his pen in a slow repetition. His voice is deep and warm, with resonance that comes from the back of the throat. He speaks with consistent and strong inflection.

MN: I would like to start by asking you about your medical practice in town, if you could just describe it for me.

VB: Yeah, I began practicing here in November of '49, but didn't really get going until January of 1950. I practiced here for about a year, then the Korean War broke out. They called me back, I was in the Navy Reserves, and called me back because I had had training under the Navy, then I spent two years in the Korean War and then came back to Holland again and started early 1953 and practiced here until I retired in about '87. So I practiced about 37 years. Thirty-eight years. Prior to that I had taken my training at University of Michigan Med School. I took my post-graduate Med school education, that is my internships and residency at the University Hospital in Ann Arbor.

MN: I guess this is going back a little bit before your practice, but what took you from, you are a Holland native correct?

VB: Correct.

MN: What took you from Holland to go off to Med school?

VB: I was always interested in, I shouldn't say always, but in high school already I had geared myself to go into medicine. I was interested in science and in those days,

particularly I think at Hope College and most colleges, there were only two very emphasized areas of science, one was chemistry and the other was medicine. Physics existed but there was no Nuclear Physics, there was no technology like we know of today. It was more of a mechanical physics. Biology was interesting, but there was not very much biochemistry or biology related to diseases and all. So botany and the other sciences just weren't emphasized much. So I think I chose medicine for that reason. There were a good many pre-med students at Hope at the time. Hope was a good school to attend. Of course I lived locally too, so. And that was during the depression so it meant that it all worked out more easily and readily for me to do it that way than to go on to any other scientific field. I think today a lot of kids have the opportunity to choose other scientific fields so its diluted the pool of medical graduates probably. But there are far more in computers and physics and into biology and environmental health and that sort of thing.

MN: So what brought you back after you finished your education, what brought you back to Holland?

VB: There was one obstetrician in town by the name of Dr. Carl Cook. He was having difficulty because he was largely doing only obstetrics and gynecology, that he couldn't get anyone to take care of the babies after he delivered them because the other fellows were all family practice and general practice as they called them in those days. He, they wouldn't take care of his babies unless the mother came to them for the next delivery. He had my mother as one of his patients. He persuaded her to get me interested in trying Holland, and I thought well, Holland was much

smaller in those days but they could probably support a pediatrician and one of my professors at the University of Michigan said, well, if you don't go to Holland we are going to send somebody else there soon. So I just decided to try it and it worked out well. I did, when I first started, because everybody else was doing general practice here, I did some general practice as well as pediatrics. People in those days, people thought a doctor should be able to do everything rather than just be a specialist, you know? About that time all of the young guys were coming back from the service and they had learned that specialties were important and so people began to specialize more. So my first twelve years I practiced alone and then I was doing some general medicine. I had a rotating internship through various areas of medicine, but otherwise my specialty had been just the pediatrics. My post-internship training was pediatrics. But after twelve years I got a partner and then I just limited myself to pediatrics except for the migrant clinics and for Hope College. I worked with the clinic there.

MN: Could you describe what you saw Holland like at the time when you came back and starting a practice?

VB: Holland was very private. I had grown up here, I had a lot of friends here and I liked the community, particularly I think to raise kids. It was a small town, we probably had 15,000 residents at the most. It is hard to believe that there was hardly anyone on the North Side and we had a small hospital, about a fifty bed hospital. That was one of my big drawbacks because I kind of had to bring up the laboratory myself to improve it because they didn't do the kind of testing I was used to getting in Ann Arbor. I thought they were very cooperative and a very, I

knew of course the background on a lot of doctors practicing here. In fact I was only number fourteen on the staff. I was the fourteenth doctor on the staff, so that there were fourteen doctors working at the time. I decided that it was worth a try and I was eager to give it that try, and also because I had been investigating another practice in Missouri, and my wife had bought a new dress and we were of course we got married when I was in my residency. She bought a new dress and I got all decked out and got ready to go to this interview in Missouri at the Andrew Clinic. About a couple of days before we were going to leave, why they called up and said they had interviewed somebody from Chicago that they had already hired so there wasn't any point in coming.

MN: Oh no.

VB: Then I said, well, that settles it, I am going to give Holland a try. I am glad I tried it. I got started here and the bank asked me when I came and they asked me how much I thought I could make after a year and so on. I told him \$10,000 a year. My wife said, "You're kind of cocky aren't you?" Could you imagine then what the inflation has done since that time. Of course then the Korean War was also a threat, and I got called back after the first year, but then of course after that I was very convinced that I could do well in Holland so I returned to Holland after my Navy service.

MN: What was medical practice like in Holland at the time?

VB: At the time it was all general practice, general practitioners. They did most anything they wanted to do. My malpractice insurance was \$50 a year. A pediatrician pays about \$15,000 instead of \$50. It was, for the time, it was good

medicine in Holland I thought. Zeeland didn't have much of a hospital then, it was just in an old home. Later they built another hospital. We did have somebody who was in ear, nose, and throat. He didn't have much experience, he called himself an eye doctor, but he didn't have much experience in eye. Then shortly after our eye was here he hired a friend of mine who came out of Ann Arbor to do the eye part of his practice. Then there was Dr. Cook in obstetrics, and that was about the only two specialists here except myself.

