Counselling for Alcohol Problems in Pregnancy (CAP-PRE)

Project type

☐ interdisciplinary pilot project ☒ cross-sector project ☐ global health postdoc fellowship

Research areas involved

☐ Biomedical sciences ☒ Public health
☒ Social sciences and humanities ☐ Engineering and other sciences

Project duration

March 2024-July 2026

Project team

Name	Organization	Discipline(s)
Prof. Daniela Fuhr	Leibniz Institute of Prevention Research and Epidemiology (BIPS), Bremen, Germany	Public Health, Implementation Science
Dr. Petal Petersen Williams	South African Medical Research Council (SAMRC), Cape Town, South Africa	Psychology
Dr. Isabelle Lange	Centre for Global Health, Technical University of Munich (TUM), Germany	Anthropology
Dr. Meike Wolf	Federal Institute of Public Health (BIÖG), Cologne, Germany	Prevention Science / Anthropology

Case study 1

CAP-Pre: Supporting Pregnant Women to Reduce Alcohol Use in South Africa

South Africa has the highest estimated prevalence of fetal alcohol spectrum disorders (FASD) globally, with particularly high rates in disadvantaged communities in the Western Cape. Despite the substantial health risks associated with alcohol use during pregnancy, few interventions are available outside clinic-based antenatal services, which are often accessed late in pregnancy. To address this gap, the CAP-Pre project, led by the Leibniz Institute for Prevention Research and Epidemiology (BIPS) and the South African Medical

Research Council (SAMRC), adapted and evaluated a community-based counselling intervention for pregnant women experiencing alcohol-related problems.

Building on previous formative research and the evidence-based Counselling for Alcohol Problems (CAP) intervention, the project developed the “Mommy and Baby Wellness Programme”, a culturally adapted counselling intervention delivered by Community Health Workers (CHWs). Through a participatory treatment development workshop involving pregnant women with lived experience, CHWs, healthcare providers, policy stakeholders, and researchers, the intervention was refined and adapted to the local context. The adapted intervention was subsequently tested in a case series involving 10 pregnant women with hazardous alcohol use. Feedback from participants and providers informed further optimisation of the intervention content, delivery approach, and supporting materials.

The final intervention consisted of five individual counselling sessions delivered over approximately eight weeks. Using motivational interviewing, problem-solving approaches, and behavioural change techniques, the programme supported women in understanding the risks of alcohol use during pregnancy, managing cravings and social pressures, and developing strategies to maintain positive changes.

The intervention was subsequently evaluated through a pilot randomised feasibility trial involving 40 pregnant women from low-income communities in Cape Town. Participants were randomly assigned to receive either the CAP-Pre intervention plus enhanced usual care or enhanced usual care alone (20 participants per study arm). Recruitment proved feasible, with 40 eligible women successfully enrolled and randomised. Participant engagement and retention were high throughout the study. Within the intervention arm, 19 women attended the first three counselling sessions and 17 completed all five sessions. Three participants withdrew during the intervention period, including one prior to initiating treatment and two after Session 3. Follow-up completion was 95%, with 19 of 20 participants in each study arm completing the three-month assessment. In addition, qualitative interviews were completed with 19 intervention participants and 5 control participants, providing rich insights into women’s experiences of the programme.

Preliminary quantitative findings were encouraging. Analyses indicated positive trends towards reductions in alcohol consumption among intervention participants, including fewer drinks consumed, fewer drinks per day, and reduced heavy drinking days at follow-up. These findings are exploratory, as the pilot trial was designed to assess feasibility rather than effectiveness, but they provide promising signals warranting further investigation in a larger trial.

The mixed-methods process evaluation provided valuable insights into participants’ experiences. Women consistently described the programme as supportive, respectful, and non-judgemental. Many reported increased awareness of the harms associated with alcohol use during pregnancy, greater confidence in their ability to reduce drinking, and

improved coping strategies for managing stress and difficult life circumstances. Participants also highlighted the importance of receiving support from trained CHWs who understood their social circumstances and provided encouragement without stigma.

One participant reflected on the impact of the programme:

"Since I started the programme, I have stopped drinking, and I believe it will help me have a healthy baby." (CAP_post_23)

Another participant described how the programme strengthened her motivation and self-belief:

Yes, I learnt a lot. People always pushed me down, always said I was an alcoholic, and said funny things but I learnt a lot here. I learnt to stand up; you fall but you stand up again. You must stand up again. You don't do it for you, you do it for your children. (CAP_post_32)

The findings suggest that community-delivered counselling for alcohol use during pregnancy is perceived to be effective in reducing harmful alcohol use, and is both feasible and acceptable to deliver in low-resource settings. By equipping CHWs with evidence-based counselling skills and embedding support within communities, CAP-Pre demonstrates a promising approach for addressing a major public health challenge while strengthening maternal and child health services.









