

Transcript of an Oral History Interview with Jay
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Health and Director of Duke Poison Control Center
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Introductory Materials

Interview Title: Jay Arena: Professor of Pediatrics and Director of Duke Poison Control Center, an oral history interview

Interviewer: James Gifford

Interview Abstract

Dr. Arena discusses his family origins; growing up; the Depression; premed at West Virginia University; affinity for children; Clarksburg, West Virginia; Dr. Wilburt Davison; medical school at West Virginia Medical School; two-year medical schools; Duke University Medical School; Duke Medical School faculty; Dr. Harold Amoss; Dr. Deryl Hart; Dr. J. Lamar Callaway; Dr. Edwin Alyea; Dr. David Tillerson Smith; Dr. Oscar Hansen-Pruss; recollections of Dr. Davison in his role as dean, teacher, and friend; life among the student body at Duke Medical School; antibiotics; changes in pediatric surgical techniques since the 1930s; divisions in Department of Pediatrics; outstanding research in the Department of Pediatrics; return to Duke as instructor in 1934; beginnings of Duke's Poison Control Center; efforts to ban lye in North Carolina; birth of other poison control centers nationwide; Dr. Madison Spach; interactions with makers of household products as director of Poison Control Center; companies' current sense of cooperation with poison control centers; death of children from 'candy aspirin' in the 1940s; St. Joseph pharmaceutical company; Mr. Abe Plough; development of child safety cap; testing of child safety cap; protection of children with child safety cap; critiques of safety cap

Oral History Program History

The Duke Medical Center Archives Oral History Program was established in 2003 to augment through recorded memoirs the Archives's materials on the history of the Duke Medical Center and Health System. Copies of all interviews are available for research use in the Duke Medical Center Archives. The Department is under the direction of Russell S. Koonts, Director and Archivist, and the administrative direction of Patricia Thibodeau, Associate Dean for Library Services, Duke University Medical Center.

Legal Information

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Interviewee History
by Emily J. Glenn

Jay Morris Arena was born in Clarksburg, West Virginia on March 3, 1909 to Anthony M. and Rose Sandy Arena. He received degrees from West Virginia University (B.A., 1930) and Duke University (M.D., 1932). Arena interned at Strong Memorial Hospital, Rochester, New York (1932) and later Johns Hopkins Hospital (1932-1933). Arena joined Duke University in 1933 as a resident at Duke Hospital. Following his residency at Duke, he worked at Vanderbilt University as an instructor in pediatrics, but soon returned to Duke University School of Medicine in 1936 to become an assistant, associate, and finally full professor of pediatrics. Arena was the secretary-treasurer of the Duke Medical Alumni Association. In 1970, Arena was also appointed professor of community health sciences. He was a preeminent physician in the field of pediatrics and toxicology and has been credited with beginning the first poison control movement in the country.

In 1953, Arena founded the Duke Poison Control Center. The center, later directed by Shirley K. Osterhout, provided information to individuals and businesses about the product safety and chronic and acute management of poisoning through referrals, correspondence, and educational speakers. Later in the 1950s, Arena went beyond the center to persuade drug companies to develop the childproof safety cap for medicine bottles. Many companies were not interested in changing their product for fear of low sales or reputation of not producing a safe drug. But Arena persisted, and with support from Duke University, convinced a number of drug companies to begin using child-proof safety caps. A major success was in the safety closure for children's aspirin: he helped bring about a reduction in the strength of aspirin as well as in the number of tablets per bottle. As a result, the incidence of aspirin poisoning in children during the early 1980s was reduced from 25 percent to less than 5 percent of all poisoning cases.

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Arena's interest in poison prevention was due in part to the influence of Dr. Wilburt C. Davison, long-time School of Medicine dean. During the 1930s, the two men had treated children suffering from the unfortunately common and caustic effects of lye poisoning. They kept a reference file on other types of poisoning. The file eventually led to an inventory of treatments for poisoning and helped to develop the Duke Poison Control Center and more than 600 poison control centers across the United States.

Arena shared his expertise in poison control throughout the United States by founding and presiding over the American Association of Poison Control Centers, an association to share information between health care centers which provided poison control information. He was the chair, vice president and president of many divisions of the American Academy of Pediatrics and president of the North Carolina Pediatric Society. He also served on the advisory board of the Council on Family Health and as a member of that group's delegation to the People's Republic of China. During his trips around China, Arena worked with other medical professionals to assess the quality of care and evaluate the effectiveness of some traditional treatments as well as implementation of more modern techniques.

Between 1935 and 1979, Arena published approximately 300 articles and pamphlets on poisoning and a variety of pediatric subjects. He was the author, co-author or editor of many books: *Poisoning: Toxicology, Symptoms, Treatment* (1970, 1974, 1979, 1986), *Child Safety is No Accident: A Parents' Handbook of Emergencies* (1978), *Dangers to Children and Youth: Accidents, Poison, Prevention* (1971), *Duke's Mixture: Davison's Saga* (1968), *The Peril in Plants* (1970), *Poisoning: Chemistry, Symptoms, Treatment* (1963), *The Treatment of Poisoning* (1966), *Davison of Duke: His Reminiscences* (1980), *Human Poisoning from Native and Cultivated Plants* (1969, 1974), *Pediatric Therapy* (1964, 1975, 1980), and *Principles and Practice of Emergency Medicine* (1978). He also served on the editorial board of *Clinical Pediatrics*, *Emergency Medicine*, *Family Practice News*, *Highlights for Children*, *Journal of American College of Emergency Physicians*, *Nutrition Today*, *Pediatric Annals*, and *Pediatric News*.

Arena was appointed to serve with various government agencies. He worked with the Department of Health, Education, and Welfare with the Poison Control Branch of the Bureau of Medicine in the Division of Hazardous Substances and as an advisor on the Committee on Safety for Children. Arena served as an advisor and member of the United States Product Safety Commission and a chair of the Standards Committee of the National Standards Institute. As an advisory expert on the Accidents and Poison Panel of the International Pediatric Association, Arena was frequently called upon to give expert witness testimony in cases of accidental poisoning, prescription medication problems and corporate responsibility in poisoning cases. He was a member of the National Advisory Committee on Consumer Product Safety. Fraternal organizations memberships included Sigma Xi, Phi Beta Kappa, and Alpha Omega Alpha.

Arena retired from Duke University in 1979. The Jay Arena Fund in Pediatric Pharmacology and Toxicology was established in his honor. He was married to Pauline (Polly) Elizabeth Monteith. Together they had seven children.

This interview was conducted in February, 1984 in Durham, North Carolina. Dr. Arena's family reviewed the transcript making minor changes.

