

Social norms messaging to improve antiretroviral adherence among youth in Uganda



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- **R21 Pilot RCT in two clinics in Kampala and Entebbe, Uganda**
- **Adolescents aged 15-22 years**
- **Adherence measurement using wisepill device**
- **Disclaimer: data not final**



- **HIV clients found to be overly optimistic** in how well they will be able to adhere consistently to their medication regimen
- **Youth in particular influenced by their peers** / perception of what others are doing and how they compare to others

Peer competition as non-monetary incentive:

- Group 1: Weekly message on ***own adherence level***, sent to 170 adolescents receiving in HIV care
- Group 2: Same weekly message, but added to it a ***group level adherence*** between 85 and 95%

“Congratulations, you took 70% of your meds this week. Your friends took 85%...”



Receiving adherence feedback

"...it will help me see the marks I have scored and the message to remind me."

(female, 16 years)

"...it will be helpful, because if my brothers haven't been able to remind me, or my girlfriend has not reminded me, the sent message is able to remind me"

(male, 19 years)

Receiving information about group level adherence

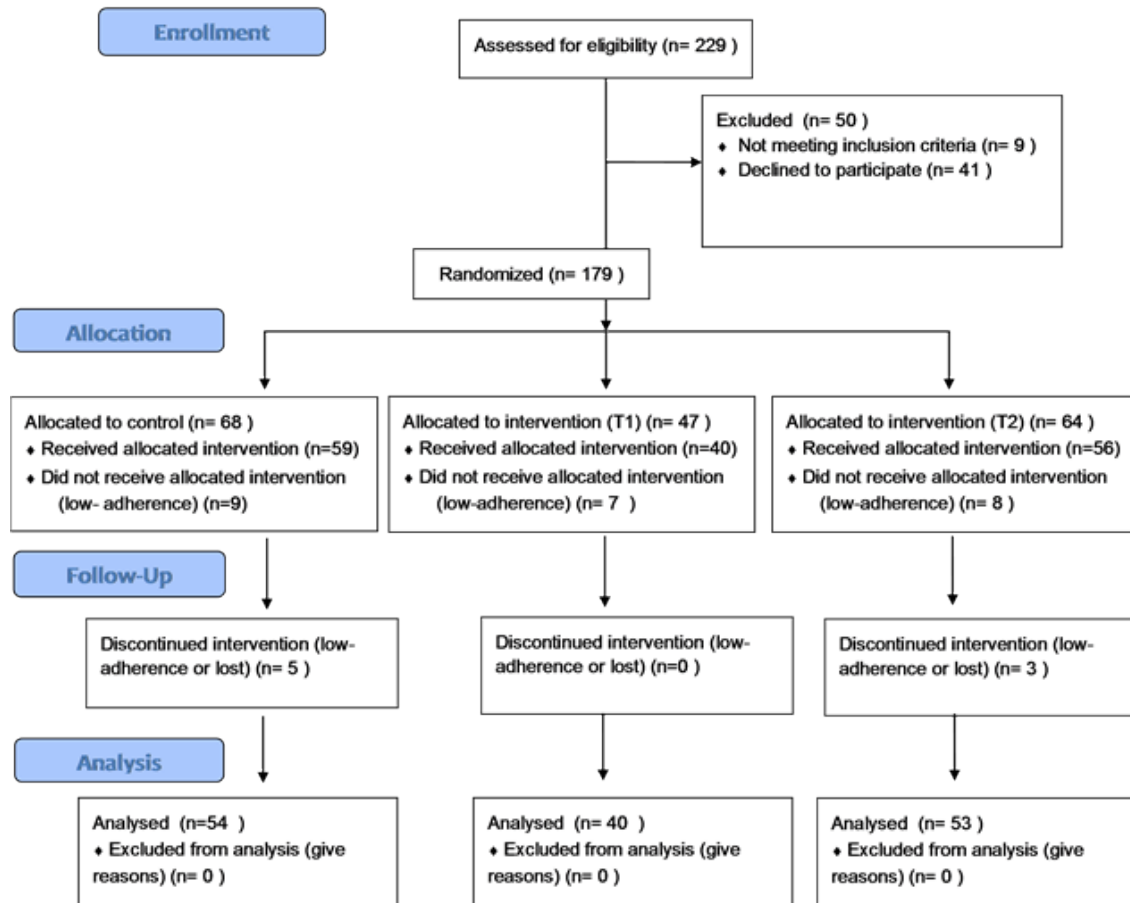
"...I would like to know the group marks because they would help me improve. When I check mine and they are low, I can tell myself to improve so that I align my scores with the others."