MN: And did you work together, often?

VB: I took care of all the babies that Dr. Cook delivered. I had to help him with his surgery when he did cesareans and that sort of thing, because you needed assistance and he found it easier to have me than one of the family practitioners. There was a little antagonism between family practice and specialists at the time. Just like the big grocery stores came in, there was antagonism against chain stores. Of course that has all worked out, and for a number of years, family practice or general practice just went down the tube and everybody was in a specialty. Then people began to say, well, we don't know where to go first when we get a disease, which specialist to go to. Then Michigan State [University] decided to have a medical school, which they had not had. And they developed a program, which was training people toward what they call family practice or general practice. That sort of brought general practice back again, so we got more emphasis on general practice. Yet I didn't have any trouble, I got a lot of referrals from the fellas in town. Actually, one of them, I had while I was in training, when

I'd come home he was ill or he needed to rest or something, he then had me take over his practice for a few days and then of course he would send me patients.

MN: Do you remember his name?

VB: That was Dick Schaffnaar.

MN: So in your practice in Holland, what was your experience with polio?

VB: Well, polio of course, was always around, but it was never emphasized much. Probably because there were a lot of other diseases. In the first place it was not as rampant, because the population was much smaller in the whole United States. We were a rural country at the time. We had far more rural population than we did urban. That is why when Roosevelt became president even in the '30s. He emphasized the rural vote over the city vote. That was then. We had a lot of small farmers, of course that has all changed since then. The population was smaller and not as many people got in contact with each other being rural and so it didn't spread like it had since, and we didn't have, we had so many other diseases where there were not any anti-biotics and anti-biotics were coming in when I was in practice, in the thirties and so forth, but there weren't any real ways to treat disease and people would die from appendicitis, and they would die from a lot of other causes. Polio, which was not called polio at the time, it was called infantile paralysis was not featured like it was later. Of course after we got anti-biotics in the later thirties and early forties. We began to cure diseases with a lot of, people didn't die of infections as often, particularly after the war, and polio became known as a scourge of course. Our population, people got more crowded together, particularly like in military camps and in other camps, schools, and then

Roosevelt, who was president and contracted polio himself, was crippled from it established a foundation, he and Basil O'Conner, his partner in law. The foundation got a lot of marketing and publicity and raised a lot of money for research and all. So polio was really featured. And of course it was a disease particularly in this climate where you see it only in the summer time. It is caused by a virus, which established itself and grew much better and spread in a warmer climate. It would be dormant, would be alive in a frigid climate. It was much more of a threat during the summer months when people would congregate at beaches and sporting events and stuff. Then polio began to be more prominent. We would see it in the movie films. We didn't have television of course, but a lot of people had, probably more relied on newspapers than we did today. Do today. And they feature articles in the newspapers in the Holland Sentinel almost every day, whether or not there had been any more cases of polio. They started doing some more studies on polio and they found how they thought it was spread and then they warned people not to get in crowds and not to go near swimming pools and beaches because this might be a contaminated area and then they might pick up polio, so, it began to scare people so we had very much inhibited beach attendance and camping. People going to large sporting events. I think my involvement in polio prior to my coming here, my involvement in training was considerable so I became quite interested in it, and had quite a few refers about it when other people had cases that they thought might be polio. It was a disease that was unusual in that some people, in fact probably majority of people would feel very ill and they might suddenly notice that they had a weak leg or that they

were not as strong in one foot or something, and they hadn't noticed before and looking back realize that they would have polio. There were of course the cases where they definitely had sore muscles and stiffness and then developed some paralysis later in which they realized was polio at the time. They had a number of severe cases of course where they could not breathe very well anymore because the muscles in their chest or even the muscles in their spinal column and up towards the brain were involved in the polio. They would need special attention. Somebody, an engineer developed an iron lung that would breathe for them until they hoped they could recover. Some of this would come back slowly, but generally it didn't come back. One person who was very famous in Holland was Marjorie Cooper who was in an iron lung all her life, but she died which was probably 40 years later. We had a few others in iron lungs too but most of them died, but it was a disease that they suspected was a virus or a germ of some kind. They had not isolated it. They didn't know as much about viruses in general at that time of course, as they do today. When three fellows by the name of Robbins, Ender, and Weller, discovered how to grow the virus, from patients feces, from discards from patients that had had polio and they learned to grow it on monkey tissue culture at Harvard, and they got the Nobel Prize for that. Then they could develop a vaccine and once of course we got the vaccine that altered the whole course of the disease and that did not occur until the '60s. During my time of practice in the '50s and early '60s, why I would see lots of cases during the summer where people were really worried because polio starts out as just a mild cold with aches and pains like so many other things, like other viruses cause. I