Jessica Roseberry
Editor
May, 2005
Duke Medical Center Archives
Duke University

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INTERVIEWEE:
Dr. Jay Arena

INTERVIEWER:
Dr. James Gifford

DATE:
February 28, 1984

PLACE:
Durham, North Carolina

Arena INTERVIEW NO. 1

Dr. James Gifford, Ph.D.: -twenty-eighth 1984, Durham, North Carolina. This interview presents Dr. Jay Arena. Dr. Arena was a member of the originating class of students at the Duke University School of Medicine, and after an internship at Johns Hopkins University, returned to Duke as a resident and then an instructor and has followed a career in pediatrics that led him eventually to a full professorship. He was instrumental in the development of the Poison Control Center at Duke University, which was the prototype for the concept that was later used for the movement across the nation, and has served for a number of years as secretary of the Medical School Alumni Association. This combination of roles makes Dr. Arena uniquely qualified to speak about not only the development of his own career, but also for the evolution of pediatrics at Duke and the evolution of the medical center itself. Good afternoon, Dr. Arena.

Dr. Jay Arena, M.D.: Good afternoon, Jim.

Gifford: Perhaps we might begin by asking you to tell us something about your family background and your early education and how that led to the decision for a career in medicine.

Arena: Well, my parents were Italian immigrants, and they settled in West Virginia, where my father came over at the age of seventeen, where he was a bookkeeper. He came over as a bookkeeper for an Italian, Mr. Fucci, who was building a railroad through a great part of West Virginia at the time. Mr. Fucci knew my father, because he came from the same little town in Italy many years before. He knew about my father's background, and he needed a bookkeeper, so he asked him to come over, which he did. My mother came a few years--came from another small town in Italy. She came about a year or two later. She settled in Pittsburgh with some relatives; she was only fourteen when she came over. My father was eighteen, seventeen or eighteen, and they were introduced to each other through mutual friends and married and settled down right outside of Clarksburg, West Virginia, in the little town of Wilsonburg, which was a coal-mining town. My father had a little office there and kept the books for Mr. Fucci. I was born in Clarksburg and brought up there. I have a brother who was a year older than myself, and I had three sisters. So our family consisted of five children. My education was in the

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Catholic school there in Clarksburg until I was eleven years old when I was sent to a prep school in New Rochelle, New York, because my father was concerned that I had lost my ability to speak Italian. Until I was five years old, until I started to school, we spoke just Italian at home, and that was the only language I knew, so I had some difficulty when school started, which I started at five. But the English came easy, and eventually by the time I was eleven years old, I had lost my ability to speak Italian, although I understood it very well, and to speak it well--. And my father was concerned. And then he was concerned also because some of the boys that I was associated with at that time in Clarksburg had bad reputations I presume, although I don't recall anything terrible that they did. My father wanted me to get away from that environment, so he sent me to New Rochelle, New York, to prep school there. It was a Catholic prep school. So I spent the next six years there. When I graduated from the prep school there, I went back home, and during the summers, I was in charge of a playground. I also played some semi-professional ball to earn enough money to take me through medical school and through the university. So those years went by rapidly, and they were certainly ones that I enjoyed very much, particularly the years at the Salesian prep school, where I participated in basketball and baseball. I had a good prep-school career. When I went to West Virginia [University], I played baseball on their freshman team, but then I--my father, who eventually left bookkeeping, went into money exchange for the Italians and the steamship agents--agent. The Italians in West Virginia at that time, most of them that came over had left their--if they were married, had left their wives, and if they had children--still in Italy. So what they did, they came in West Virginia and worked in the coal mines, and every week or every two weeks when they got paid, they would send money to their spouse, children in Italy and save as much of it as they could so they could go back to Italy or bring their spouse and children here to the United States for permanent residence. So from bookkeeping, my father went into this business, because someone had to do it: nobody in Clarksburg was doing it. He learned the mechanism for money exchange and became a steamship agent as well. During the Depression, the coal mines closed. So the Italian immigrants couldn't afford to send any money to Italy to their spouses, and most of them went back to Italy that couldn't make a go of it during the Depression, which was terrible in West Virginia at the time. So my father lost everything. He had a building, he lost his building; he lost his business. When I started to West Virginia, I was on my own, and of course, there were no scholarships or anything like that. I played baseball enough that I made enough money to pay my board and room and the tuition. It must have been all of twenty-five dollars to go to West Virginia University at that time, so I was able to do that and got through two years of premed.

Gifford: How had you made your decision to enter medicine?

Arena: I always--Jim, I always liked--I always got along beautifully with children. As a matter of fact, when--we only played three ballgames a week. And the rest of the time, I was--guests. *(pause in recording)*

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- Gifford: Dr. Arena, before we were interrupted, you were speaking about your baseball-playing days and your relationships with children as a precursor to your medical decision.
- Arena: I--they had in Clarksburg, which was a community of diverse people--. We had, for example, seven Catholic churches in Clarksburg. We had a Polish Catholic Church, Italian Catholic Church, a Spanish Catholic Church, an Irish Catholic Church, and one or two others; so we had segments of diverse immigrants that had come over. So we had a playground for the Italian section of the community and for the Spanish and for the Polish and for the Irish. We had a league, and so I was, at sixteen--during the summer, I was director of the Italian playground, which I enjoyed very much. And we developed good softball teams, volleyball teams, and won just about everything in the four years that I was in charge. I had good relationships with all of the children. I enjoyed working with youngsters, and some of them were almost as old as I was on the playground. Some of them were as old and even older. I always had the idea that I wanted to go into medicine, and I was interested in children right from the start. I know that a lot of my friends think that Dr. [Wilburt] Davison--he did influence me a great deal, but even before I knew Dr. Davison, I was still very much interested in child welfare. So after two years of premed at West Virginia, I went down to apply for the two-year medical school and get my two years of medicine in. At that time they were taking in about seventy-five students at West Virginia Medical School. And so when I went down, they said they already had their full quota and that I only had two years of premed. So they suggested that I take another year of premed. I said, "Well, I can't afford this. I have absolutely no funding to continue longer than I have to, and I just need to get into medical school, and I think my record is good enough to get me in." The dean of the medical school who was interviewing me said, "We can take you in, but you won't be in for very long. We're going to get rid of two thirds of you anyhow." He said they took in seventy-five and graduated thirty at the end of the second year. And this was--the two-year medical schools were scattered all over the United States, and they were atrocious, starting off with such large classes knowing that they could only graduate thirty. The dean told me, he said, "You know, you would have a difficult time." He used the words that I'm saying. He said, "We'd get rid of you in a hurry if you come, so you better spend another year." I said, "Well, I will just have to take my chances, because I can't spend another year up on the hill taking another year of premed." Finally they took me in because my record was such that it was good enough that I could be accepted, had to be accepted, really. So I had a terrible time my first year of medicine, but I finally got through. I know that especially the--I shouldn't mention that. I would be--misspelled words, you know, they would take ten, twenty-five off for misspelled words. After the first year, the second year--which I made through by the skin of my teeth through the first year--I got through the second year with no problems, and then Duke entered into the picture.
- Gifford: How did Duke come to your attention?