(female, 18 years)

"...in this world, you have to make it and no one can make it for you. But when you are ahead of the group, they say this one in the group is the one having a lot of marks, even beyond the group, it is quite delicious"

(male, 19 years)

Acceptability: CONSORT Flowchart



Clinical trials identifier:
NCT02514356

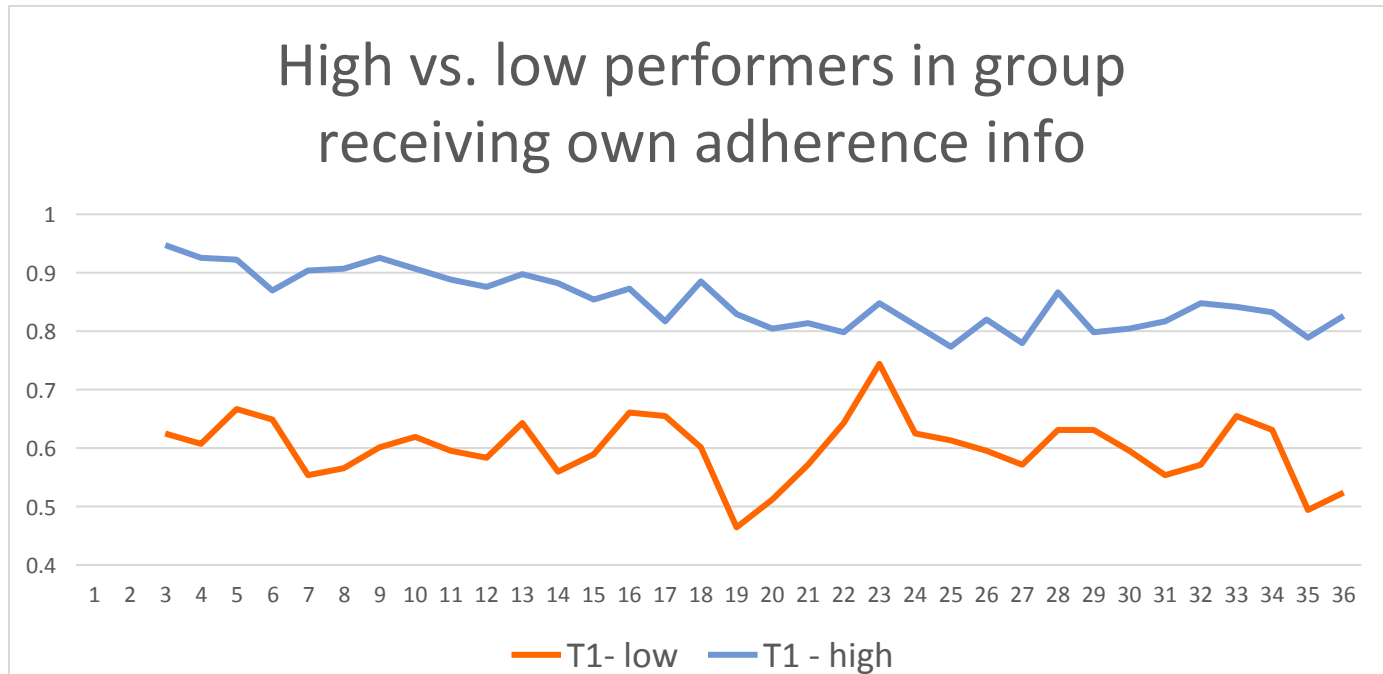
About 4,100 messages sent over 9 months

>90% reached the receiver and delivered correct adherence information

<10% either not sent, or sent with wrong information

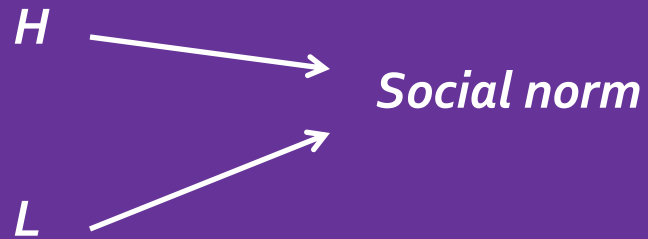
- problems with Ugandan cellphone providers
- issues with wisepill server, SIM cards, etc.

