

Q&A with Research Challenge finalist Aimen Vanood

JAN 6, 2021

Brendan Murphy

News Writer

In the days after the pandemic, Aimen Vanood, a medical student at Oakland University William Beaumont School of Medicine, was pulled from clinical clerkship with her colleagues. In the coming weeks, she would hear of faculty members and residents getting sick and learn of the common symptoms associated with COVID-19.

She also began to wonder about longer-term effects. Eventually that curiosity led her to research potential neurological complication from the virus. A poster presentation on the topic—titled “Neurological Manifestations of COVID-19 in 1,156 Hospitalized Patients in Michigan”—earned her a spot in the AMA Research Challenge.



Aimen Vanood

To advance to the research challenge, Vanood’s poster was selected as the top five poster presentations from the AMA Research Symposium, the largest research event for medical students, residents and international medical graduates, this past December.

To get to five, the research symposium began with 1,000 submissions. Approximately 500 of which

were selected for presentation in a virtual Research Symposium poster gallery. Of those, the top scored posters were featured in a poster competition and voted on by participants. The final group of five posters represents the innovative thinking needed to drive medicine forward. The finalists cover a wide variety of topics, including the effects of electronic cigarettes, ventilator access during the pandemic and emotional intelligence in relation to burnout.

The next step in the process—the inaugural AMA Research Challenge—offers the five finalists the chance to present to a group of experts in medicine. The event will premiere on YouTube Jan. 13 at 7 p.m. CT. In advance of that competition, Vanood offered some insight on her project.

AMA: What drew you to your research topic?

Vanood: The first cases of COVID-19 in Michigan occurred in early March. Days after, we were pulled from our clerkships and began quarantine. I found myself in the depths of uncertainty regarding what the rest of medical school would look like because we knew nothing about this novel virus. As the patient case load at Beaumont Health System rapidly grew, and the PPE diminished, I saw my physician mentors from all my rotations working longer hours with little protection. As time passed, I saw many of them get sick with COVID-19 and felt guilty for not being able to do anything to ease their burden. One day, as I was reading the early research on how the virus could cause GI symptoms, I began to wonder if neurological complications were a possibility as well. My literature search at the time revealed only two results: a case report from Florida describing encephalopathy as a presenting symptom of COVID-19; and a report of 214 patients in Wuhan, China, the majority of whom experienced some sort of neurological symptoms. The evidence was sparse but the indication was there, and, given the large amount of patient data I had access to at Beaumont, I felt it was my duty to further investigate how COVID-19 impacted the nervous system. Not only that, I felt this was the one way I could help the fight against COVID-19 as a medical student.

AMA: Poster presentations are typically done in-person. As with so many things this year, this event had to go virtual. What was the experience like doing a virtual poster presentation?

Vanood: I am thankful for the opportunity to present posters virtually and appreciate how the scientific community has created ways to carry out conferences online. While I do miss meeting people face to face and exploring new cities, I cannot deny that virtual conferences create a more level playing field in terms of accessibility. Meetings that I previously could never have attended due to cost and travel are now only a click away! I think this has connected us all not only nationally, but internationally as well. The world of medicine is large and I think it is very special that physicians and scientists all over the world can participate in these meetings together. I personally think virtual poster presentations are easier, but I do think the engagement per poster is lower than in-person conferences; that is the only unfortunate part.

AMA: How have you managed your workload as a medical student as well as your poster research?

Vanood: Research is something I have enjoyed since college. A huge part of being a physician is lifelong learning and I have found research to be a fun, and more creative, way to learn than traditional textbooks. Investigative design allows me to focus on a specific facet of a disease or its management and study it in immense depth. Beyond that, my favorite part of medical school has been talking to patients, and the desire to improve their quality of life is the driving force behind my clinical research endeavors. For me, research never seems like work, but rather a hobby; something I look forward to working on when I get home from a hospital shift or need a break from exam prep. I believe this is why I have been able to accomplish different projects during medical school without feeling burnt out or exhausted. If anything, I am enjoying learning how to design research studies and I am looking forward to continuing to improve my skills during residency!

AMA: What connection do you see between your research and your career path?

Vanood: My interest in neurology is what led me to develop my project idea in the first place. I am currently going through the residency interview for neurology. I want to pursue a career in academia because this will give me the opportunity to take care of patients while also conducting research and engaging in education initiatives. Ideally, I see myself as a neurology clerkship director, teaching medical students both clinical skills and research methods.

AMA: What is next for your research endeavors?

Vanood: With a large bulk of formal education switching to online platforms during this pandemic, I often marvel at the reality of “Zoom school.” Currently, I am working on a study investigating the efficacy of online instruction in teaching a simple motor task to undergraduate students. One thing I love about research is the opportunity for interdisciplinary collaboration, and I came up with this study idea with my best friend from college who is getting her PhD in engineering education. Some of my friends who graduated from my medical school last year are working on this project with us as well, so it has definitely turned into multi-institutional endeavor! Teamwork is so much more fun when you are working with your friends and I am excited to see what our results will show.