think that the symptoms of polio are not as definite as one would like in a disease. Most diseases don't always have all the symptoms that they are supposed to. Some of those symptoms and then accommodation of some other things that ~~can't~~ can confuse you. The typical signs of polio were the stiff neck and the fever perhaps a little achiness and stiffness in muscles and soreness in muscles. And then after four or five days some weakness in the muscle and noted paralysis. That is the nice typical case, but the majority of the cases that you saw were not nice and typical. There were other diseases, like meningitis or other viruses in the same class called enteroviruses, which could mimic polio. In order to determine what you had you usually had to do a spinal tap. I was doing many spinal taps each summer. Probably as many as six or seven every week anyway, just to check. With polio if you had a certain findings you had polio and then you would probably transfer your patient to Grand Rapids where they had more facilities to watch them and be there in case they needed immediate attention. Some of them would get a paralysis of the pharynx and the vocal cords, couldn't swallow and had trouble breathing at the same time. They would have to be watched closely so they could to a tracheotomy or put them in an iron lung. Keep them alive and hope that over a period of a week or two that some of the original function would return, they may wind up paralyzed particularly in the legs and yet be alive. There are still some people around today who had polio as children and are crippled from it today. Dr. Bill Bloemendaal who is very active and has been, who was a teacher in the Holland School Systems is a good illustration. He was a son of a doctor, who was a doctor in Zeeland at the time, when he had it. I have Millard

DeWeerd and Marjorie Cooper, Danny Padnos' wife had polio and is still crippled, has a limp, a mark from polio. So did Paul Elyinga's wife Pat. Most of the people who had it are now dead because they were alive many years ago, some of them even adults when we had those polio scares and epidemics. They would be in their seventies and eighties now you know, or older. Of course they are gone. [pause] Most cases did recover however. A lot of cases, because we could do studies after we learned about the virus, because we could do studies on their spinal fluid, we had a lot of cases we found we might not of called polio if we didn't have evidence that they had had it but that they recovered. They think that 90 to 95% of the people who had polio did recover and did not have paralysis that was permanent. So it was a pretty ubiquitous infection that most people that had had it, never showed any symptoms. There were a number of cases of what they call, abortive polio or polio that is not diagnosed or non-paralytic polio. But it was interesting to practice in those days because the entire population was as aware of the polio that was around as they are now today with West Nile Virus or SARS. Same sort of an attitude. Polio was caused by a virus that resides in the intestinal tract which is passed generally through feces. That sounds kind of gross, but actually, just to get a germ from feces is not difficult if it is vaporized or somebody touches themselves and then touches something else before they wash or they are sanitary. Particularly with kids, day care centers. What was interesting in that regard is that once we had the oral vaccine which was discover by Alfred Sabin, and gave it to infants, we discovered that some of the mothers in the contacts in the family were, who changed diapers were immunized. The got the

virus from the baby, vaccine you see. In fact we had a few cases, in fact every year we had a few cases where they actually develop polio, because the vaccine that they gave orally was a live vaccine. People were susceptible, particularly if they had treatment for cancer with drugs that compromise your immunity so that it was not hard to infect people. They do feel that some of this could have been transferred through respiratory contact too. Although not largely. Largely it was a fecal transmission. But that is why they were so afraid of swimming pools and beaches and water. People getting into the water, taking the child and passing the little feces of some kind and contaminating the whole pool.

MN: When in Holland did those warnings start going out?

VB: I think that the, probably in the early 50s. It might have even been the late 40s, but I think it was more of that, in the mid-50s we got very aware of it. Also I think we got more congregation because the population was getting bigger. Circumstances changed to the point where we congregated in larger groups, church functions of course, and all these things were curtailed because, just like travel is curtailed today because of the threat of terrorism. People started staying at home because of the threat of polio.

MN: What other effects did polio have on the community other than closing down some of the theatres and pools and things like that?

VB: They slowed them down but I think they—other effects, in what regard do you mean, as far as?

MN: Maybe—

VB: Hygiene of course. Some people were for example, concerned about the type of communion you had in church. The common communion where you had a common cup or even the kind of communion, it wasn't as common, where you would walk up and dip the bread with wine or grape juice. They take it they felt it, the people who were passing out the bread and somebody might drip a little wine off their chin. So that was curtailed, that kind of communion. We had an experience like that with diphtheria, in the early 20s or the late 1900s, and that had the same effect. I think also that the whole thing was marketed considerably by the polio foundation, which grew to quite a tremendous influence at the time. Perhaps because the president promoted it. It was one of the few charitable organizations going after funds like that at the time. So people were very interested in promoting it and getting to it. It got a lot of money for research, which led to the vaccine, which was wonderful. Except it cut out the whole purpose for the foundation because we didn't have much polio after that. [End Tape 1 Side A] You asked about the influence in community. I think became apparent that the poor people and the people in the ghetto area, that they were, particularly in the big cities, and the people who generally who were at the lower social class were far more threatened, than the people in the upper classes. They had more, probably less experience with good sanitation with a little more crowded conditions with larger families and all. Larger schools.

MN: So do you think there was—

VB: It was certainly, I should say confirmed that the lower poorer class were more threatened than the upper class.

MN: What was the economic situation of Holland like at that time?

VB: The economic situation was good all over, particularly in the '50s. Particularly in the Detroit area and Michigan too, because we had a lot of auto industry and did a lot of work here for the auto industry. After the war the whole United States economy, particularly five six years after the war—

MN: Which war?

