Introduction

• Research about the human microbiome has recently begun to uncover the possible effects that gut flora has on human health.
• Most of the published research about microbiomes has been published in the western world.
• The microbiome project through Agincourt aims to study the bacterial composition of the guts of a previously neglected population.

Background

Up to 70% of women in South Africa are either overweight or obese. The number of people with diabetes has also been increasing.

Study Objective

To study the composition of the gut microbiota of African women aged 40 years and above. One third of participants will be obese. One third of participants will be obese and have diabetes. One third of participants will have a normal BMI and be euglycemic. No participant should be HIV positive.

The Project

In order to begin this pilot study, methods needed to be developed in order to collect fecal samples from people in rural communities.
• Most people in the rural communities do not use toilets but use floor holes that do not have seats.
• The microbiome collection kits that were available to us are made for the Western-style toilet.
• Therefore, a pilot study was conducted to brainstorm the best ways to ask our participants to collect their fecal samples.
• Group meetings were conducted with community members to help us consider the best ways for fecal sample collection.

• Community meetings were useful in navigating the traditional practices of the community we were in.
• Community engagement officers and volunteer community members attended such meetings.
• An infographic depicting how participants can collect stool fecal samples resulted from conversations during these meetings.
• There are traditional beliefs that the research unit must always navigate to maintain a reputable relationship with the communities work with.
• The project also involves ethic sensitivity to conducting HIV Rapid Tests and blood glucose tests with participants.

Agincourt’s Research Goals

• Agincourt conducts research on rural populations in order to provide concrete ways to help such communities.
• Agincourt mainly participates in research whose findings can create real-life implications for the people in the communities in which they work.

Remaining Questions

• Will understanding the bacterial composition of the microbiomes of rural African women produce any useful results?
• Will Agincourt be able to present the findings to communities in a way that is easily understood?

Conclusion

• There are not yet conclusions to this study as it is still being conducted.

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