

# **Challenges and Opportunities in Human Subjects Research: Assessing Glyphosate Exposure in Pregnant Women**

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Transcript

Undergraduate Research Showcase

Spring 2022

## **MODERATOR**

Up next we have Brie Ellison from Interdisciplinary Studies with a talk titled, “Challenges and Opportunities in Human Subjects Research: Assessing Glyphosate Exposure in Pregnant Women.” Brie, take it away.

## **BRIANNA ELLISON**

Good morning, everyone. Many of you are probably familiar with weed killers like RoundUp, a common herbicide that my own parents used on their farm. Glyphosate is the main ingredient in products like RoundUp, and its usage rose 1200% worldwide in the last two decades. It's great at destroying weeds, but what's it doing to our health?

A few previous studies have suggested that glyphosate exposure during pregnancy may lead to preterm birth, but much more research is needed to understand if this is true and how exposure is occurring.

We designed a robust study to follow 40 women throughout pregnancy, collecting weekly, and sometimes daily, urine samples during a two-week dietary intervention, to compare glyphosate levels when eating organically versus conventionally. We are currently awaiting results from the CDC regarding the glyphosate measurements.

In the meantime, I'd like to share our discoveries about human subjects research, and how we were successful despite many challenges. One of the challenges was the COVID-19 pandemic. Recruitment and informed consent is a vital step in human subjects research, and it's typically done in-person.

Instead, we created YouTube videos to better connect with the participants. We would park outside their house, drop the forms on the doorstep, send them links to the videos, and phone them to go over the paperwork. Then, we would drop off the urine cup and pick it up when it was filled, all in real time.

That allowed us to maintain social distancing, but keep a more personal feel, which ended up being a key part of our success in participant retention. And participant retention was a major concern throughout our study. We had to keep the women engaged on a weekly and sometimes daily basis to get the kind of in-depth data that's missing from this area of research.

On top of that, many of the women were dealing with difficulties that impacted their availability. One of our participants was homeless for the duration of the study. I once had to pick up a sample outside a Hobby Lobby.

Many of them dealt with food and housing insecurity, irregular job schedules, and children with disabilities. But despite these challenges, we collected 1,395 samples from 40 women over a nine month period, for a 97% compliance rate. How do we do it? By building a personal connection with these women.

In research, it's easy to say that we give back to our participants retroactively, through results. But through our study, we were able to immediately impact these women and help improve their quality of life.

We built personal connections, we texted them updates and reminders, compensated them with gift cards, and provided each with \$360 in groceries. We knew them by name, knew what they were dealing with, and worked with their unique situations as much as possible.

Throughout the study, we had many women express their gratitude for the help we provided them, as well as excitement for our research. If you'd like to hear more about this important stepping stone in glyphosate research, please feel free to check out my poster and ask me any questions.

END OF TRANSCRIPT.