VB: World War II. There was such a backlog of demand. You weren't able to buy anything after the Second World War. It was a rationing of everything. There was no manufacturer, for example of cars, they didn't make cars, they made tanks and ships and war equipment. The only way you could get a car is through some, pull someplace that you had. So there was a big demand, and of course we were one country that was not affected as much as the countries where the war had actually taken place. So we not only had domestic demand, but we also had foreign trade as well so our economy boomed. That was inflationary too, like in the 50s and 60s we had no problem with our economy. The stock market went skyrocketing.

MN: Looking more locally, what was it like economically, was there any kind of distinct economic divide between, was there a distinct middle, upper, class versus a lower class, or?

VB: No. I don't think polio particularly relates to that, although there had always have been class distinctions, but I think that became the distribution of income. It got worse as time went on as more money was made because more people in the top brackets took more than their share, but everybody was doing well, and of course we had strong labor unions and there was a big demand for labor so labor could

call the shots and teachers were in demand so teachers could get better wages, and everybody was in more demand as far as work is concerned. I think generally speaking, compared to the depressions in the 30s and all and the sacrifice they made during the war, there was more money available and everybody was happy, but as time went on, the 60s and on, it grew faster in the upper echelons than it did in the lower echelon. Nobody suffered economically in the '50s though. I shouldn't say no one, there is always some, but the percentage was considerably, unemployment was considerably lower than it is even today.

MN: What was Holland's awareness of polio like?

VB: It was a worry. It was of course in the news regularly. So people were as they say concerned about it. I think far more so that they are now I'd say of West Nile virus because there aren't that many cases of it. You know it may come on the air or on the television once a month or two times a month or so. But when it hits you everyday, it gets to be a constant talk of conversation amongst people. It is quite a feature and then you see people afflicted with it. You see people or hear about friends of yours who got it. That emphasizes it even more.

MN: What were those conversations like, hearing about polio?

VB: You were worried that you couldn't do anything about it. There wasn't much treatment for it. There was a feature of a treatment that they called the Sister Kenny treatment. She was an Australian nurse who used hotpacks and when people would get spasms in their muscles from polio, she would have a special kind of massage and hotpack treatment she used. That was featured quite a bit in the magazines and in the newspapers. Other than that, discussions centered

around friends of yours whose child fell down, he had a little fever, and a few nights later he fell down when he was running to the bathroom. Low and behold they found out later that, a week or two later, that when his fever had left him alone, and he was feeling good again, that he was weak in one leg. That is, one leg is weak. They evaluate his muscles and discover that he had a few paralyzed muscles that weren't functioning and so his reflexes were going in that leg and he had polio. Of course that sort of thing was even more prominent than the kind where someone was definitely paralyzed or hospitalized. You sat there wondering whether your kids could get it, or even you could get it. And how are you going to avoid it? It might hit you overnight. That I think was part of the conversation probably. And the way to avoid it was just to avoid crowds.

MN: So did people talk out of fear? Were discussions out of fear?

VB: [Slow with hesitation] Yeah, they would be fearful that something they did might inadvertently get them in contact with somebody who had the disease and passed it on. They didn't have a lot of reassurance because there was not as much known about it as we do know now. That we discovered, after they discovered how it spread and what the cause was.

MN: What was like being a doctor then, hearing this?

VB: The doctor was aware of the fact that everybody who had what they thought was a cold and a fever, especially a child, that it could be polio. We were far more aware of checking the rigidity of their neck which it a more reliable sign of the fact that they have a virus in their spinal cord or their brain. That and aching muscles. Particularly tense muscles. You'd look for that particularly. Check that

now for enteroviruses, which is what polio is, it can often cause red throats, no really red like syrup but irritated throats. So you were on the defensive always keeping polio in mind, I think.

MN: Were there any particular fears you had then, as a doctor?

VB: You were very careful not to contaminate yourself. I think the one thing is that a lot of doctors were not comfortable doing spinal taps. The technology has improved to a point where it is not too much of a procedure now a days. But some of us who were quick to do spinal tabs because it was an early way of detecting polio and a way of making a definitive diagnosis. Giving people assurance because they would not have it if the spinal fluid was normal. That is probably why so many spinal taps were done in those days.

MN: How common then was polio in Holland?

VB: I got to thinking about that, it would be interesting to get all the, get Randy Vandewater for example, who is Holland's historian and particularly worked on the paper for years and years. To get out the old papers sometime to look at the headlines and look at the different papers and count up the number of polio cases in a year, just to get some kind of idea of how many actually occurred. And of course you would have to compare that with the population of Holland at the time but then there were other cases that didn't even know it had been polio until it was all over. I would say, roughly guessing, and this would be a wild guess, but I would say that every summer we had a dozen cases of confirmed polio publicized. That is probably underestimating. [Pause] But it is like terrorism. We had a planned trip for spring vacation with all of our grandkids, there are four of them in

town here, Our sons and families, to go to Washington DC and look at congress and look and see some of the sights around Washington and go to Williamsburg. That is a trip I had all the reservations made and all, but when the kids heard of that and there was an incident of some terror incident. I can repeat it just prior to that they said, “We are not going near Washington DC, no way?” If there is a terrorist act it is going to be there. The percentages are not great but it certainly changed our plans. Instead of going to Washington we went to Mammoth Cave and some other places. That is the kind of thing that went on with the polio epidemic.