Hypothesis 1: If overoptimism is a key barrier to adherence, low performers in group 1 should catch up to high performers (cet. par.)



Hypothesis 2

Low performers move to social norm



Hypothesis 2

*High performers
(blue) and*

*low performers
(black)*

*move to social
norm*

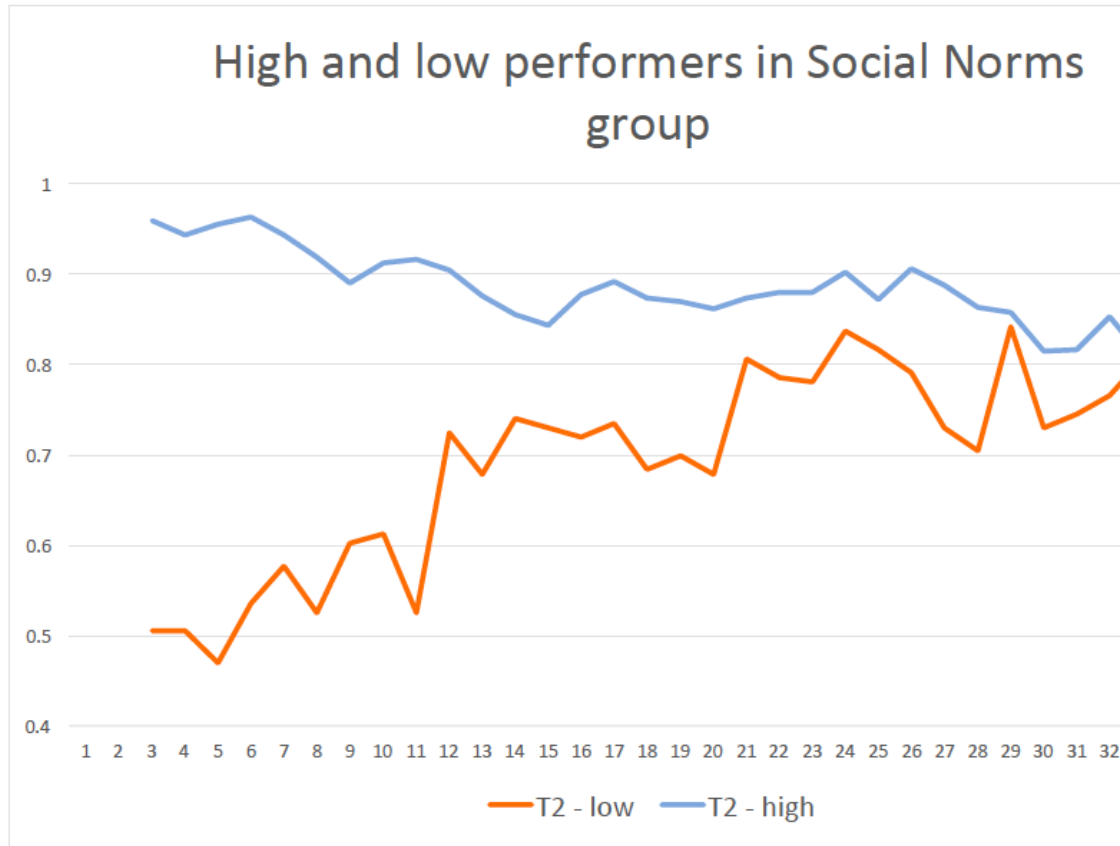
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Social norm

High and low performers in Social Norms group



Results 3: Phase 3 focus groups

"...this device is confusing me (Laughter) At first I thought it had a camera, every time you take medication, someone is watching. ."

(female, 15 years)

"For me it used to push me to take my medication. That message, if I got very little results, I told myself that let me put in more efforts to get better results compared to my peers!"

(male, 21 years)

Results 3: Phase 3 focus groups

"The results that demotivated me, I had gotten 20. But my most thrilling result was a 70."

(female, 15 years)

"... the [messages] used to fire me up because I was on competition with some, when I have received 85 and see one who has 90, that pushed me to strive harder for 100 on the next Sunday!"

(female, 17 years)

- This study shows a novel use of text messages focusing on two clearly identified pathways:
 - countering overoptimism;
 - leveraging peer competition
- Acceptability: low refusal, low attrition
- Feasibility: some problems with network provider, but overall successful
- Results: the pilot study indicates that the intervention may be beneficial for some participants, in particular those with low adherence levels
- Next step: implementing the study in a fully-powered project

Thank you!

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