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Arena:

I might say the two years of medicine at West Virginia was a very traumatic experience, because we started off with such a large class, and I saw a lot of my close friends who never even got to finish the first year, because they just flunked it. For any small reason that would come up; they just had to get rid of a number of them, and I hate to say this, but those that they got rid of, most were children, sons of immigrants. This was great years of Ku Klux Klan in West Virginia. As a matter of fact, in my little town of Clarksburg, our little Catholic Church was burned down three times in five years by the Ku Klux Klan. So that's the kind of experiences I had. But how did I get to Duke? It is very interesting. About the middle of the second year, you start applying to where you should go for the last two years of medicine. Now, as I told you Jim, at that time two-year schools were plentiful. Not too many four-year schools, but there were lots of two-year schools. The smaller states had two-year schools, and then they sent the students who graduated from two-year schools off to four-year schools to take the last two years. A number of them went up to Richmond to the medical school in Richmond. Some of them went to Jefferson, four or five went to [Thomas] Jefferson [Medical College]. Rush [Medical College] took two or three, Hopkins took one. I applied to Hopkins, and I was accepted. I didn't know anything about Duke until I looked at the *Mountaineer*, the paper that the university put out three times a week. A student paper like the *Chronicle* here. I saw this ad. This was the early part of the year, and I saw this ad. It was intriguing that a new medical school--it struck me, you know, neatly, that a new medical school would be interesting, and maybe I made the wrong choice. Maybe I should go to the new medical school. But anyhow, I said, I'll write and get the bulletin to see what the school looks like. And so I wrote, and about ten days later, a week or ten days later, I was in class, and they said, You have a long-distance call from a Dr. Davison. I didn't know who Dr. Davison was. So I got on the phone, and he said it was Dr. Davison, dean at the new medical school, Duke Medical School. Durham, North Carolina. And, "We have your note about the bulletin, and we have just about finished filling our class of two-year students, which will be our junior class. We have already completed our freshman class. We have got forty or thirty-eight--" I've forgotten how many "--that are coming in. We have seventeen. We need one more for the eighteen that I had planned for, and we would like for you to come." (*laughs*) I kind of laughed, and I said, "You are not serious?" And he said, "Well, sure." You know, in my letter I wrote that I have already been accepted at Hopkins, and that I was just writing for information and interest in a new school. He said, "I know you had been accepted at Hopkins. If you're good enough for Hopkins, you're good enough for us." (*laughing*) That's what he told me over the telephone. And just listening to him talk, I just liked what he had to say. I don't remember; it was a very long conversation. I said, "Well, you know. I hate to do this. I have been accepted, and don't know how to get out of it." He says, "Oh," he says, "Don't worry about that; I used to be the assistant dean at Hopkins. I'll take care of all that if you will come and be the eighteenth student that we need to fill our class." And I hemmed and hawed and thought about it, and I didn't even say, Well, let me think about it; I said, "Yeah, I'll come. If you can do all that, I'll come." That's how I got here. It's hard to believe, but you know, he didn't

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even know my--. He just knew that I had been accepted someplace else, and I must have been all right, or else he wouldn't have said what he did.

Gifford: Was it your impression after you got here that he took a similarly personal involvement in the recruiting of other students that year, or do you think you were unusual in that respect?

Arena: I don't know; I never inquired to find out how the other seventeen students got in, but I can tell you and I can assure you that nobody was breaking down doors to get into medical schools in 1930. I don't know how much trouble he had filling his freshman class of forty, but I know the applicants were far and few between. Many of the individuals in my class were older than the faculty, the Duke faculty at that time. You see, when I came here, everybody on the Duke faculty except one was under the age of thirty-five, was thirty-five or under. We had two or three well over thirty-five who had taught school to earn enough money to start in medical school. So that is how I got here. Of course, about the middle of August 1930, it was a different world. This was like heaven. Coming here, leaving Morgantown and the University of West Virginia, leaving the turmoil and the problems that I had to surmount to get here. This was like a different world. Just like being in heaven, really. Everybody was interested in you, everybody knew who you were. Everybody. We only had thirteen on the faculty when I came here. Of course they had a long list of fifty others, but they were practitioners from town and surroundings. So we were one large family, and it was certainly the finest move that I ever made in my lifetime.

Gifford: Can you speak a little bit about the education that you received here as a medical undergraduate after you came from West Virginia? Who your professors were, how they taught, what the curriculum was like in those days.

Arena: We had, as I had already indicated, only Dr. [Harold] Amoss was the only one that was over thirty-five. He was our professor of medicine. Dr. Amoss was one that had a reputation when he came here. He had worked on or developed the erysipelas serum, and he was well known internationally because of his work with erysipelas, and he was our professor of medicine and a second [Sir William] Osler, he thought. He was not terribly liked. He was a good teacher, but he was very demanding in your presentations, in your speech, in your dress, and so forth--which was perfectly all right. I mean, you had nothing to say about that. But you've got to remember, this was 1930, and most of us didn't have five pennies in our pocket, you know. To wear shoes that were perfect and to have everything--the type of clothes that he thought that perhaps we should be wearing, we didn't have the means. All of us. There wasn't a single one in the class, maybe one, whose father was a physician, who could afford to dress well. But then we had Dr. Hart--

Gifford: Excuse me, before you go on beyond Dr. Amoss--

Arena: I'll tell you what happened to Dr. Amoss.

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Gifford: That's what I was going to ask.

Arena: Well, what happened is that Dr. Amoss--as I say, he was a good teacher, but he was demanding. Not only was he demanding of his students, but he was demanding of the younger faculty. As I say, he had an ego that was pretty large. He had some reputation. He came down here, and he felt like he should be running the show because he was the one that had the reputation. No one else at Duke--these young residents running around here who have become chairmen of departments, he knew them from Hopkins, because everyone came from Hopkins. There was a power struggle between him and Dr. Davison, not because of the students so much but because of the faculty. I don't know the full story because I was at Hopkins at the time interning when everything started to break. But he and Dr. Davison had a power struggle. I know he came to Dr. Davison--I heard this, and I think there's a lot of validity to it--he came to Dr. Davison and told Dr. Davison that he should be the dean. He should be doing, running the medical center and that Dr. Davison should be just professor of pediatrics. He said, "Let's bring it before the trustees, let's see how they'll--." Dr. Davison said to Amoss, he says, "If you feel that way about it, let's just bring the whole subject up before the trustees and let them make the decision." This was done, and of course; they said for Dr. Davison to stay and for Dr. Amoss to leave. (*chuckles*) And that is what happened.

