Tuberculosis still remains one of the leading causes of death and chronic disease worldwide. Those who suffer the most are from disadvantaged communities, and all they want is to improve their health by having access to treatment. However, it is difficult to embark on or complete a treatment regimen when the treatment you are on makes you feel worse. Patients eventually do feel better in the long run, but when the drugs make them feel ill, they stop taking the treatment. This then leads to the development of drug-resistant TB, which may cause more severe complications, as normal treatment will not help.

At the same time, these patients face a stigma from their communities, which contributes to depression and mental health difficulties. Altogether, these problems eventually have negative effects on households and families.

Currently, intradermal implants are available for contraception. These can be implanted every 3–5 years and provide long-term contraception through a slow release of hormones. This same technique could be used for treatment of TB patients. However, for the technique to work as a TB treatment, it would need further investigation.

“If an intradermal implant for TB can be made, patients will never miss another dose, and they will be guaranteed to finish their treatment,” says Avril Walters.

Pharmaceutical companies and scientists need to collaborate on finding the best possible way to adapt this technology for the treatment of TB.