# **Experiences of Women of Childbearing Age With Epilepsy Throughout Their** Motherhood Journey: Results From a Social Media Listening Study

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# **Background**

- Epilepsy affects more than 65 million people worldwide.<sup>1</sup> - Approximately 15 million of these are women of childbearing age.<sup>2</sup>
- Women with epilepsies (WWE) face specific potential challenges related to contraception, fertility, pregnancy, breastfeeding, and parenthood.<sup>3,4</sup>
- There is a lack of qualitative research on women's experiences of the motherhood journey while living with epilepsy.<sup>5</sup>

# **Objective**

• To provide insights into the experience of WWE related to their motherhood journey and to identify their unmet needs.

# Methods

- A social media listening study was conducted across six countries.
- Sources were public social media accounts, including X (formerly Twitter), forums (eg, Reddit, Mumsnet), YouTube, blogs, Instagram, and Facebook.
- Search terms used to identify social media posts related to epilepsy were similar to those previously published<sup>6</sup> and were applied to historic social media posts published over a 12-month period (January 27, 2020-January 27, 2021).
- A list of multilingual key terms associated with the motherhood journey was created and used to identify relevant posts among the epilepsy social media conversation.

### Social listening methodology

Total epilepsy social media conversation that referenced a key term associated with the motherhood journeya:

246K posts Broad disease terms, treatment terms, and common hashtags used to capture ongoing social media conversation happening over a 12-month period (Jan 2020 to Jan 2021)



\*Key terms used were "(f)" OR female OR woman OR women OR girl\* OR ladies OR girlfriend\* OR wife OR partner OR pregnan\* OR child\* OR baby OR family OR kid\* OR obgyn OR +"OB-GYN" OR gyny OR gynecologist OR gynaecologist OR obstetrician OR contraception OR contraceptive\* OR conceiv\* OR "birth control" OR "bc pill" OR coil OR IUD OR condom\* OR "using protection" OR "used protection" OR "use protection" OR "depo-provera" OR "depo shot" OR microgynon OR rigevidon OR ovranette OR minipill OR "combo pill" OR "combined pill" OR mircette OR cerazette OR loestrin OR yasmin OR nuvaring OR (("don't want" OR "not planning" OR "never going to" OR "not going to") NEAR/3 (children OR kids OR child)) OR abortion OR miscarriage OR miscarried OR "still-birth" OR stillbirth OR birth OR "birth" complications" OR (congenital AND malformation) OR menstr\* ÓR sex OR "having a baby" OR "going to be having a baby" OR "first trimester" OR "1st trimester" OR "second trimester" OR "2nd trimester" OR "morning sickness" OR (early NEAR/2 scan) OR "dating scan" OR "booking scan" OR "due date" OR "growth scan" OR "antenatal screening" OR "NT scan" OR "nuchal translucency scan" OR "anomaly scan" OR "viability scan" OR "gender scan" OR antenatal OR "ante natal" OR "pre natal" OR prenatal OR "intra-natal" OR intranatal OR ultrasound OR "child birth" OR childbirth OR "C-section" OR "c section" OR csection OR caesarean OR cesarean OR VBAC OR "baby is due" OR nesting OR "giving birth" OR "gave birth" OR "give birth" OR birthed OR birthing OR labour OR "third trimester" OR "3rd trimester" OR overdue OR labour OR induced OR induction OR "contractions" OR ((bump) SENTENCE (growing OR big OR huge)) OR "midwife" OR "delivery room" OR "water birth" OR "natural birth" OR "home birth" OR epidural OR "umbilical cord" OR "pre-eclampsia" OR preeclampsia OR "in labour" OR "during labour" OR TTC OR (("trying to" OR planning OR plan) NEAR/4 (baby OR conceive OR pregnant)) OR fertility OR fertile OR infertile OR infertility OR "low sperm count" OR IVF OR FET OR "embryo" transfer" OR surrogate OR surrogate OR adoption OR endometriosis OR "polycystic ovaries" OR (("can't have" OR "unable to") NEAR/2 (kids OR baby OR children)) OR sterile OR vasectomy OR "freezing my eggs" OR "freeze my eggs" OR "froze my eggs" OR "pregnancy test" OR surrogacy OR conceiv\* OR conception OR ((unplanned OR accidental OR accident OR accidentally OR unintended OR surprise) NEAR/2 (pregnancy OR pregnant)) OR (("on birth control" OR condom OR "bc pill" OR IUD OR coil OR "used protection" OR "use protection") SENTENCE "got pregnant") OR "want another child" OR breastfeed\* OR BF OR ((Looking OR looked OR care OR caring OR walking OR walk OR playing OR play OR cooking OR cook OR feed OR feeding OR fed OR sleep OR sleeping OR help OR helping OR carry OR carrying OR push OI pushing OR making OR make) SENTENCE (baby OR newborn OR infant\* OR kid\* OR child\* OR daughter OR son)) OR cleaning OR chores OR laundry OR "household tasks" OR housework OR nursery OR playground OR "post partum" OR stroller OR buggy OR crib OR formula OR diapers OR nappies OR pushchair OR pram OR "baby boy" OR "baby girl" OR "new mum" OR postpartum OR cot OR cotbed OR "bottle fed" OR EBF OR lactation OR motherhood OR toddler OR toddlers OR LO OR "little English syntax was translated by local language analysts and applied in each country. \*Indicates multiple endings are included; "..." quotation marks = exact phrase.