MN: Do you think that national awareness of polio, with the foundations and FDR, do you think that effected Holland locally?

VB: It effected them in as much as it was one of the main sources of publicity. As far as the, and of course it received contributions from this area. Although charitable contributions again were at a low at that time. I shouldn't say that, in the '50s they weren't. Prior to the World War II they were, but I think it did effect charitable contributions. They gave more to charitable—charitable foundations and charitable organizations. After the publicity of the polio foundation. Of course the amount the money they raised and the amount of money that they provided to the universities, and to other research institution, Other research institutions really was effect in finding a vaccine. There was a little turmoil with that vaccine too. But that is another story.

MN: So to what extent did you care for patients with polio?

VB: Actually I didn't do a lot of personal care. Because if they got polio, unless it was pretty much a past event and that they have diagnosed that they had polio, otherwise we almost always referred them to Grand Rapids immediately because they had a center there, and they couldn't do a whole lot really. I would do a spinal tap here and then send samples, we'd analyze it here, and then I'd send samples along with the patient to Grand Rapids and they were usually hospitalized and then in those days hospitalization was much more common than it is today because we didn't have as much outpatient care and didn't worry about hospital expense and they would observe them for a period of maybe a week. It was an acute illness so that it was over in a short time. It was not one of these illnesses where you have the patient stay there for a month at a time. In a week or 10 days they have either had it and had paralysis and had to stay in rehabilitation, and had no threat of getting more. Or they were over it and cured and they could go home. So the actual treatment which was not much was carried out in Grand Rapids.

MN: Where did the doctors in Holland then get their information and their education on polio?

VB: They had to do their own reading really. They could go to a conference perhaps, but they had to pick it up themselves. That happens with a good many things. We find things in medicine and discover a new entity, or a new approach or a new therapy, and the doctors in practice are obligated to keep up on that and they have been trained how to do this. They can't teach them everything they are ever going to encounter in Med school because some of these things are not known when

they are in Med school. Its up to the doctor to keep up on the new developments just by getting some education.

MN: Was there any kind of role that the doctors in Holland had in educating the public about polio?

VB: No, not really. Although, the health department was very active. The public health department. They were probably responsible for all the publicity and the polio was a reportable disease. In other words, there was a law that states that if you had a communicable disease you are supposed to report it to the health department so that they can prevent further contact. That was true also of some other disease that got so common and so unthreatening that a lot of the doctors never reported, for example, measles and mumps, and things like that. But polio, most of the doctors were very responsible in recording them. If they didn't, the hospital, most of them were diagnosed at the hospital or they were sent out to Grand Rapids and they would report it back to the health department. The people would get wind of it through the health department I think. In those days they'd have a reporter, probably particularly during the summer who would probably make his rounds at the hospital to find out what was going on, you know, because it is news.

MN: Were there any troubles, what were the troubles in diagnosing polio?

VB: Because it isn't, in 95% of the cases, a very definitive set of symptoms, they mimic so many other things that the diagnosis of polio, if they had a stiff neck and a spasm of their muscles, and pain in their muscles and all, it was thoroughly easy to suspect it. But if they just had a low grade fever. The only way you could be sure of it wasn't something else was to do a spinal tap. A lot of the doctors,

particularly the older ones weren't that eager to do that. It was a procedure that has a little risk with it and takes some skill, so they would often times, unless they had a patient with very clear cut signs of polio, they would probably just send them to Grand Rapids right away and wait for them to do the spinal tap. Otherwise they, a lot of them I think, went undiagnosed until a week or two afterwards they had discovered that they had had it.

MN: Were there any issues with insurance then?

VB: No. Maybe a few. We had a poor population like you always have, and there were what we called the Michigan Crippled Children's Commission at that time and they would take, the State would pay for their care. As far as the doctor's fees are concerned that they paid such a little bit that all the doctors got together and donated the fees that they got from the state for the doctoring to do a little fund, or pool and they used that to buy some new equipment for the hospital or for other charitable things. So the poor were taken care of, but there wasn't any insurance or very little insurance at that time.

MN: Were there, like the Polio Foundation and the Crippled Children's Commission, did those often compensate for medical expenses?

VB: The Polio Foundation never compensated anybody, they never paid medical expenses. Hospital expenses weren't that great for somebody on an iron lung, there were very definite government subsidies for that, government help. There were some people like the auto workers I think has at that time Blue Cross had started and they had some insurance. I am not sure that the teachers had any insurance in those days, they might have had some. But expenses were not as

much of a problem as they are today, because most people could afford to pay their bills and those who couldn't they never really, they just figured that they would take care of them and they just didn't get paid. They might have sent them a bill sometimes, sent them several bills and not get paid, but if they knew the circumstances, they just accepted that there was going to be some charitable care or care that had to be given. People couldn't afford to pay it, so that was it. That was not a big percentage, but it was, even in my practice, it was always a factor that you carry out. For example if a patient you felt drove up in a Lincoln and then couldn't pay their bills then you probably would turn them over to a collector but if you knew the circumstances and particularly in a small town you usually did, then you just figured that it was your duty to take care of them. You just didn't charge them, or charge just an amount so you thought they could pay it. And the hospital bill was the same, they really didn't don people very much.