Photo credits: SAMRC

Photo from participatory adaptation workshop (above)

Photo: Intervention delivery and interventional manual

Case study 2

CAP-PRE: Bridging the gap of CAP-PRE relevance in Germany

Fetal alcohol spectrum disorders (FASD) is an umbrella term used to describe disabilities caused by maternal alcohol consumption during pregnancy. It is estimated that 1–2% of newborns in Germany are born with a form of FASD each year, whereas globally, South Africa has the highest documented prevalence of FASD. FASD is associated with livelong impairments of varying severity, ranging from neurocognitive and functional impairments to heart defects, kidney malformations and skeleton malformations. Unlike other birth defects, FASD is entirely preventable through abstinence from alcohol consumption during pregnancy, thus making prevention a central concern. While the project partners at the Leibniz Institute for Prevention Research and Epidemiology (BIPS) and the South African Medical Research Council (SAMRC) addressed the situation in South Africa through the adaption and evaluation of a community counselling intervention for pregnant women experiencing alcohol-related problems, the work package at the Federal Institute of Public Health (BIÖG) focused on current prevention approaches and stakeholder structures in Germany. It aimed to investigate if and how the intervention may be applicable to Germany.

In order to examine FASD prevention in Germany, a narrative review was carried out, focusing on prevention strategies and gaps as described in the literature. The literature search used three databases for the years 2010 to 2025 (PubMed, the Cochrane Library, and Google Scholar), supplemented by advanced Google searches and manual searches of relevant initiatives and networks dealing with FASD prevention (e.g., EUFASD). Specifically, North Rhine-Westphalia and Bavaria and their respective care structure were

chosen as case studies within the German federal system. The results of this review have been written up as a scientific paper.

The results highlight the complexity of diagnosis and challenges in addressing a highly sensitive and stigmatized issue within the German context. The literature suggests that gaps remain in professional training, as FASD prevention is not consistently integrated into education programs. As alcohol consumption during pregnancy occurs across different socioeconomic groups, it is crucial to critically reflect on risk groups, given that alcohol consumption patterns are closely linked to the widespread availability and normalization of alcohol in Germany.

A wide range of universal, selective, and indicated strategies was identified: Stakeholder structures vary across federal states in terms of centralization, coordination, and implementation. Several programs categorized into universal, selective and targeted prevention are addressing different target groups. First, universal prevention targets the entire population and aims to increase awareness that no amount of alcohol is considered safe during pregnancy. These approaches include e.g. public health campaigns, informational material for women and expectant fathers, professionals training or gender-sensitive school-based interventions. Second, selective approaches focus on individuals or groups who are at a higher risk of alcohol-exposed pregnancies, including e.g. women who engage in risky alcohol use, have unplanned pregnancies, experience mental health difficulties, or have limited access to healthcare. These approaches cover routine alcohol screening in primary care and antenatal services, preconception counselling, family planning and contraception services or culturally appropriate education programs. Third and finally, indicated prevention encompasses measures such as motivational interviewing, referral to specialized alcohol treatment services, multidisciplinary antenatal care, or mental health support. It targets individuals with confirmed alcohol consumption during pregnancy, or who have previously had an alcohol-exposed pregnancy.

Some regions such as Bavaria have developed centralized competence-based structures. Thus, North Rhine-Westphalia in turn relies on decentralized networks embedded within existing welfare and healthcare systems. At the same time, recent initiatives, including the establishment of a specialized FASD competence center in Bavaria and the federal FASD umbrella association, indicate increasing policy attention and cross-sectoral engagement.

The findings of the review highlight structural differences between Germany and South Africa. Healthcare in Germany is characterized by a well-resourced, but mostly decentralized system. Antenatal care is primarily delivered by gynecologists as well as midwives in private practice, rather than through centralized clinics. Healthcare professionals operate within a regulatory framework that limits the extent to which non-professional counsellors can deliver clinical interventions. In consequence, the implementation of lay-counsellor models would require adaptation. However, an emphasis on brief psychological interventions and stigma-sensitive communication aligns with recommendations in the German national guidelines; it may also help to address gaps

within antenatal care. Training healthcare professionals in non-judgmental counselling techniques and strengthening linkages between obstetric care, addiction services, social welfare organizations, and community-based actors may improve existing approaches to prevent FASD.

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