

## Topic: Exploring Cyberchondria in Pregnant Women: A Comprehensive Investigation and Analysis

Women often experience physiological changes during pregnancy. These changes can cause worry and anxiety. As a consequence, expectant mothers often seek information online. Given the nature and characteristics of the information obtained online, pregnant women might be involved in a never-ending vicious cycle of online searches that leads to an increase in health anxiety. This phenomenon is known as cyberchondria. Cyberchondria is an excessive, compulsive, repetitive behavior of searching online for information about one's health that is triggered by and exacerbates health anxiety. The consequences of cyberchondria can be an increase in worry, distress, and anxiety, which might lead to heightened healthy anxiety or certain mental illness, fear of childbirth and impaired functioning [1–3]. Despite the challenges and negative effects of cyberchondria, the risk factors, predictors and causes, role of pregnancy-related health complications and the consequences of cyberchondria in pregnant women are still under-researched and not fully understood [1, 4]. Therefore, the aim of this thesis is to understand how pregnant women are affected by cyberchondria and to find risk factors in cyberchondria in pregnant women. Understanding how cyberchondria manifests during this period can provide insights into the unique challenges faced by pregnant women. Consequently, potential research questions include: Whether cyberchondria levels differ among pregnant women during different gestation periods, whether present and previous pregnancy-related complications have an impact on cyberchondria, and whether sociodemographic factors influence cyberchondria during pregnancy.

In light of that objective, this work consists of the following parts

- Literature review on cyberchondria and cyberchondria in pregnancy.
- Extraction and preparation of the data collected during the SMART Start study regarding cyberchondria.
- Definition of at least 5 research questions and hypothesis regarding cyberchondria during pregnancy.
- Analysis and evaluation according to the identified hypothesis.

The thesis must contain a detailed description of all developed and used algorithms as well as a profound result evaluation and discussion. The implemented code has to be documented and provided. An extended research on literature, existing patents and related work in the corresponding areas has to be performed.

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## References

- [1] Matea Šoštarić, Una Mikac, and Nataša Jokić-Begić. Understanding cyberchondria in pregnant women: longitudinal assessment of risk factors, triggers, and outcomes. *Journal of Psychosomatic Obstetrics & Gynecology*, 44(1):2265050, 2023.
- [2] Yaşar Demir, Erhan Dağ, and Saliha Özpinar. The relationship of e-health literacy with cyberchondria: A cross-sectional study on pregnant women. *Journal of Health Literacy*, 2024.
- [3] Burcu Demir Gökmen, Volkan Gökmen, and Yılmaz Sariboğa. Does fear of coronavirus affect cyberchondria in pregnant women? *Fenerbahçe Üniversitesi Sağlık Bilimleri Dergisi*, 2(3):568–578, 2022.
- [4] Matea Šoštarić, Nataša Jokić-Begić, and Matea Vukušić Mijačika. Can't stop, won't stop—understanding anxiety's role in cyberchondria among pregnant women. *Women & Health*, pages 1–10, 2024.