Cellphones4HIV

Mobiles in health in South Africa

Cell·Life

www.cell-life.org.za

Context/need

- HIV in South Africa:
  - 11%
  - 5 million people
  - Over 600,000 died in 2006 as a result of HIV and AIDS
- Overburdened health system – so it's very hard to introduce new systems. South Africa doesn't even have a unified patient record system.
- Hence Cell-Life focuses on working directly with patients, instead of with/via clinics
- HIV is a stigmatised condition, which constrains the kinds of interventions/services implemented.

Cell·Life

Mobiles: an opportunity

- SA mobile stats
  - 50 million (ITU figure)!
  - Local research: about 75% of those are individual subscriptions
- Few on smartphones:
  - 10% smartphone; 25% basic (SMS & voice only); 65% feature phone (internet access, allows installation of applications, media player)

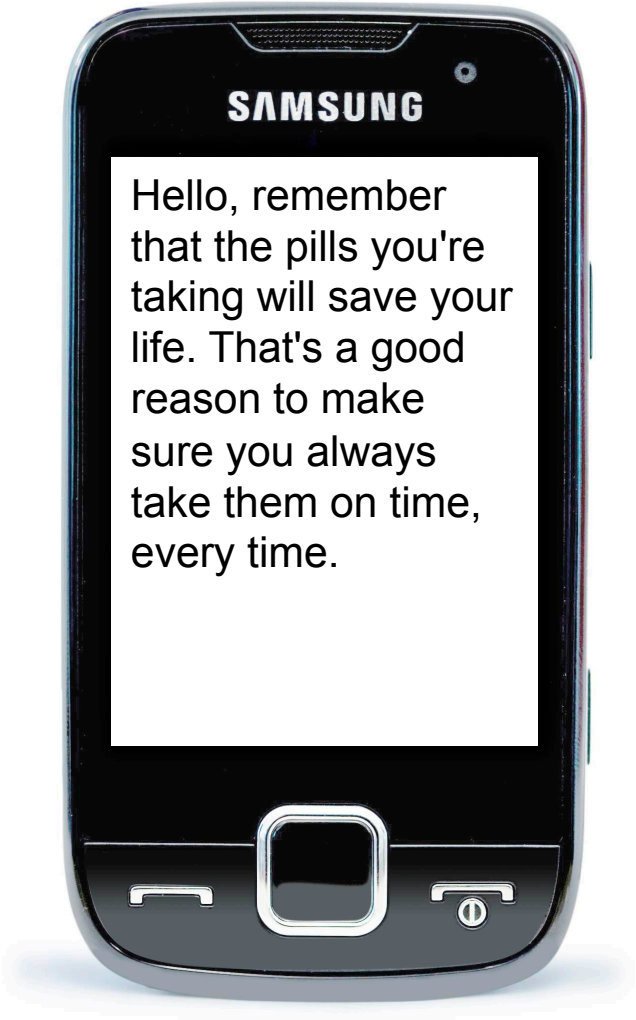
  ➔ SMS safest
- Only about 11% of South Africans go online on their phones
- Gender: phone ownership divide is 45% women and 55% men
- It's a personal device (in the pocket) so perfect for work on HIV
- Little phone sharing in South Africa.

Cell·Life

SMSs for HIV medication adherence

Why?

- SA has one of the biggest ARV programmes globally
- Government's huge testing campaign: as at Dec 2010 - 5 million people tested since campaign launch, over 900 000 HIV + - so a lot of people will start medication over time
- Adherence is critical – people need to be almost perfectly adherent for drugs to work and not to get resistance (when drugs stop working)

