Antibacterial mouthwash does not reduce the number of sexually transmitted infections (STI) in men taking Pre-Exposure-Prophylaxis (PrEP). On the contrary, there could be an increased risk of contracting a gonorrhea infection in the throat. This is the result of the PReGo study carried out by ITM researchers and published in the renowned journal, *The Lancet Infectious Diseases*.

The research was undertaken because of the increasing need for alternatives to antibiotics to prevent the transmission of gonorrhea, chlamydia and syphilis. It was launched in April 2019, in collaboration with ITM partner Sensoa who helped assess the project’s support and feasibility. 343 men who have sexual contact with men (MSM) and use PrEP participated in this study. PrEP protects against HIV, but not against other common STIs such as gonorrhea, chlamydia and syphilis that can be treated with antibiotics.

However, growing antibiotic resistance makes this treatment increasingly difficult. As the mouth plays a significant role in the transmission of STIs, the PReGo researchers investigated a mouthwash as an alternative treatment. "We chose Listerine Cool Mint because previous studies indicated that it is effective against bacteria such as gonorrhea, chlamydia and syphilis," explains ITM researcher Christophe Van Dijck. "We hoped its use might reduce STIs."

Half of the study group received Listerine while the other half were given a placebo. The participants and their partners had to use the mouthwash and gargle once a day for 3 months and before and after oral sex. "After the initial 3 months the products were switched between the groups, allowing us to compare, because you take account of the differences in sexual risk behaviour among study participants", explains Van Dijck.

The COVID-19 pandemic put an early stop to this FWO-funded study, since face-to-face consultations had to be suspended. However, the researchers had collected sufficient information. "Our data seem to indicate that Listerine Cool Mint actually increases the risk of gonorrhea in the throat. We cannot therefore recommend this mouthwash for the prevention of STIs," says Van Dijck. An additional study will further investigate the samples taken during this study.