Gifford: That was the wrong move on Dr. Amoss' part.

Arena: Yes, that was the wrong move, it's a shame because he--

Gifford: Something for your anecdote file: in the mail two days ago, I received a letter from an attorney in Kentucky who has written a book on the violence that took place at the turn of the century when the farmers in Tennessee and Kentucky tried to force the Duke Power Company to do various things, and it turns out that the physician who led the night riders was Dr. Amoss' father. Now, I'm not saying that that had anything to do with what happened at Duke, but this book called [*On Bended Knee:*] *The Night Rider Story*, is now about to come out, and the author had been down here to the Duke library getting information, and he has taken that picture of the original faculty in the knickers outside Davison Building. And he comments on that picture in his book. He said, Over here on the end of the second row is the professor of medicine who worked on the erysipelas serum and who did this and who did that, and he appears to be thus-and-such, and he is the son of the night rider leader. So something for your anecdote file.

Arena: Yeah. That's interesting.

Gifford: Okay, um--

Arena: Anyhow, that was Amoss, and of course we had--Deryl Hart was the professor of surgery, chairman of Surgery. He was a young man, thirty-three

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or thirty-four and unmarried. A very fine teacher and excellent surgeon. As a matter of fact, I think, in medicine, over fifty years, I would say that--and I've seen quite a few surgeons--I would say that Dr. Hart probably had the best surgical hands for any abdominal operation. For any operation in the abdomen, I would say that Dr. Hart has no peer, had no peer. He trained a lot of excellent residents that have made reputations for themselves all over the country. He was easy to get along with but very difficult to understand because he was always lost in thought; he was always thinking of--well, he had discovered tidal drainage, you know. He was always thinking of many things and was involved in many aspects, not only of surgery but of the medical center, the events that occurred at the medical center. The only fault that we students found with Dr. Hart was that he never could remember anybody's name. As a matter of fact, [Dr. J. Lamar] Callaway tells the story that he and--he came here a year after I did, and he came during the summer, and they put him on surgery with another student who came as a transfer student. He and Callaway were the surgical students that summer. And Callaway was tremendous at that time. The other student was like a toothpick. And Dr. Hart, having two students making the rounds with him never could remember which one was Callaway. (*chuckles*) Callaway knew this, and so what they did, the two students would never make eye contact with him during rounds, so he couldn't ask them any questions. (*Gifford laughs*) You never make eye contact. Of course, his residents will tell you that. He couldn't even remember his residents' names half the time. But he was a great surgeon and a great teacher. We all admired him and respected him. Then we had Dr. [Edwin] Alyea, who came here from Hopkins also, and he was our professor of urology. I had very little contact with Dr. Alyea except personal contact at events that we had. We had a lot of--we used to play softball games. We used to--it was just like a family in the summer when we played. We would go out every Saturday and play against the faculty, and so got to know them, and we'd go to somebody's house, and we'd have a party after that. He was certainly a fine teacher, and he trained any number of great urologists. Then we had Dr. Connie [Clarence] Gardner, who was the first resident under Deryl Hart. And Bert [Elbert] Persons was the first resident here when I was here. Connie Gardner was the surgical resident, and Bert Persons was the medical resident under Amoss. Then we had Watt Eagle, who was in ENT: [ear,] nose, and throat. And he was a lot of fun. He was a very rapid speaker, and when you would go to his lectures, he would hardly stop to take a breath. Then we had [Alfred] Shands, who was in orthopedics. Also Hopkins. He was a fine teacher, and the thing I remember about Al Shands is that--his demonstration of the jelly boot that they used to put on for chronic ulcers. They would put it on when the temperature--during the summer when the temperature was about 104 or something like that, and these jelly boots would melt, and they would be all over the floor (*chuckles*) and all over the man's leg. Dr. Smith, D.T. [David Tillerson] Smith was in medicine. What I remember about him--of course he was recovered from tuberculosis, and his interest was in tuberculosis. And he spoke a lot about it. What I remember about him was that he smoked a pipe constantly, and he never used small matches; he always had kitchen matches, the big, long kitchen matches. He always had those with him. And his stethoscope would

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not be down here (*indicates chest*). It would reach down to his foot. It was so long. I don't know whether that's because he was working on patients with tuberculosis and would (*laughing*) want to be away from them, but that was his trademark. His pipe and his long matches, kitchen matches, and his long stethoscope. Oscar Hansen-Pruss was something else. He was in medicine. We learned a lot from him. What I remember about him was that I had the first pernicious anemia patient at the hospital. Now, this was another thing that was a delight was that the first few months that we were here, the first pernicious anemia patient, everybody was called and everybody came down to see this patient, you know, and it was presented to everybody, so everybody learned from this. Not only the students, but even the young faculty, you know. And the first pellagra, the first this and first that. But anyhow, we had the first pernicious anemia, and Oscar Hansen was hematologist, and he asked me to do a Price-Jones curve on the patient. I scouted around, trying to find out how to do a Price-Jones curve. I couldn't find the method anywhere. Not in any books or anything like that. So I went out, went back to Oscar and to find out, you know, How do you do a Price-Jones curve? It's very complicated. I knew that, and I found out that he didn't know how to do one either. Finally we got enough material together to find out how to do one, and between the two of us, we finally was able to do a Price-Jones curve on the patient. And then I realized why the disease was called pernicious. And so those are the--.

Gifford: What about Dr. Davison and pediatrics?

Arena: Oh, yeah. Well, we're coming to him.

Gifford: Okay.

