

**Title:** Using behavioural science to support contraceptive strategies for adolescent girls and young women

**Authors:** Tristan von Zahn, Rodwell Ndlovu, Jesse Njunguru, Richard Matikanya, Benoit Renard, Martha Brady.

**Significance/background [200]:**

Behavioural science offers insights into the challenges of contraceptive non-use and discontinuation. A key insight is that contraceptive decision-making is complex and dynamic. Each adolescent girl and young woman (AGYW) makes her decision based on a unique set of internal and external influences. As these change, so will her decisions. Each decision can be thought of as a tactic that helps an AGYW pursue her sexual and reproductive health (SRH) goals and overarching strategy. This framing explains why non-use and discontinuation occur. Adolescents struggle to develop concrete strategies and stick to them. They are more present-biased than adults, resulting in a large intention-action gap. The benefits of closing this gap are significant. A clear pregnancy prevention strategy allows AGYWs to reflect on their SRH goal and take health-seeking actions to meet that goal.

We argue that SRH programmes should consider focusing on supporting an AGYW's overall strategy rather than prescribing a particular tactic for her. Success should not be defined as an AGYW remaining on a particular service indefinitely, but instead whether she can transition seamlessly between different options as her needs change. We use insights from Triggerise's Tiko platform in Kenya to recommend steps that programmes can take to support the development and execution of informed contraceptive strategies. (200)

**Programme intervention/activity tested [100]:**

Tiko is a digital platform designed to promote positive SRH decisions among AGYWs in Kenya. It uses mobile technology to connect AGYWs to service providers and incorporates a system of behavioural nudges to encourage them to seek health services and adopt contraceptives. AGYWs are given loyalty points, called Tiko Miles, as a reward and can spend their Tiko Miles at participating retailers on a range of goods and services. The goal is to create an ecosystem within a community that supports and reinforces SRH decisions. There are 614,127 unique Tiko users in Kenya who have adopted services since 2019. (100)

**Methodology (location, setting, data source, time frame, intended beneficiaries, participant size, evaluation approach) [200]:**

We analysed programmatic data generated via the Tiko platform between January 2020 and December 2021. During this period 378,617 AGYW between the ages of 15 and 19 across 16 counties in Kenya enrolled on Tiko. Tiko records when an AGYW takes up a contraceptive service by performing a 'validation'. This is a digital handshake in which an AGYW requests a code using her mobile device, or Tiko membership card, and the service provider inputs that code onto their mobile device. The validation process also allows Tiko to record which service was provided and confirm that it was adopted. Because AGYWs are assigned a unique membership number on the platform, it is able to follow a user's contraceptive choices over

time.

We plot these user journeys to determine the average point at which users discontinue, or where they change to a different method. We combine this novel data set with qualitative data collected from AGYWs during interviews which examine their contraceptive preferences and motivations for choosing certain methods at specific points. We also examine data on ratings given to service providers by AGYWs on the platform to see if higher scores correlate with increased continuation on certain services over time. (200)

### **Results/key findings [250]:**

There has been a 37% increase in unique users on the Tiko platform between 2020 and 2021 (159,654 vs 218,963). The method mix skews towards short-acting contraceptives. The majority of users (52%) accessed oral contraceptives (OCs) over this period, with a dramatic increase in OC use between 2020 and 2021 (44% of users vs 72%). There is evidence that the majority of users who adopt OCs (55%) do not return within a 30-day period after initiating. However, of the 45% that do return, there is consistent continuation behaviour. The majority of those users (75%) return each month over a 90-day period. This result is consistent with the hypothesis that AGYWs who can overcome the initial barriers to continuation, such as the learning curve for handling side effects, are more motivated to continue using them. The behavioural nudges delivered by the Tiko platform may explain why Tiko users can overcome these barriers. This is supported by a significant increase in repeat use of contraceptives on the platform (defined as a user returning for an additional service during the 12-month period) between 2020 and 2021. There were 2,468 repeat users of OCs in 2020 compared to 60,527 in 2021. There is also evidence of users switching between methods, both from short-acting to long-acting and vice versa. Finally, 89,74% of AGYWs report that they received the contraceptive method they wanted. This suggests that AGYW are selecting methods that are appropriate for their particular circumstances at a given time. (250)

### **Programme implications/lessons [250]:**

Overcoming the intention-action gap is the key challenge in creating successful, informed, and empowering contraceptive strategies. AGYWs face a difficult decision between the financial and social costs (such as stigma) of adopting an SRH service, and the benefits of that service. A further complication is that AGYW move through different windows of perceived risk based on their circumstances. This may reduce the perceived benefits of a contraceptive option. A client-centred framework of information and incentives can make this choice easier to make, and build a habit of health-seeking behaviour. The results from the Tiko platform provide evidence that this approach works and supports strategic thinking about contraceptive decisions.

We draw three practical lessons for programmes that wish to support AGYWs with their contraceptive strategies. Firstly, the ability to follow the SRH service choices of AGYWs is important to understand their needs and preferences. Digital platforms have a significant role to play in achieving this. Secondly, an ecosystem approach can create conditions that support and reinforce SRH decisions. External social pressures are a powerful motivator for AGYWs. Thus,

a social environment that supports her decisions creates a powerful feedback loop that makes future decisions easier. Finally, a two-way relationship between AGYWs and service providers is important. Empowering AGYW to rate the service they receive improves their experience, and service providers can observe and respond to this accountability mechanism. Combining these approaches can help us understand the evolving SRH needs of AGYWs and design programmes that can successfully support their contraceptive strategies. (250)

---