

Women Leaders in Hematology: Inspirations & Insights

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■ Carol K. Kasper, MD

Interviewed by Doris Quon, MD, PhD



Carol K. Kasper, MD

Biography. Dr. Carol Kasper is a hematologist and Director Emeritus at the Orthopaedic Hemophilia Treatment Center in Los Angeles, California. Dr. Kasper is well known for her work on the diagnosis and treatment of hemophilia over the past 40 years. During her career, she has held numerous leadership positions within the field, including Vice President Medical of the World Federation of Hemophilia (WFH), Vice President of the National Hemophilia Foundation (NHF), and Chair of the Medical Advisory Board of the Hemophilia Foundation of Southern California. She has received many awards for her work, including two career achievement awards from the NHF (2000 and 2007), the Brinkhous Award for Excellence in Clinical Research (1992), the George F. Davignon Lifetime Profes-

sional Achievement Award (2005), and a lifetime achievement award from the Hemostasis & Thrombosis Research Society (HTRS; 2008).

Dr. Kasper received her undergraduate degree from the University of Chicago (1954) before completing her medical degree at the University of California, San Francisco (1959). She then completed a residency in internal medicine and a fellowship in hematology. Dr. Kasper later joined the faculty at the University of Southern California (USC) and became professor emerita in 1999. Over the course of her distinguished career, she has published over 200 scientific papers, monographs, and book articles in the field of hematology. Dr. Kasper currently trains hematology fellows at the Orthopaedic Hemophilia Treatment Center.

Q&A

Dr. Doris Quon: *The first question is: how did you even get involved in medicine?*

Dr. Carol Kasper: I was always interested in articles on medicine that I read in ordinary magazines, like *Time* or *Newsweek* or *Reader's Digest*. I realized that I had an interest, but it wasn't so strong. I knew I just wanted to do something worthwhile. I thought a little bit about the law, and [knew] that I wanted to do something challenging. A lot of my friends and relatives, my parents, thought that medicine would be good for me. And when the kids in the dorm said, "You really ought to be a doctor," then I thought, "Well, maybe they see something that I haven't completely seen [in] myself yet." I was more serious, I think, and they thought that's what a doctor ought to be. But there was no particular experience that led me to medicine. It was not a highly informed decision.

Dr. Quon: *Looking back, would you change that?*

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Dr. Kasper: I've enjoyed it, so I don't think I would change it now. I must say that it was difficult at the time. I found medical school to be a hard slog because a great deal was expected of us to learn so much in such little time, and I had to study very hard. So it was difficult, but I'm glad I did it.

Dr. Quon: How did you get into hematology?

Dr. Kasper: I really don't quite know where the spark for hematology came from. I just picked up an interest as we went along. I used to joke a little bit about it—I joked that it was because blood was so pretty!

I was very fortunate when I thought about hematology as being attractive. At the time, I had met a lady who was a cardiologist and who was the wife of a hematologist, and she said, "Well, if you like hematology, this is where you should apply"; and I was really lucky because I had a fellowship with an excellent person. He was very big in coagulation, Dr. Paul Aggeler. He had tremendous integrity, and he was not at all a proud kind of a guy. So it was a wonderful experience for me.

Dr. Quon: When you first got into medicine, did you think that it would be challenging given that you were a woman? Did you think it would be more challenging than it would have been for a man?

Dr. Kasper: Well, I did... there were various snide remarks that people would make like, "You're taking up a man's place in medical school. The man will practice; a woman won't! She'll just get married and have children and drop out"—that was a common assumption, and one had to sort of fight that.

I remember one of my interviews, which was with the dean of a medical school who said, "What will you do if your husband doesn't allow you to work?" And I said, "I'm not going to marry somebody who doesn't allow me to work!" And he said, "Well, you have a lot to learn about life." I did get admitted to that medical school, so I can't say that any of the snide remarks that I've ever run into have kept me from a job or an appointment. They just told me what the attitude was of the questioner, but they didn't keep me out at any point that I know of.

Dr. Quon: Do you remember your medical school class having very many women?

Dr. Kasper: Mine had more than average. I think that this was very unusual. The class before had two or four, and ours had ten in a class of 80-something. But then, the following year, after us, they went back to only four females in the class.

Dr. Quon: Interesting. Do you think the medical field is actually becoming more supportive of women in the field?

Dr. Kasper: I think it's become more the norm to have women in the field. I hope that salaries can keep [us] supported. I remember once when an editor of the *New England Journal of Medicine* gave a talk at USC about the future in medicine. He said, "Well, now that we're getting all of these women in medicine, we won't have to pay them so much."