MN: It seems like a very big difference from the way we do things today.

VB: Well, then medicine advanced to the point of where we have got machines and we had x-rays and that sort of thing even when we took care of the migrants which we did from the late fifties on and sixties. To get an x-ray, you know, to get studies done, some of the advanced lab studies they had no money at all. Then we got grants from the government. We got state grants and national grants that would pay for migrant care, and that was paid directly, particularly paid directly to the hospital so those people could get care. But medical, as medicine developed and got more technology, the problem arose that some people could pay for themselves and other people couldn't. Then the hospital also got to the point

where they had to make ends meet, and they would don people for it, or they would have to go to some organization to stay afloat. A lot of people, because they got donned for it hated to go to the emergency room or hated to go to the hospital. So then we started getting insurance, the whole social, economic structure of medicine has changed completely. It is no longer doctor to patient either, you belong to a group or you belong to a certain HMO or something. It is far less personal that it was.

MN: Could you tell me a little more about your work with the migrant population?

VB: That is another whole story. When I was first in practice, I realized that I'd patients in my office and the health department would call me and I even knew some blueberry farm owners and they'd send patients in to see me and I realized that they had nothing. You couldn't charge them at all, but you'd want some hospital work done. The hospital would be rather real moody, they'd go ahead and do the tests but then the people would get billed and donned afterward till they paid the bill. So a lot of these people just didn't seek medical care where they came from, southern Texas often. They were not used to having care so some of these cases became so desperate that I felt something had to be done and so I got a trailer. I rented a trailer first, but then somebody saw that, a fellow from Hamilton, who had a business and had a trailer and loaned it to me to use on Wednesdays and Wednesday nights and Saturday afternoon and evening. I put a hitch on my car and I would pull it to the blueberry fields and conduct a clinic. A time or two a week and see some of these people there. They didn't even want to go to the doctor because of course they could not pay and they weren't used to

being cared for where they came from. Anyway this grew a little. People like the nursing director saw me doing this and they got to help. They gave a nurse, the health department supplied a nurse and then the ladies of the church started a program for migrant with thrift sales and had seminary students going out there during the summer, teaching Sunday School and stuff. Then I got to use their building out there that they bought. It was an old abandoned school. Then they had the same problem with migrants other places in Michigan. So they, the national government started a migrant program in the state and gave aid through the state. And there was a program that had developed in Berrien county, north of here near St. Joe. And those people heard about our program and came over and asked me if I would want to be part of their program and I said [with laughter], "Sure, we'd love to be!" Then we got funds. And this was during the '60s when Lyndon Johnson was president. He started the poverty program. Then money became available through the federal government for migrant care and that program developed and it is still in effect. Now they have a big clinic. This grew from my going there a couple times a week to where we got to, when I retired I worked out there more than that, but then, by that time they had a nurse practitioner. While I was still in practice they hired a nurse practitioner. They bought a building North of town on James, just off James Street, no on James Street, just off Butternut. And they own a whole big complex of buildings there now and they have got one or two full time doctors there, but of course the migrants when they first came her they picked blueberries and they would stay here for six weeks or so and then go on to Sparta and pick apples or they came

from Berrien County, where they worked in the fields with Strawberries and beans and that sort of thing. But then the blueberry picking machines displaced pickers, but nursery work developed. Migrants would come in late March and they would work in this greenhouse type, plastic greenhouse thing with heaters in there. They would do the plantings then and later they would transfer the planting out to the fields. Later they trimmed it all. They'd stay here even through, a number of them stayed until Thanksgiving, trimming, getting ready for the next year, then they would go to Texas and hibernate. Hide from Ottawa county for the winter. They didn't have anything to do down there. But it was warm, and then they would come back next spring. Over years, Holland, these people would settle out and get a job around here. Holland developed a big Spanish population. We had practically nothing when I started. Very few. We had a few people come in to pick pickles for Heinz or picked cucumbers. But that whole Spanish population developed because of the migrants, because of the population that came here. It settled down, and some of the people I took care of as kids, are pretty famous people in the area now. Lu Reyes, who runs the Community Health Center. She was 12 years old when I first took care of here in the fields. Al Gonzalez and Al Serrano and those people are all examples of migrant people who settled down in the next generation, and developed into good citizens.

MN: Were there any problems with polio in that population?

VB: Yes. There were. They did get polio. I had one case of a fellow who, had acute polio. At first in the '50s they stayed here for such a short while we got a few cases and we would send them up to Grand Rapids and then they could get into

that center that's still there the rehabilitation center, next to St. Mary's, Mary Freebed. But we have run into cases where kids were crippled or limping or using a crutch or something, and they had never had any care or anything. Then you realize that they, you'd ask them, "did you have this at birth?" Well no, no, he was alright, but he got sick one time and then he—so we did see some of those.

MN: Did you do any work inoculating for polio in the migrant camps?