Arena: Dr. Davison was something else. As a teacher, he was excellent. But you know the thing that I remember about Dr. Davison was his concern about children. You know, you'd think a man who was big and gruff like he was that children would get on his nerves. He was busy, traveled a lot; he went around trying to build up this medical school. He'd go to every county meeting throughout the state and come back late at night dog--tired, and yet he was very kind and concerned about children. You had to be around him and be close to him to realize this aspect of him. And lo and behold, if you'd have mistreated one of these children, it was too bad. The only intern, house officer, that was ever dismissed from Pediatrics was one that Dr. Davison dismissed after this intern slapped a child who didn't cooperate with him or something. And he just slapped him, you know, real hard, and not only once: twice. And Dr. Davison heard about it; and he told him, he said, "You pack up and leave. I'll give you twenty-four hours, you pack up and leave." And so that will give you some idea about the depth of the man. Besides being an excellent teacher and organizer--which he was, a tremendous organizer: how else could you build a medical center in thirty years that he was able to build here in the little town of Durham, North Carolina, which, when we started, it was 35,000 people here, 35-- or 40,000. I remember when I went to Hopkins and they found out that I had graduated from Duke, and they said, Oh yeah,

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that's where Davison went. And they said, That's Davison's folly down there. You know, That school will never go anyplace. They said, It's never going to amount to anything in a town like that. So that's what they called it, Davison's folly. His colleagues up at Hopkins. But the man himself, as I've said so many times--that its unbelievable that we have--fortunately, that we had a man of the caliber of Dr. Davison. He was here, you know, before the school was built, before the books were bought for the library, and before an administrative staff was assembled, and before a single faculty appointment was considered. To me, he was--and to his students, all of them, he was a dynamic, informal, and humorous man with tremendous wit. He set no written rules if it was possible to avoid doing so. And what I liked about the man was the past was always prologue, and the future was always now. In all the years that I knew him, I never heard him use the personal pronoun, *I*. I never heard him say, I did this or I did that. If he was referring to anything that was done here, and he had the major part in whatever developed, he would never say--never indicated what role he played. He would always say, We did this or we did that, or Duke did this and Duke did that. And I think a lot of this rubbed off on the people who worked with him. I know it certainly made a tremendous impression on me. Moreover, he was like a father to me. For some reason, he was interested in my future. For example, towards the end of my first year, Dr. Davison stopped me in the hall one day and stuck out his hand and said, "Congratulations. You just have been selected the first member to our Alpha Omega Alpha [AOA] chapter." Being naïve and broke, not knowing what AOA meant, I asked Dr. Davison what it would cost to belong. He replied, "Twenty-five dollars." I told him to offer it to some other student because I didn't have twenty-five dollars and didn't especially want to belong to a fraternity. Dr. Davison looked at me as if I was crazy and went his way. Later when the chapter was established in 1931, I was one of the three chosen. George Heintish and John Lovejoy were the other two. Dr. Davison had paid my fee. A few years later when I was more affluent, I offered to repay him, but he would not accept.

Gifford: Can you describe his teaching style a bit?

Arena: Well, he was very informal. For example, we'd start on rounds, and we'd have campstools, little campstools: you don't see them anymore. And because the floors were hard, you know--and we'd start with the first patient, and we'd have the campstool in our arms, and the student or resident, I mean, the same way. And by the time we got through the first five, we'd make rounds all the way around, and we'd get to talk about every patient every day. By the time we got a third through, everybody's feet were tired, and it was time to sit. So we'd put the stools down, and we'd sit. And then we'd talk. And he had tremendous experience; in writing the book *The Compleat Pediatrician*, he kept on top of every new development in pediatrics. He read everything. He abstracted much of the material that he read, and we got to see it. He passed it on to us, and he used it in his book. He passed it on to us. We worked with him on the book. Even as a student, he was just starting the book as student, and he passed, you know, just to read it to see how we--how it would affect us, and what we thought of it; and of course, as house officers,

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as instructor and assistant professors, the book became part of you as well as part of Dr. Davison. You learned a lot from it, just as he did, by putting it together. Now, he was a great teacher, because he was very informal, and he had a wealth of knowledge always.

Gifford: Can you say something about life among the students in those days?

Arena: Well, in the early days, the first few years, of course, nobody had any money, as I said, but we went to a movie, which was fifteen cents, occasionally. Most everybody, the students in the first few years, Jim, we were just like a family. We lived here in the hospital, Duke South. We all had rooms up on the third floor where Psychiatry is now. We had rooms there. We worked here; we slept here; we ate here. And, as I say, this was just--those days are gone. We were a family, and that's what it was. We thought of each other as part of a family. We missed each other as part of a family after everybody left.
[side 1 ends; side 2 begins]

Arena: At this time I married Pauline Monteith, a Watts [School of Nursing] nurse graduate. We tried to keep it a secret since we were both without funds. She continued to live in a rooming house with other nurses, while I remained in my room at the hospital with the other students that were permitted to have rooms there. When I interned at Hopkins in 1932-33, she remained in Durham doing private duty nursing when she could get work. In any case, we could not have lived together in Baltimore since Hopkins would not accept married interns. It was only because of Dr. Davison's insistence and the fact that Polly would not be living in Baltimore that Hopkins accepted me. Our first child, Rosanne was born Nov. 4, 1935. As was the custom, the hospital stay was ten days. After her discharge, I went to pay the hospital bill, which was \$95. Since I was in my residency year and was getting \$25 a month, I had saved enough to make the payment. With money in hand, I went to the business office to pay the bill, but Mrs. Campbell said I had no bill, that it had been taken care of. I knew that no one but Dr. Davison would have done that. I hiked to his office to thank him. His office was always open to anyone: student, faculty member, or orderly. As long as there was no one with him, you were free to enter. As I did, he was on the phone berating a lumber company for an overcharge. I kept thinking, Here is a frugal man who was generous to a fault, but if you tried to cheat him out of a few dollars--look out. It took him fifteen years before he would increase his own salary beyond \$13,000. The income from his eight editions of the *Compleat Pediatrician* amounted to \$100,000; which he kept in a separate account, using it for urgent needs of students, house officers, faculty and even orderlies. Once when he was out of the country for several weeks, Carl Rogers, the orderly and "assistant dean," as Dr. Davison jokingly called him, got married and bought himself a small home with the aid of a bank note signed by Mona Morgan, Dr. Davison's secretary. When Dr. Davison returned, he was met at the airport by Carl, who then informed him, "We's bought a house." When I returned--for example, when I returned from Hopkins and I was the assistant resident and the resident and I had two interns, we were seeing the same number of patients that we have now on Howland [Ward]. But, of

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course we didn't give them the intense care that they get now, nor did we have the wherewithal, the knowledge and the equipment to do the things that they do now, but nevertheless, we did try to take care of our patients quite well. TLC, that was the main thing, and diagnosis and take care of the acute surgical needs. We had--that's BS--before sulfa--long before penicillin. We just--we had very few drugs, specific drugs that we could use. So a lot of it was just nursing care and giving supportive care, but we enjoyed doing this. I remember the little staff we had, two interns and myself, when I was a resident. The dining hall was just up from where it is now, where the cafeteria is. We had linen table cloths and instead of plastic utensils; we had silverware. We were fed royally. We had steak quite often. And it was almost like a country club in those days, except you worked very hard, and you earned all of these niceties. Especially during polio epidemics, which we had several severe polio epidemics where we worked night and day. Unfortunately, we were unable to do a lot for them except try to support them as best we can. And that was before Salk and Sabin vaccines and before polio was eliminated. Those were treacherous times. In North Carolina we had about five real severe epidemics of polio when we lost hundreds of children.

