

## OUWB MEDICAL STUDENT SUCCESSFULLY COMPLETES POST-POLIO RESEARCH PROJECT WITH INPUT OF MICHIGAN POLIO SURVIVORS

When questioned about post-polio difficulties and experiences, one very common complaint from polio survivors concerns their doctors or medical service providers having no knowledge of polio or post-polio issues. With this primarily in mind, Michigan Polio Network (MPN) in March 2015, met with a group of officials of the then newly instituted Oakland University William Beaumont School of Medicine (OUWB) to explore opportunities to increase awareness among new medical students regarding polio and its effects on survivors in later years.

Resulting from this meeting, MPN was put in contact with one of their new medical students, Virpal Kaur, and ultimately supported her efforts with her capstone research project studying the effects of polio on aging polio survivors. Michigan polio survivors responded in an extremely positive manner to a survey that Virpal created, providing a large database of information for her analysis. Following submission and enthusiastic acceptance by the OUWB Institutional Review Board of this project's final results, this information on post-polio syndrome's (PPS) effects will be shared with all incoming medical students at OUWB in the future. MPN is pleased that our efforts will result in the increase in awareness of polio and its effects on polio survivors among future classes of aspiring doctors.

The student, Virpal Kaur, with whom MPN collaborated, has written a summary of the results of her research project and asked that MPN share this with our members. Virpal's thoughts follow:

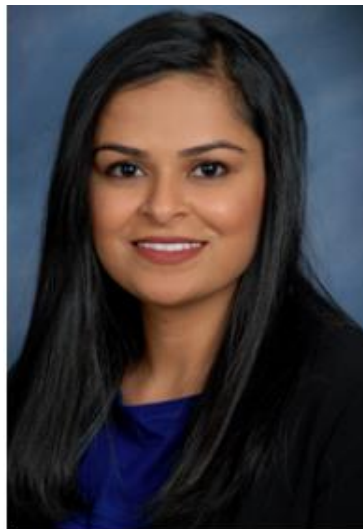
"I want to deeply thank everyone at MPN for their support and effort for making this project a reality for me. The usual response rate of blind survey studies is 10%, however our response rate was 50% and this validates your belief that the polio survivors want to tell their stories and help others. I also want to inform you that I presented my results at Oakland University William Beaumont School of Medicine in March during a presentation colloquium and it was well received!"

**Here is the summary of my results:**

**"As a result of aggressive vaccination efforts, polio is almost eradicated globally. However, poliomyelitis remains endemic in Afghanistan, Pakistan, and Nigeria. With globalization, and global travel, a virus can travel around the world in 24 hours. Moreover, the effects of polio remain beyond the acute infection, linger in a latent stage, and recur in mid-life. We hypothesized that the results of this study will confirm that even after recovery from poliomyelitis, there remains a sequelae of polio that has a lifelong physical, social, and economic**

impact on polio survivors. The results will help us document these long term sequelae of polio infection to educate future physicians about post-polio syndrome. This will further prevent misdiagnoses, and most importantly, raise awareness about poliomyelitis. Among a total of 678 survey recipients of polio survivors in Michigan, 327 responded to the survey indicating a response rate of 50%. Among this cohort, we identified that 76.5% had been diagnosed with PPS at the mean age of 53 years old. Moreover, our survey results show that majority of survivors with PPS actually only see a family physician and 92.2% reported a new weakness. This makes it even more important to educate future physicians about the incidence of post-polio syndrome and its manifestations, so we can reduce the number of misdiagnoses and help survivors get proper treatment before they lose functionality. “

Thank you,  
Virpal Kaur



**Virpal Kaur**  
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*Family Medicine*

Virpal has successfully completed her medical school studies and was graduated on May 11, 2018 at the OUWB Commencement Ceremony. She will be serving her residency in Family Medicine. We at MPN wish her well!