VB: Yeah we did. The health department sponsors this. We had big clinics after the vaccine become available. Especially after the oral vaccine became available because it doesn't require a shot, and it doesn't require a lot of boosters, which the injectable vaccine did. The injectable vaccine did. The injectable vaccine, after the Robinson, Enders, and Weller learned how to grow the virus on this monkey tissue culture, then the race was on to find a vaccine, and then Jonas Salk who was at the University of Michigan at the time at the Public Health School. We used a regular old method they had always used to make vaccines, the killed vaccine. Just take the virus and kill it. Not completely, well it was just killed, and then it still had some immunogenic properties, you would give it to somebody and they would build antibodies against it. Those anti-bodies would last for a year or two or a few years. The Foundation unfortunately decided that this was something that would raise funds for them, so they really marketed this and published it, and it was a treatment, a good treatment. At the same time, a fellow by the name of Sabin had been working on a live vaccine where the oral route was possible to give it orally, because that is where the virus normally resides. In the intestinal tract. It took him longer, it took him a couple of years before he really had it

developed after the injectable vaccine. It was a much better vaccine, it gives a lifetime immunity, the need for the occasional booster would be given out. It is a vaccine that we use all over the world. The Rotary foundation has been especially prominent, and it has almost eliminated polio worldwide. But you don't have any trouble passing on an oral vaccine. Just give a couple of drops under their tongue and it tastes good. Giving a shot you had to give about three shots and you have to give it to them every couple of years, you have got to give them a booster. And it is not as good an immunity. The University of Michigan, I have to say, kept fighting to keep the injectable vaccine, but eventually it became obsolete, we don't use it anymore.

MN: How do you think polio, generally during your practice in those years in the fifties. How do you think it generally affected Holland?

VB: Just about the same as it did any other community. It didn't effect it, it began to make people aware of vaccines a little more. But they had been aware with the diphtheria and the tetanus vaccine. I don't think we responded any more differently than, except that it would be a little less threatening than it would be in a place like New York City where you had a large population.

MN: Do you think polio patients were affected differently, in your experience, affected differently than other people who contracted viruses. What did you see happen with patients who contracted polio?

VB: No, I think there were probably more helps afterwards. More centers developed to treat it and all. More attention given to polio than there were to some other viruses.

MN: With polio patients, how did the community respond to those people, did you see—?

VB: I think that the community and the people in general were pretty well aware that they were no longer contagious once they had gotten over it. They weren't afraid of people like you would be with the lepers or something like the Biblical days. Or for example, even now with HIV or something, they are concerned about anybody who gets a cut or a bruise or something or has blood. No I don't think that there was any reason or any general objection to those people.

MN: So you don't think families ever became isolated because of the effects of polio?

VB: Not because of the effects, while the case was being treated and all, there was some question of whether some others in the family might come down with it, and get isolated with it. But there was never any quarantine associated with it. It wasn't like a respiratory illness. It wasn't ever passed on as being highly contagious, except hygiene-wise and close contact.

MN: Were there ever any kind of associations made with polio, anything like any shame or anything like that?

VB: No, just sympathy really.

MN: So you think the community was supportive, did the community respond real positively? A lot of support for families?

VB: Yes. And it came right after the second World War that it was really featured. That was a very positive nationwide experience as far as unity is concerned, the whole nation was in one spirit, which has never been the same after the Vietnam War.

MN: Were there any particular times when polio was real bad in Holland, like more noticeable than others?

VB: You would have to do a special research project to make sure of that, but there were periods where we would get clusters of cases you know. Of course at that time the tension would be real high. And I said twelve cases, maybe, I think there's probably more I think it may have been 50. Yeah.

MN: Were there ever, were certain cases ever treated differently than others, say with—?

VB: There was quite a bit of a debate, and I would say that there was generally, in the medical community, mild rejection of the Kenny treatment.

MN: Really?

VB: Yes. They said that this gal promoted herself, and promoted the treatment. Even the foundation didn't get heart and soul behind it, so that the doctors were very skeptical of it as being of any help, they said, "well it wouldn't do any harm to put warm packs on and massage and all but that is not going to make any difference in the course of the disease." So since it was harmless, it was allowed to go on without too much antagonism but it wasn't generally felt to be good science.

MN: Were there any other kinds of antagonisms that went along?

VB: Well, no, there was just the antagonism between the two kinds of vaccines once they were available. That was mostly a political, and that was also a inter-scientific fight.

MN: Did any of that go on in Holland?

VB: Yes, quite a bit, and the reason was we had an author here by the name of Paul DeKruif, who was quite a famous author. He wrote Microbe Hunters and a bunch of other books and he was a regular writer for "Reader's Digest." He lived here in Holland, in Laketown Township over by the park out there, Laketown Park. And he also had a cottage on the North side. And he was very much opposed to the injectable vaccine and he very much promoted the oral vaccine. He saw the politics involved because he was involved politically in Holland. So he wrote about it quite a bit, but I don't think generally speaking that it left a whole lot of impression on the whole population.

MN: What about the doctors though?