Gifford: Can you tell me what, to your mind, over the course of your career at Duke, have been the changes in the kinds of pediatric patients that come to Duke? Do you see the same sort of things now that you saw in the 1930s, or what have been the major developments in pediatric care?

Arena: Well, I think the great change is what we have been able to do with the antibiotics, and with the vaccines that we have developed, and the elimination of infectious diseases. Now, when I was interning at Hopkins, I spent two months in Sydenham Hospital, an infectious disease hospital where they had one floor of scarlet fever, one floor of diphtheria, one floor of meningitis, another floor of measles, another floor of whooping cough. You had a hundred or more children with scarlet fever, a hundred or more children with diphtheria. You had to learn how to keep these children from suffocating in diphtheria, to intubate those children. We had to do a lot of things that you don't do now, you don't have to do now. That, in my mind, is a major change. The other major change would be the development of the surgical technique to take care of the cardiac malformations that children are born with. Up until [Alfred] Blalock and [Helen] Taussig did their first heart operation we in forty-six or whatever--well, later than that, I guess, fifty-something--we had nothing. We couldn't do anything for these children. So those are two major, major changes in pediatrics in the nation. For example, the year I was resident, we had any number of diphtheria cases with neurological deficits, and of course, we saw a lot of tuberculosis meningitis. All of them died. Now you very rarely see it, and when you do, you've got the drug that can pretty well take care of it.

Gifford: Over the course of your years of involvement with the department, what do you consider to have been the outstanding accomplishment of the department per se?

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- Arena: Well, I think the divisions of the department that developed. I mean, it's kept pace with the development of pediatrics all over the world. I mean, we have top-notch people in pediatric cardiology. We have top-notch people in pediatric allergy. We have top-notch people in every division. In my time, you did it all yourself. Pediatrics was just emerging as a specialty. We didn't have a pediatric neurologist, a pediatric hematologist, a pediatric cardiologist. So I think that we have been very fortunate in having very superb people in most instances. We've had a few clinkers I know of, but most of the time we've had superb division chiefs, and we've been very fortunate in that regard. So I think that's where we are today. And it's been because we, even though we had a small patient load, we had enough material to keep these individuals in their various divisions busy, interested, and producing very good research.
- Gifford: Are there research accomplishments by members of the department you can think of particularly outstanding over the years? Things that won Duke a reputation here and there?
- Arena: Well, I think the work that Rebecca [Buckley] has done in immunology and Maddy [Madison] Spach in cardiology, I think those are a few, and, of course Sam Katz did his work before he came here. I think those are the two that I would say stand above the crowd in pediatrics.
- Gifford: Now, in terms of your own career, you returned as instructor in 1934. Can you describe the development of your own research interests and when it becomes appropriate the origins of your interest in poison control and the development of the Poison Control Center?
- Arena: Well, my work, Jim, started right when I was a student. My interest in poison started then and there. The summer, the first year I was here, in the summer, Dr. Davison had no pediatric intern. So he called me and he said, "You will have to be the intern." (*laughs*) He says, "I'll be with you, you know, the two of us." And I said, "Okay, if that's what you want." He got some uniforms for me, and somehow I was wearing a white uniform. I was in an intern uniform as a student. And you know, I was taking the halls of Howland by myself. Knowing very little pediatrics, of course, because I was just a young student. You see, after all, I was twenty-one when I graduated from here. I was just a kid, really. At one time I remember we had ten or eleven children with lye strictures, that had to be dilated to keep their esophagus open.
- Gifford: Was there any particular reason for having so many at a time?
- Arena: Nobody would take care of them, so they sent them down here. Duke was free. You, in your own book [*The Evolution of a Medical Center: A History of Medicine at Duke University to 1941*], you've got to get that in there, what the cost was in those days. It's just unbelievable. One dollar a day, and you could stay at Duke if you had it. But nobody would take care of them. And you had to dilate them and increase size of the catheter after two or three

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weeks, you increase the size, and you keep dilating it until the child was able to take some solid food. And then you send them home, and they came back, and we'd do it in the clinic. And so I had to do that. And you know, Dr. Davison showed me how to do it, and we fixed our catheters and put buckshot into the catheter to give it some weight. So when we put it down the child's throat, it gravitated down the esophagus. These children were so pathetic, some of them. And Dr. Davison and I both got very much interested in lye, and this increased over the years, especially when I was a resident. We tried to get lye banned in the state of North Carolina. He and I both went before the legislators in Raleigh and showed some slides that we had of these pathetic children, and we said that lye should be banned, you know, bulk lye in the sale for home use. It could still be used on the farms. We weren't trying to ban it from use on the farms, but we were trying to ban the home use of lye. And after we showed a few of these children, we would bring children over, some of the lye children over. We would always get them interested enough to think, Well, we are going to get this law passed; but then the Drackett Company from Cincinnati who put out lye--the drain pipe cleansing agent they put out, Drano, and all this--they would come down here and just buy off these legislators. They would never pass a bill, so we never got it passed. So my interest started then because these children were--first of all pathetic children. Second, there was something you could always do for them if you worked with them. I even had children before I got through--I had a three-year-old child that I would give the catheter to while I would go to do another one. I would give this three-year-old child--I've got a picture of him someplace in one of the articles I did--and he would take it and put it down his throat all by himself. Three years old. So that started my interest. Then we had a lot of kerosene poisoning. It was being mismanaged, and a lot of people were making these children vomit and using gastric lavage. That would cause these children to aspirate more of the gastric contents with kerosene and produce more pneumonia, which they already had, because if you aspirate any of it while you are taking it, you are going to develop some pneumonia. And so we saw a lot of serious kerosene. And that, with the lye, started my interest. And then when this interest increased, I started keeping a sort of a diary of types of poisoning that we were having, and people heard of my interest, and they started calling me. Some of them would call me from Burlington or Greensboro. I've got a child that just swallowed this, and what should we be doing about it? If I knew, I would tell them. Then I thought, Well, you know, we have got to find out more about these household agents. And so I started making index cards and got my residents interested in doing this. They got interested in the same thing as I did. You know, one of them that did a tremendous job was Maddy Spach when he was a resident. He got interested in what I was trying to do, and he would take his weekends and go out to the grocery store and find out these household agents and put down the list of ingredients, you know, and toxic--. If they were listed, he'd put it down, and we would make a card, and we would put it in the file. And so we had a nice index file on poisoning here for fifteen years when the [American] Academy of Pediatrics put me on their Accident Prevention Committee, the first Accident Prevention Committee, in about 1950. In about 1952, they put a survey. They said, We want to make a survey about accidents in children

