

Pregnancy Online Communities: A Content Analysis using a computational method with online discussion among “Plus size moms to be”

Sookja Kang

Diverse online health communities allowed internet users to join their interest groups and to discuss similar health concerns.¹ Pregnant women also showed that the internet is their main source of seeking health information and peer support during pregnancy.²⁻⁴ Online communities with an anonymous and non-judgmental environment enabled pregnant women not only to exchange health information but also to share private or sensitive issues, which might be difficult to discuss with healthcare providers.⁵ WhatToExpect (WTE), one of the most popular pregnancy websites, has an online community for pregnant and postpartum women to share their experiences, ask questions, and provide support for each other.^{6,7} One of the subgroups in the online community of WTE is called “Plus Size Moms and Moms to be” group for women who identify themselves heavy or curvy. My aim is to explore topics discussed in the main posts among self-identified plus size pregnant women.

The data was collected within the timeframe from December 2019 to May 2020 on the WhatToExpect website. A total of 442 initial posts existed within the timeframe. The Natural Language Processing (NLP) approach was applied to analyze the data to explore and capture topics from text files discussed among the pregnant women. More specifically, Latent Dirichlet Allocation (LDA) was used to explore topics that emerged from the dataset.

Frequently Used Words

Figure 1 shows 100 words that are mostly frequently used among the pregnant women in the “Plus Size Moms and Moms to be” group from December 2019 to May 2020. Not

All the 9 topics include two terms, such as “pregnant” and “week”, that are used to identify gestational age among the plus size pregnant women. Topic 4, the highest proportion among the 9 topics, includes “feeling”, “baby”, “bump”, and “cramps”. These terms show *the plus size women’s feelings and experiences related to pregnancy and baby*. Topic 3 has the second highest proportion in the document that contains the following terms: “feeling”, “belly”, “size”, “baby”, and “hard”. Topic 3 is highly overlapped with topic 4, *the plus size women’s*

feelings and experience related to pregnancy and baby. The most common terms in topic 5 are “size”, “maternity”, “baby”, “nursing”, and “suggestions”. These terms show the plus size pregnant women’s interests in *recommendations regarding pregnancy and maternity.* Topic 1 includes the following terms: “doctor”, “baby”, “weight”, “ultrasound”, and “bmi”. In topic 1, *pregnancy related health issues* emerge in the plus size pregnant women. Topic 2 includes “weight”, “gain”, “bump”, “eat”, and “baby” suggesting that this topic represents *gestational weight.* Topic 6 contains the common terms such as “size”, “weight”, “doctor”, “baby”, and “normal” that indicate *plus size related concerns during pregnancy.* Topic 9 including “weight”, “baby”, “lose”, “love”, and “belly” presents *emotional feelings during pregnancy.* The common terms of topic 8 are “baby”, “feeling”, “husband”, “test”, and “girl”, which shows *the family’s feelings related to pregnancy and baby.* Topic 7 includes the common terms such as “pounds”, “weight”, “baby”, “diabetes”, and “doctor” that indicates *weight gain and health concerns during pregnancy.*

The results show that the plus size pregnant women regardless of their discussion topic shared their gestational age on the WTE discussion forum. Identifying the gestational age among the pregnant women could promote active discussion and better feedback from pregnant women who are in a similar gestational age. The prominent topics from the topic modeling using LDA were physical health and emotional aspects related to pregnancy and baby in either the plus size pregnant women or their families. The plus size pregnant women discussed their emotional feelings, curiosity, and experience with their peers on this WTE online forum. Also, these plus size women frequently talked about their weight as well as health issues. Some of the pregnant women were interested in suggestions or recommendations related to their pregnancy.

The plus size pregnant women are using the online forum to share their issues, concerns, and feelings and to find recommendations among their peers. Regardless of the accuracy of the information from the online forum, this information exchange among the pregnant women occurs, which could affect their decision-making during pregnancy.

Figure 2. Topics of Words with Top 10 Beta Scores

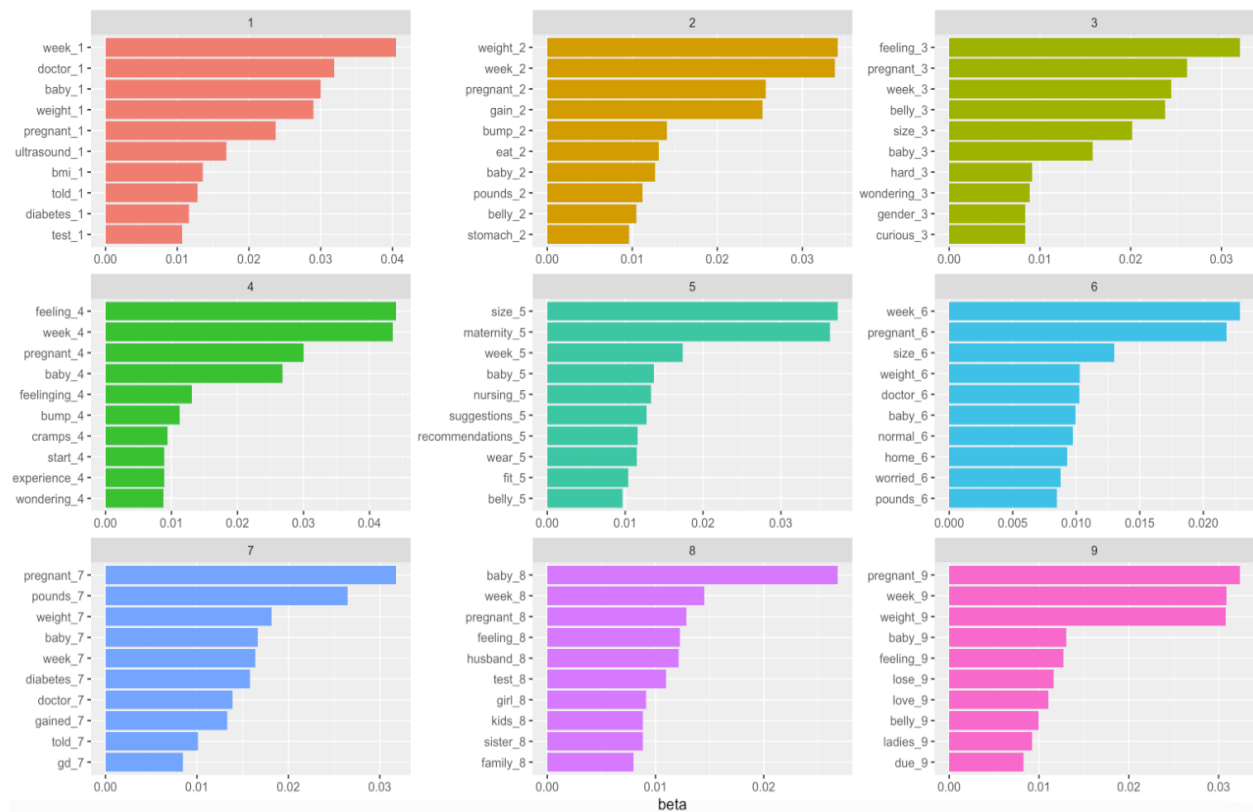


Figure 3. Topic Proportion

