

Drinking during pregnancy and the precautionary principle: inventory of the information available online and on social media in 2024

Summary

Alcohol consumed by pregnant women is the most common cause of preventable cognitive impairment among newborns worldwide and is recognized as a global public health problem. Prenatal alcohol exposure can interfere with the normal development of the foetus and result in central nervous system disfunctions and physical damages with lifelong social and health consequences, including cognitive, behavioural, emotional, and adaptive functioning deficits. In Switzerland, it is estimated that between 170 and 425 children are born with *Foetal Alcohol Syndrome* (FAS) and 1700 with *Foetal Alcohol Spectrum Disorder* (FASD) every year.

Given that FAS and FASD can be entirely prevented by not consuming alcohol during pregnancy, public health authorities adopted the 'precautionary principle' and recommend abstinence to pregnant women and those wishing to become pregnant. Yet, 67% of the pregnant women reported not abstaining from drinking during their pregnancies. There are multiple barriers to pregnant women adopting the 'precautionary principle', including personal beliefs, cultural tolerance towards drinking during pregnancy, lack of knowledge on the risks of alcohol to foetal development and exposure to misleading information online (on websites, forums and social network).

An urgently needed intervention to reduce the prevalence of FAS and FASD is to increase the general population's awareness of risks and effects of drinking during pregnancy (DPP). This project therefore aims establish an inventory of the online information currently available to the general population. In order to achieve this objective, this project proposes a content analysis of websites, online forums and popular social networks. The following three content types will be targeted: informational content (e.g., created by governmental, institutional or private actors), comments in reaction to the content produced by others, and forums (spaces for argumentative discussion organised on a given theme).

Content from webpages, forum threads, and popular social networks (YouTube, Twitter, Facebook, Instagram, Pinterest and TikTok) will be retrieved in the three main official languages (German, French, Italian) and English, using screening strategies specific to each online platform (e.g., 20 first results in Google, 10 first YouTube videos matching standard search queries). All textual contents will be coded for general characteristics, including the type of source, the target audience, the length, clarity and accuracy of the content, the presence of the precautionary principle, the tone and other influence metrics (e.g., likes, retweets). This coding will be informed by a codebook of general characteristics.

Once the textual corpus is coded, descriptive statistics will be used to compare the prevalence of content characteristics (e.g., presence of the precautionary principle) across languages, platform types, and the platform's country of origin. In particular, the analyses aim to identify the extent to which specific platforms and actors communicate information on DDP and promote or discourage the precautionary principle. This will be combined with qualitative content analysis, which aims to, firstly, identify the questions most frequently asked by women online. This qualitative analysis will then identify and thematically analyse the most frequent or most engaged with responses to these questions. The results are expected to provide further insights into the nature of the messages used in easily accessible online content which advocates for or against the precautionary principle. These results will also highlight the role of specific websites, forums and social networks in the dissemination of ambiguous or contradictory information.

By establishing an inventory of the information on DDP currently available in Switzerland, this project will help to identify which actors, channels and messages should be strategically applied by public health actors when communicating information on DDP in the future. The research team will work closely with the prevention and the communication departments of Addiction Switzerland at different stages of the analysis and the production of the study outcomes, which will include a factsheet with recommendations for improving the provision of information on alcohol and pregnancy, a research report, and the presentation at an international conference.