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among the pediatricians. And we had about 3,000 pediatricians in the country at that time that belonged to the academy. And there were a lot of them that didn't belong to it. And so we made a survey and found out--. I told this committee, I said, "I think that what you're going to find is that poisoning is one of the most common accidents, medical accidents that is occurring in children." I said, "You wait and see when we get to the end of this survey and see what we come up with." Lo and behold, that's what it was. Fifty percent of the people that answered the survey said poisoning. Children are taking aspirin. Children are taking anything: household agents and taking plants. We don't know what to do about it. We don't know anything about it. Why don't you develop something? So we talked about it as a committee, and I said, "You know, here's what were doing down at Duke. We have index cards. We are answering telephone requests for poison information that we have." But if we could start a center like this everywhere--." So they said, That's a great idea. We'll start what we'll call Poison Control Centers. "Okay." So in Chicago they started--they called theirs the first one, which was all right with me, because I just said we had the second one here, because we didn't call it a Poison Control Center. Because we didn't call it anything. We just--everybody in North Carolina knew that we had this index card file. So we called ours the Poison Control Center, so we are listed as having the second Poison Control Center. But the idea really started right here.

Gifford: And this was in the early 1950s.

Arena: Yes, '52.

Gifford: When was Dr. Spach going out? Before that?

Arena: When he was--

Gifford: (*speaking at same time*) I can look up the dates of that. When he was a resident.

Arena: When he was a resident here.

Gifford: Yeah, I can look up those dates.

Arena: I don't know when that was. But that was early. Long before that. Not only him, but a lot of the residents were doing that. I'm thinking of the young man--he's not young anymore--that's in Florida that was terribly interested and spent a lot of time. We had--well, we had so many of them to do this. That's how it all started. It started because of our interest with lye strictures that we had right from the start and the kerosene, and we used to have arsenic of course, and all kinds of poisoning, and we tried to develop a little index card file on these things that we could gather some information and data on them.

Gifford: Now, once this particular medical concern became widespread--

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- Arena: *(speaking at same time)* Then it just boomed.
- Gifford: --obviously you had to interact not just with the medical community but with manufacturers, politicians, and other people.
- Arena: Right.
- Gifford: Can you talk a little bit about how that's gone over the years? You and I are sitting here now, having just reviewed an article that came out on the efficacy of safety caps. So I'm wondering if you could say a little about the, you know, what kinds of developments led people to become more safety conscious, and where you think they may still fall short.
- Arena: Well, I think in the early days when we first started, even before it was called the Poison Control Center, when we had a child that took a household product and nothing was labeled, to tell you what was in it, the toxic element that was in it or chemical that was in it and we had a child that was quite ill and was not responding to treatment, I would call personally the medical director of the company, and sometimes I would get the type of information that I wanted, and sometimes I wouldn't. It's a trade secret, we can't tell you what's in it. And if I got that kind of a reply, I would say, Okay, it's a trade secret. This child might die, and if this child dies, the press is going to know about it. He died from your product. And that you wouldn't give us the information. And he said, Well, I can't. And I said, Switch me to the president of the company. And if I could get him, I'd talk to him in the same vein. And he'd say, Sure, you can have it. When you tell them--when you have that kind of conversation with him. So we got the information that we wanted, although sometimes it took an awful long time to get it. And that was what happened with industry in the early days. They weren't terribly cooperative. But you can't say that now. They have been great. They know that they have an important role in prevention of these poisoning accidents. So it completely turned around as far as industry is concerned. They're aboveboard. They'll do anything to prevent a catastrophe, whether it's just because of federal regulations or because they understand their responsibility more. I feel they do this on their own. Although federal regulations that make them mandatory, I think they do feel their responsibility, and they do help us in many, many ways now when they didn't twenty-five years ago. I think it's a different ballgame. Now, how did the safety closure start? Safety closure started because of the development of the flavored aspirin tablet for children. In the mid-1940s, Mr. [Abe] Plough had a small pharmaceutical company in Memphis, Tennessee. And their big seller was aspirin, adult aspirin. Saint Joseph aspirin. And Mr. Plough or somebody on his staff came up with the idea that instead of breaking these five grain tablets for children, why don't we develop a child's tablet, you know, something that a child will take? We'll flavor it. Mr. Plough immediately saw the impact of such a suggestion. He said, That's great. Let's go ahead and develop flavored aspirin especially for children. Which they did. And it was a pink-colored tablet. It was put up in bottles of 100, and it was two and a half grains, which is half of the adult dose aspirin. This came out in the mid-1940s, towards the end of the 1940s,

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about '48, I guess. I'll get that information someplace. But anyhow. I gave it to her, I guess. I gave it to that woman, Kathy, who wrote this article here. So when it came out, it was a tremendous success immediately, because the parents said, Oh boy, we don't have to fool around with breaking up this aspirin. When my child has a temperature and I want to get the temperature down, I can give him one of these things, just like candy, you know, and it works beautifully. It did work beautifully, and it was a tremendous success. But unfortunately, we started having a lot of serious aspirin poisonings as well as having a lot of deaths. As a matter of fact, we had over 400 deaths in children under five years of age about two years after this flavored aspirin came out. We had 400 deaths in children under five years of age, and we had all kinds of serious poisoning from it. So one week here, and I think it was in May--it was the month of May; I remember the month--we had two children. I had one child from Durham in my practice who took a whole bottle of child-dose aspirin. He was two years old. And in spite of everything we did, that child died. Then I had another child who came from Burlington who was sent to me two days later, who did the same thing. This child was three and a half or four years old and took almost a full bottle, was sent here late. That child was moribund, and that child died. Two children died in one week. And I had been giving it a lot of thought, because I said, This is terrible. This is great, but I had seen a lot of--downtown, my practice was downtown. I'd seen a lot of it here. I'd been called about a lot of it. And poisoning from these "candy aspirins"; that's what everyone was calling it, candy aspirin. Mothers were calling it that. And so when the second child died, I picked up the phone and called Mr. Plough. I told him, "Look, we've had two children to die here at Duke from your product." I said, "I think it's a fine product, but I think it's a dangerous product. And you have to do something about it." I called Plough because it was St. Joseph who had this--Sterling Drug, I mean Bayer, didn't have it. So he said, "Yeah, we have been hearing some rumors about that." I said, "It's more than rumors." I said, "There are a lot of children dying from taking your product, and I think you ought to do something about it." He says, "Like what, Doctor?" You know, over the phone (*laughs*). I hadn't given it much thought, and I just said, "I don't know like what." I said, "You got the funds, and you got the personnel, and it seems to me that you could develop something to make it very difficult for a child to get to these candy aspirin." I said, "How about a different top? Make a different top that will be very difficult for the child to get to it." Well, that's just something that came right off the top of my head. He thought a while over the phone, because he was silent for a while. And he said, "Well, we'll think about it, you know, we'll look into it. I'll send one of my vice presidents up to talk to you in about a week." So he did; he came up about ten days later, and we sat down in my home. I was sick at the time with a terrible case of the flu. We sat down, and we talked for four hours. I think we probably fed him soup and sandwiches, and we talked for four hours. And they said, We'll go ahead we'll get Libby Owens to develop some different types of closures. The regular closure was a screw cap closure, you know. Will you work with us? I said, "Of course I'll work with you." So he said, "We'll see what we can do, and we'll be in touch with you." I heard from them about every month saying we're working on it. Finally they came up and they said, Well, we've got

