

OLFACTORY AND GUSTATORY DYSFUNCTIONS AFTER COVID-19 RECOVERY IN THE PUERTO RICAN POPULATION



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Introduction

As the Coronavirus Disease 2019 (COVID-19) transitions to becoming an endemic, it is vital to understand its long-term consequences. Although most patients recover within 2-3 weeks, others suffer persistent symptoms that can exceed 6 months. Studies have confirmed persistent olfactory (POD) and gustatory (PGD) dysfunctions as one of the most frequent long-term sequelae of COVID-19, with a prevalence of 24.6% and 19.5%, respectively, second only to fatigue (42.5%).¹ These new long-term effects of POD and PGD are also raising concerns about their potential impact on patients' quality of life (QoL). Thus, this study aims to assess the prevalence of POD and PGD in the Puerto Rican population, characterize the types of olfactory and gustatory disorders, and evaluate how the persistence of these dysfunctions affects the participants' QoL.

Methodology

This scientific study is a self-report questionnaire that will include a cross-sectional analysis of data. Participants are being recruited through social media. Once subjects sign the informed consent, they can complete a 15-minutes questionnaire in the REDCap software. The questionnaire assesses demographic information, medical history, and the function of the senses of smell and taste. Once a sample of 500 subjects is reached, an analysis will be performed using descriptive statistics for continuous variables and frequency distributions for categorical variables.

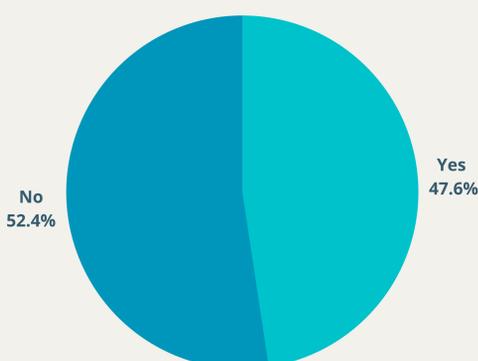
Inclusion Criteria	Exclusion Criteria
Subjects ≥ 21 years of age	Subjects < 21 years of age
People who exclusively live in Puerto Rico.	People who do not live in Puerto Rico.
Subjects who can read and write to fill the survey.	Subjects who cannot read and write to fill the survey.
Subjects who got infected by COVID-19 and already recovered.	Subjects who are currently infected with COVID-19.
Subjects without olfactory and/or gustatory disorders known before the pandemic.	Subjects with olfactory and/or gustatory disorders known before the pandemic.
Subjects who are not confined to an electronic monitoring bracelet.	Subjects who are confined to an electronic monitoring bracelet.

Results

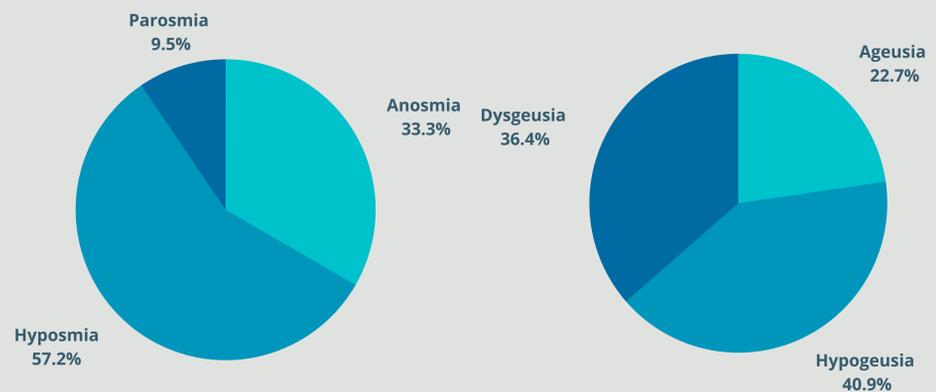
Currently, there are 55 participants recruited. 37 (67.3%) identified as women and 18 (32.7%) as men with a mean age of 31 ± 12.5. 80% of the sample were diagnosed with a COVID-19 RT-PCR test. 21 (42%) subjects experienced olfactory dysfunctions and 22 (44%) experienced gustatory dysfunctions after being diagnosed with COVID-19.



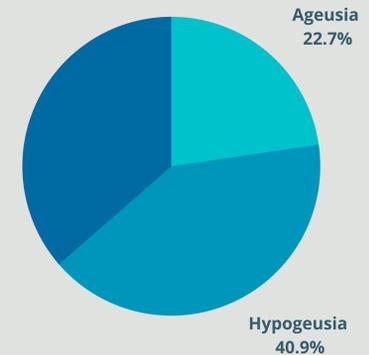
Graph 1: POD after testing negative for COVID-19



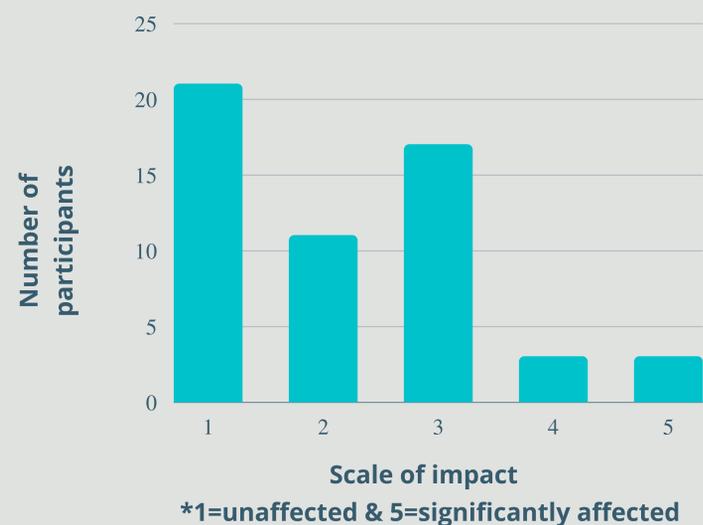
Graph 2: PGD after testing negative for COVID-19



Graph 3: Types of smell disorders reported



Graph 4: Types of taste disorders reported



Graph 5: Impact of POD and PGD on participant's QoL

Conclusion

The preliminary data shows a similar trend to the findings observed in other studies where there was a significant percentage of people with POD and PDG. Thus, the results from this study are important to understand the extent and duration of long-term smell and/or taste changes as well as their impact on the patients' QoL. Yet, the final sample of the study (N=500) and statistical analysis are pending to reach significant conclusions.

Acknowledgments

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