Dr. Quon: There is a disparity between pay across all jobs, not just in medicine, unfortunately.

Dr. Kasper: Yes; but, alas, it doesn't cost any less for women to go to medical school than it does for men.

Dr. Quon: Yes. So for a lot of male doctors, they get married and they have the woman at home "to take care of the home." You think that was more difficult for you being a woman?

Dr. Kasper: I think this is a major issue when both the man and the woman have professions. If you're a hematologist, it's a profession that requires a fairly big population to draw from. So you probably aren't going to get along in that profession in a small town. So I think the first big problem is, can you and your spouse both find jobs in the same town?

And then the next big thing is trying to take care of the children. The hard part, I think, is while they are young [since] they need so much attention. I was very fortunate because my parents lived less than a mile away. They were delighted and wanted to babysit. It certainly solved that huge problem for me.

I would say to any woman I'm advising that those are the hard years and they don't last forever. And once the children are teenagers, there's a lot they can do themselves. And even when you get to be, say, 50, that is not the end. In fact, for a lot of women, it's when they blossom because the kids are grown or grown enough and they don't have to take care of them every minute.

Dr. Quon: We talked a little bit about why you went into hematology. What made you go into the area of coagulation?

Dr. Kasper: I think that was more happenstance because my chief, Dr. Aggeler, was a big clotter. He was very well known in the clotting field. I didn't realize that. I was learning a lot of clotting while I was with him. We had patients with hemophilia in his small practice, and he was trying out the new concentrates on them. These were very early concentrates being made by Cutter Labs across the [San Francisco] Bay and [at] Berkeley. The patients would come in and we would do very nice, detailed half-lives on them. The patients were delighted and they were very interested. And I was learning a lot about coagulation.

And then, a mutual acquaintance of mine and of Dr. Sam Rapaport at USC knew that Dr. Rapaport was looking for somebody for Orthopaedic Hospital because, although the hemophilia program had been at USC since 1962, by 1966, he knew that concentrates would be coming out and [that] they were specific. There was one for factor VIII and another for factor IX, so you had to be sure what type of hemophilia the patient had; and then you had to be able to measure the clotting factors. There wasn't a coagulation laboratory at this center yet, so that was my job. I came here to be the first person trained as a hematologist to [establish] a coagulation lab [1].

Dr. Quon: Is finding a mentor really important?

Dr. Kasper: It certainly is, and I don't think people have just one. You meet people who are good to you, or you like them. You become friendly with them.

Somebody who did me favors was Dr. Judy Pool of Stanford University. She was in and out of the lab, and I became acquainted with her. Behind the scenes, she had arranged the committee that decided on the Bethesda assay. Before that, there was a multiplicity of inhibitor tests; and she said there should be *one*. And the NIH [National Institutes of Health] appointed a committee, and she had me appointed chair. And I said, "Who me? There are people on this committee who know more about it." And she said, "Just do it!" And, you know, it really was important to just do it because then my name was attached to it, and I got some credit out of it [2,3].

It's interesting—I find that, sometimes, people who are not closely related to you will sometimes just be helpful. Somebody who was helpful at USC was a pediatric hematologist, Dr. Darlene Powers. When we would go to the American Society of Hematology meetings, I would often room with her and with a couple of other women and she used to preach at us a little bit, the younger women. She'd say, "For a promotion, what you really need is papers, papers, papers! Don't just believe what the faculty handbook tells you." She told us what we really needed to get promoted. I appreciated that because the men in my department didn't come forth with that information quite as bluntly.

So there were these women who just sort of volunteered in their way. They were not responsible for me. They just put a little lesson in my ear.

Dr. Quon: Do you think that women have a supportive attitude, to support other women?

Dr. Kasper: I think there are some women who are nice and supportive and others who aren't, of course, but it's interesting that they can be supportive of people who are not just immediately under them. So your mentors may be scattered. I think you can't just focus on a single individual to be your mentor. You get your mentoring where you can and find friendly people where you can, and some of them will be men.

Dr. Quon: Is there a best time to find a mentor, or do you just sort of take advice when it sounds like good advice?

Dr. Kasper: I think you have to. I think you never know when somebody will come along who has some decent advice to hand you, and you just have to keep your ears open.

I think it's also okay for a younger woman to ask a more senior woman, "What do you think I need to do to get ahead?" It's okay if you just have a friendly conversation. If she doesn't know anything or she doesn't want to answer, she can brush it off kindly. But if she knows something, if she has some advice to give, she can give it.

Dr. Quon: What is it like to be considered a pioneering woman in hematology?