VB: It did, it did of course. The doctors I think they felt too that if the vaccine, if the Salk vaccine was a good vaccine for the first few years, but then the oral vaccine was so much better that it was a shame that they refused to admit that the other vaccine was more advantageous. But of course, that is natural, they have got an investment in it. They had a reputation, then they wanted to maintain that. Just like any other product that is developed, once somebody else develops an improvement the old one doesn't just fold up and give in.

MN: With the charity going on in Holland, was there that community support for polio?

VB: Yeah, there were community supports. People from for example that Marjorie Cooper, who was in the iron lung, regular volunteers from the church and the community would sit with her so her husband could get time off. Somebody had to be there all the time, because these iron lungs ran through, with a mechanical

device run by a motor, but if the power went out or the motor went out you had to have a hand held thing that they you could run it by hand till they got more power. And she'd need things, like she would need to be suctioned and she would need to be fed. She might want something, and she was intellectually, completely normal otherwise, but totally paralyzed. And one of my nurses would stay with her for a few hours once a week and just help out.

MN: What about churches and schools, was there any experience of churches and schools really getting into the support?

VB: I think there were. I don't remember any specific ones other than the fact that I know there were a lot of volunteers who would help families who had polio, and that was also true of medical bills, there were a lot of people who if they needed medical attention and there was not any insurance there were often times local philanthropists or people who would, churches who would get together and help out. I think there was a good community spirit.

MN: Do you have any particular memories of patients or polio, anything real distinct that you remember?

VB: I remember doctor friends of mine whose children woke up just like I told you, had a little fever, a cold, or that type of thing you'd call a cold one night, and three days later they would stumble going down the steps or would fall doing something that he had always done, or he couldn't roller skate or something. He'd check him out, and find out that he had weak muscle groups. And I had patients, I had friends, one who died from polio. Bulbar Polio. One was the son of a professor of Hope College, a physics professor, Julius Kleis. And I have had

another friend who is about my age who has since died too. Who had polio as a boy when were kids. He was crippled, but he used crutches all the time, came to church in a wheelchair. Had a car that was specially made. It was personal.

[Pause] I think I'll have to be leaving, I have to go to Rotary here.

MN: Okay. Just one thing, is there anything that I missed?

VB: Well, there, as far as its experience is concerned some of these things come back to you the more you think about them and all, but as far as the whole story of polio too, it depends on how deep you want to get into the cause and the effect, the research that went on. But no, I think you have covered it pretty well.

MN: Thank you very much.

VB: It was good to see you.

Polio in Holland, Michigan area by Dr. Vern Boersma, February 2003

Polio was a scourge and with today's urban American culture, would be much worse today if it were not for the vaccine introduced in the early sixties. I say that because the population has more than doubled since then and we have an urban rather than a rural majority, which prevailed in the late forties and early fifties. Crowds were avoided like poison!

I had a lot of exposure to polio patients since I trained at the University of Michigan and worked on contagion wards for a long time. We had numerous patients on either iron lungs or chest respirators and many more on general supportive and physiotherapy care. Most cases of course did not involve the respiratory center and chest muscles, but did involve the legs with paralysis. Some patients had severe central nervous system encephalitis involvement and died (one of my friends [Julius Kleis], son of Hope College physics professor Clarence Kleis, died of polio while in the service).

Since polio spread by fecal contamination and some by respiratory contact people were advised to avoid crowds and swimming pools and lakes especially. The beaches were not popular. Even common communion in church was considered risky. When the oral vaccine became popular and infants were given the vaccine part of the benefit was that mothers who changed their infants diapers were unconsciously vaccinated via the respiratory route (fume inhalation). It seemed that every day the Sentinel carried something about polio, wither the number of new or existing cases or some new threat.

I'm sure many cases called polio then were due to some other [Cox Sachie?] or other virus but there lots of spinal taps done to rule polio in or out whenever an unexplained group of symptoms such as fever, aching muscles, headache, or general malaise occurred and especially if one of two muscles in the legs seemed weaker than expected. Numerous kids went through what parents and even doctors assumed was "flu" only to realize when fully recovered that a muscle group was much weaker that before and they had a small limp, and had had polio.

When three researchers at Harvard, Robbins, Enders and Weller discovered how to grow viruses in monkey tissue, they grew the polio virus and the race was on for a vaccine. James Salk at the University of Michigan developed a killed virus vaccine using the same methods as his boss Tom Francis had used to make an influenza vaccine. However, a killed vaccine does not induce as good or as lasting immunity as a live vaccine so after a couple of years when Albert Sabin developed the oral live- but weakened polio vaccine-it soon replaced the Salk vaccine. Also, immunizing lots of people-especially in deprived countries is much easier with an oral vaccine than with one given by injection.

It is a wonderful vaccine and after two doses gives life-long immunity even though a booster is given after about 1-year and though in recent years some give one booster again many years later.

If you ask citizens who were kids during the 1950s about polio, you will be surprised how many had a scare in their own family.

I would estimate I treated and diagnosed 85 cases in Holland from 1950-1962. After diagnosis the majority were sent to Grand Rapids where facilities were greater.

Transcribed from an original letter to Geoffrey Reynolds by Geoffrey Reynolds, February 10, 2003.