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seventeen different closures. We want you to come down here, and let's discuss this. So I went down and spent two days there, and we looked at all the closures, and I picked out the two that I thought would be the best ones to survey to find out which one would be the most difficult to remove by a child and which one wouldn't be too difficult for the parents to remove. So we did that work right here at Duke and in my practice downtown. So it was done in Durham, with children from Durham, and we came up with the closure that they put on. And as I say, at that time, when they came up with the closure--now, this is twenty-five years before it was made a law to put closure on. Safety Closure Act [Poison Prevention Packaging Act] packaging was not made mandatory until 1972. So this was twenty-five years ago; they did it on their own. They put the one that we found to be the best closure--I think I gave you that. Do you want a copy of it?

Gifford:

Yeah.

Arena:

I can pick it up in a hurry, I think. Because it's very simple. It's-- (*pause in recording*) Because it's very simple. So we did the survey. It took me about, oh, two years to survey about 1600 families and picked out the one that worked the best. Even though we knew that about ten percent of the children could remove the safety closure without any problem. Some of them could remove it easier than their parents could. We knew that it was not foolproof. And I realized for--the father of seven children, having taken care of many, many hundreds of children in a fifty-year lifetime, I realize that children can circumvent any kind of measure that you put out. There isn't anything that you can do that is foolproof as far as a child is concerned. All children. So we came up with the safety closure, and then he decided--Mr. Plough, who, by the way is ninety-three years old right now, this year--he decided to go ahead and put this safety closure on his St. Joseph aspirin. He asked if the other companies that were putting up children's aspirin would do the same thing, and none of them would. So he was really putting his little company on the line. He started, and just the day before he put it on the market, he called me by phone and said, "Dr. Arena, I am literally scared to death about what we're doing. And I am tempted to withdraw from doing this, using this safety closure as I promised, because I think I'll lose sales, and I think our little company will go down the drain." I said, "You know that if you present the reason for your use of safety closure before the public, tell them why you are doing it, I don't think you're going to lose sales. I think you might gain sales." Of course I didn't know any better. My intuition told me that, and I said that over the phone. Then there was a long silence over the phone. I'll remember it as long as I live. I thought, Well, here it goes. He's not going to do it. He's not going to do it. He's just scared to death. Then he said this to me: "Dr. Arena," he said, "if it saves the life of one child, I'll do it." That was it. He went ahead, and I learned a number of years later that the first year after he put safety closure on, his sales improved twenty-five percent. Because he said why he was doing it; he said in his ads, I'm doing this to save children, protect children from getting into it. Of course, we did other things than that, later, not at the time. A few years later, we had him cut down the number of tablets to fifty instead of one hundred. Had him cut the dose down one-half:

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one and one-quarter grains instead of two and one-half grains. Then a few years later, we had him to cut down the number of tablets to thirty-six, and that's where we have it now. We figured thirty-six tablets of a grain and a quarter, even if a child two years old took them all, it wouldn't be a toxic--you know, it wouldn't be a lethal dose. So that's where we are today, thirty-six tablets, one and a quarter grains. And that's every company is doing that now. That's by law. You have no more than thirty-six tablets. Well, that's the story of the safety closure. And of all the things I've done and accomplished, I'm more proud of that than anything, because I know from personal experience, and I know from the experience of hundreds, thousands of my colleagues, that this safety closure has saved children's lives. Not just from aspirin, but from drugs. Now the law makes it mandatory to put safety packaging for dangerous household products like Drano and like furniture polish and many of those.

Gifford: As a way of rounding off this portion of the interview, there are two comments about safety closure that have been made in recent years that have been challenging to their effectiveness, or at least to their widespread use. One is that elderly people and people with infirmities of one sort or another have trouble operating them and therefore don't take their medicines, and so the payoff you're getting from children may be lost with the elderly.

Arena: Let me answer that. We've done a poor job, the government has done a poor job, educating the public that they can have their medication prescription without a safety closure by simply asking the pharmacist. Say: I would prefer not having a safety closure. I would prefer the regular closure, a screw-cap closure. You don't even have to say why, you just have to say, I don't want a safety closure. That's all you have to tell a pharmacist. If you are disabled, if you are arthritic, if you are elderly and you have trouble opening a safety closure, there's no rhyme or reason why you should have a bottle that's difficult for you to open when you can ask the pharmacist to give you one without it. Especially those without children. My heaven! And even those with children, if you have problems, you can get it without a safety closure, but then be careful with what you do with it. Put it out of sight and reach of a child. So the law states that for every--there should be one package for the elderly and for the handicapped that is available without safety closure, and there is. You can buy aspirin without safety closure. You may not see it on the shelf, but you can ask the pharmacist for it.

Gifford: The other, more recent question concerns whether or not safety closures have been so effective that people are now not living up to their responsibilities to be careful in how they keep agents around the house.

Arena: Yeah, well, I think that's, Jim, that's a personal element that always comes up. Parental responsibilities. I don't see any reason why it should give anybody a false sense of security, because first of all it isn't foolproof. And then if you don't use it correctly, you're going to have accidents to occur. It takes not only a safety closure, but it takes some parental responsibility to prevent these poisoning accidents. It's not just the safety closure. Parents still

Transcript of an Oral History Interview with Jay Arena, Professor of
Pediatrics and Community Health and Director of Duke Poison Control
Center

have to be very cautious and be very careful. I, you know, in raising my children, I always think of course--I guess I've been brought up in that way, and I think of accidents first, not last. I think of poisoning first. I don't think of it last. When I see a product that I think one of my grandchildren can reach, I either discard it if it is ready to be discarded, or put it in an area or location where it can't possibly be reached.
[end of interview]

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