Dr. Kasper: I never thought of myself that way. I have never really thought about being a woman in some of the various positions that I've been in. Either they have been held in the past by women, or it felt quite natural to be in them. I know that I have wound up in some leadership positions. Sometimes I have felt underqualified and I've thought there could be somebody better to do this job but, at the moment, there isn't anybody available. So, okay, I'll do it, and I'll do it as best I can.

I should also say that I don't think people should necessarily think that they have to be in leadership positions because it can be a two-edged sword. If a woman wants to be a big academic success, she needs time to do research and write papers. Being the chair of this and the chair of that takes time and energy.

Dr. Quon: Indeed. Do you think you were better equipped, because you're a woman, to take care of the patients with a chronic disorder such as hemophilia and von Willebrand disease?

Dr. Kasper: I think that women, in general, are socialized to be patient in the moral sense, to have patience with sick people and irritable people more than men are. So I think that maybe, in general, women are well suited to [care for] the chronically ill, the people who never really get well.

At this hospital, I saw the contrast between the surgeons who wanted to fix the broken limb and then be very happy that the whole case was over with, and the patients were enormously grateful—they were just overflowing with gratitude because now they were better. The patients who have chronic illnesses don't necessarily ever get to the point of being so well that [they] have that tremendous relief, which would lead them to expressing a lot of gratitude. I think that the patients are grateful, it just doesn't come up a lot.

Dr. Quon: I know patients are very grateful. Many of them who you've taken care of as children remember you and remember you fondly. . . . What do you think about gene therapy now, and do you think that's the wave of the future or do you think there will be other sorts of therapeutics?

Dr. Kasper: Some of these other therapeutics are really interesting. The fun thing is to see all these new approaches coming along. There have been so many drug developments in hemophilia; even some that are not clotting factors, which are other approaches to hemostasis. Regarding gene therapy, I have hopes that it should work. I'm aware of all of the obstacles and think eventually they'll be solved. It'll be here one of these days.

Dr. Quon: Any final words of advice for young females like myself who are interested in going into hematology, hemophilia, or other leadership positions?

Dr. Kasper: I hope that you enjoy it; and leadership is needed, even though it's not always easy, and it doesn't always come naturally.

Dr. Quon's Perspective

Dr. Kasper has dedicated her career to understanding and advancing the care of hemophilia patients from both a clinical and scientific standpoint. She has been involved with hematology since completing her fellowship in 1962 and starting at the Orthopaedic Hemophilia Treatment Center in Los Angeles in 1966. She has contributed tremendously to the field of hemophilia from her early work in establishing a coagulation laboratory at the Orthopaedic Hemophilia Treatment Center to help diagnose patients with bleeding disorders, to chairing a committee that defined the inhibitor assay, the Bethesda Unit, which is still in use today. Dr. Kasper

has been involved in clinical research in the area of coagulation therapeutics, doing pioneering work on the use of desmopressin (DDAVP) in bleeding disorders [4], and publishing extensively on new factor concentrates [5]. However, I think her biggest and most impressive contribution is her leadership role, nationally and internationally, to improve the care of all hemophilia patients. She has served as Vice President Medical and member of the Medical Advisory Board of the WFH, Vice President of the NHF, and a member of the Medical and Scientific Advisory Council (MASAC) of the NHF. The end result of her efforts has been strengthening the community and expanding access of care to those with inherited bleeding disorders. She has given tirelessly to the hemophilia community and is indeed a role model for those who are entering the field of hemophilia, and to women in particular, having accomplished so much early on in a time when gender bias made it difficult for women to advance.

Mentorship is a critical component in the development of any career. I feel that I have been incredibly fortunate to have the benefit of Dr. Kasper's mentoring. She has been an integral part of my training since I was a fellow at UCLA and even to today! Dr. Kasper is well known to be a true pioneer in the field of hemophilia, and brings the full depth of her knowledge to teaching members of the hemophilia community. She enjoys imparting her extensive knowledge to junior trainees in a patient and stepwise fashion. Dr. Kasper is incredibly generous with her time; she realizes that we are not "self-made" and that it takes time for young people to develop and learn. Dr. Kasper incorporates the history of the field into her teaching style, which provides important context for understanding the unique challenges encountered by hemophilia patients and how best to help our patients overcome these challenges. She not only provides useful advice on "things to do" based on her past experiences, but also highlights what not to do to avoid costly mistakes. When I ask for her opinion on a subject, she has honest and helpful feedback. This feedback is instructive, but is also encouraging and supportive. Dr. Kasper has had an enormous impact on my growth professionally and I only hope that I can "groom" the next generation of hemophilia treaters with the same passion and enthusiasm that she used with me.