- Specific keyword filtering was then applied to identify conversation around the key stages of the epilepsy motherhood journey: preventing & planning pregnancy, conception & fertility, early/late pregnancy & childbirth, and breastfeeding & parenthood.
- Social media posts related to a wide range of antiseizure medications (ASMs), including UCB products, were captured.
- For transparency, the conversation was split into two data sets—one with all UCB products removed (245,000 posts) and one related to UCB products (ie, BRIVIACT® [brivaracetam], VIMPAT® [lacosamide], KEPPRA® [levetiracetam], NAYZILAM® [midazolam nasal spray]; 3400 posts).
- A randomized sample of the UCB product conversation was included in the analysis (680 posts).



**E** CONCLUSIONS

able to and want to look after the child in any scenario.

Therefore, I really, really am sure."

- Patient, forum, Germany

Often, relevant information is not provided by clinicians or is unavailable. Women with epilepsies (WWE) are given conflicting information, and open questions related to epilepsy and pregnancy remain unanswered, leading to confusion and heightened anxiety. WWE may seek answers and support from sources other than healthcare professionals, including their peers. There is a need to better support WWE and their families and provide relevant information in plain language at the right stage and time, thus supporting shared decision making and a more informed and supportive motherhood journey experience.

endless seizures again. New things are always petrifying

with epilepsy."

- Patient, forum, USA



**Conception & fertility Preventing pregnancy** Planning pregnancy Although many WWE express determination to overcome the challenges/obstacles in their journey to motherhood, some can feel very pessimistic e process of rebalancing ASMs to levels the oung WWE are already worrying about fertilit reatment decisions vary, as some WWE report eing advised to continue on their existing ASM d future complications that come with an ASI pregnancy is lengthy and complex whereas others report being taken off it Motivated by their fears, some WWE are certain they never want to have children

well it was an epileptologist that told me to start.

- Patient, forum, France

VWE struggling to conceive question whether their ASM could be the cause

> WWE on IVF are unclear on potential nteractions between fertility drugs and ASMs

**Early pregnancy** 

baby's safety. And I don't know whether to take the

medication again or wait to see what my doctors do!"

Patient, forum, France

Late pregnancy & childbirth

he most concerns are expressed in the first trimester, as WWE worry about effects of ASMs on fetal health

Some WWE are driven to switch HCPs, citing a lack of communication among their existing team

WWE experiencing seizures during pregnancy express concern about the impacts they had/can have

Cesarean sections or being induced are often advised to minimize seizure risk during childbirth

WWE are fearful of a seizure during childbirth, seeking reassurance from peers online

An epilepsy diagnosis during pregnancy is shocking and overwhelming

& parenthood

**Breastfeeding** 

has to be present if I want to

feed or bathe the baby."

- Patient, forum, USA

For a copy of the poster, scan

owing pregnancy, some WWE struggle to get

WWE and partners often worry about

WWE worry about sleep deprivation and its effects on seizure threshold

me WWE feel that their career options are limite

Thematic analysis of these data revealed four key themes:

- (i) Uncertainty and fear arise for WWE when changing treatments, as balancing ASMs is often lengthy, complex, and can affect seizure control.
- (ii) Worries are intensified by inconsistent communication from and among healthcare professionals (HCPs) and a lack of information on how ASMs may affect the fetus. Fears about the safety of ASMs grow due to concerns about the fetus and child development.
- (iii) Seizure control is often a priority but can be a difficult balance to achieve, as providing a safe environment for the fetus or infant becomes paramount.
- (iv) The motherhood journey is perceived to be challenging, with multiple obstacles or barriers to a safe and successful pregnancy, including the lack of consistent information.

### **Conclusions**

- WWE want to be empowered through knowledge. They seek peer counseling and detailed information online, including about ASMs, at the right time during their motherhood journey to help them feel more confident in making treatment decisions.
- Relevant information is often not provided by clinicians, difficult to obtain, or unavailable. WWE are given conflicting information. Open questions related to epilepsy and pregnancy remain unanswered, leading to confusion and heightened anxiety.
- WWE seek answers and support from sources other than their HCPs, including their peers.
- There is a need to better support WWE and their families by providing plain language and timely information to enhance their motherhood journey.
- HCPs need more data to better inform WWE to support shared decision making.
- Our results highlight the importance of collecting data related to pregnancy outcomes. Further research is necessary to understand the impact of all ASMs and their capacity to impact on development
- Pregnancy registries are underpopulated. Data could be generated faster if there was a greater collaboration among patient organizations, researchers, and clinicians.
- There is a need for long-term monitoring to study outcomes for children who were exposed to ASMs.

### References

- Ngugi AK, et al. *Epilepsia* 2010;51(5):883-890.
- 2. Tomson T, et al. *Epileptic Disord* 2019;21(6):497-517.
- 3. Bangar S, et al. *Funct Neurol* 2016;31(3):127-134.
- 4. Gauffin H, et al. Neuropsychiatr Dis Treat 2015;11:1291-1298.
- 5. Weckesser A and Denny E. Seizure 2013;22(2):91-98. 6. Fazekas B, et al. *Epilepsy Behav* 2021;116:107729.

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Relative volume of conversation among all stages



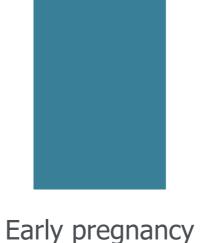
The larger the bar, the more posts were included on the topic. Different colors were used for the different key stages of the epilepsy motherhood journey



Different colors were used for the different key stages of the epilepsy motherhood journey. ASM, antiseizure medication; HCP, healthcare professional; IVF, in vitro fertilization; WWE, women with epilepsies.







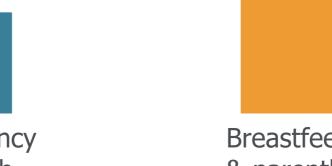


we're not allowed to get tired during birth. I have also

been told I have to stay overnight

- Patient, forum, UK

for observation."



Breastfeeding & parenthood

Late pregnancy & childbirth

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