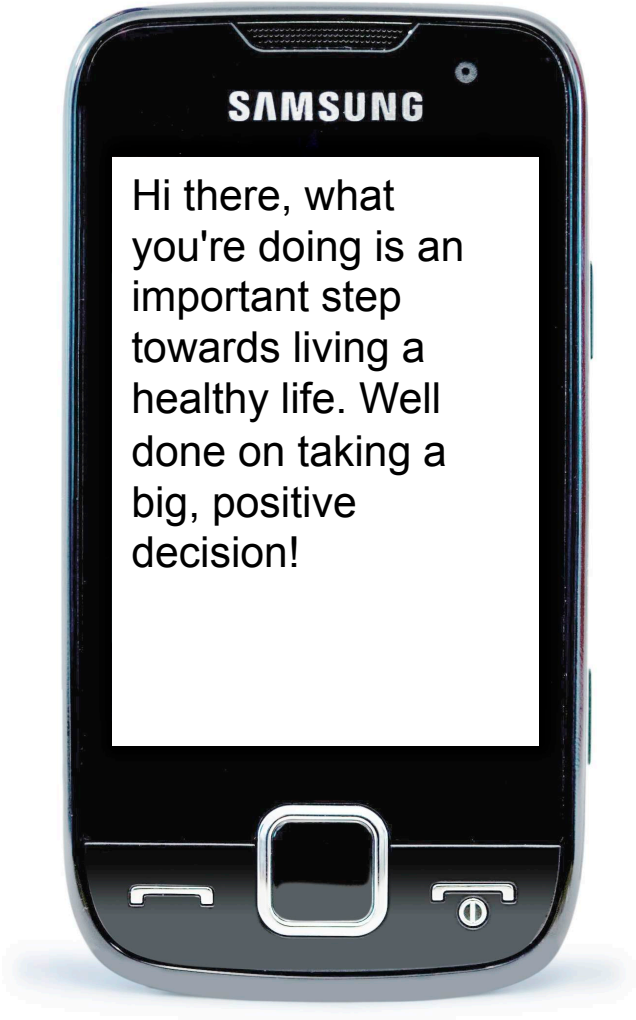


Cell·Life

SMSs for HIV medication adherence

Tech

- System allows for a ‘campaign’ of SMSs to be set up (so all get same SMSs, but starting on different days – patients start ARVs on different days)

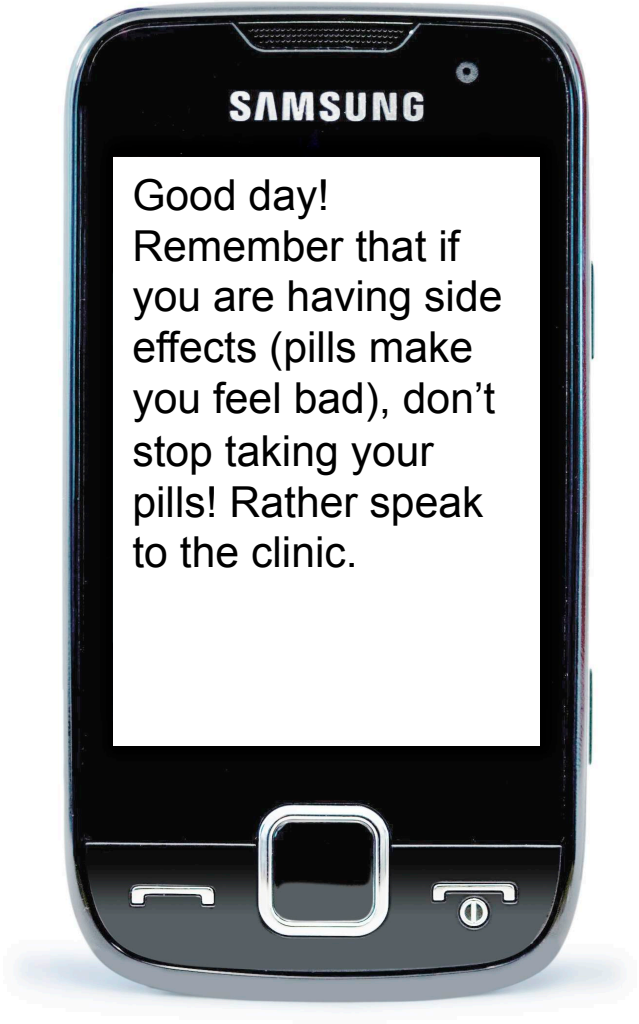


Cell·Life

SMSs for HIV medication adherence

Content

- Trying to address barriers to adherence like non-disclosure, depression, stopping because of side effects
- We had to make ‘vanilla’ & ‘chocolate’ SMSs – vanilla means no HIV-words used. Chocolate uses HIV words

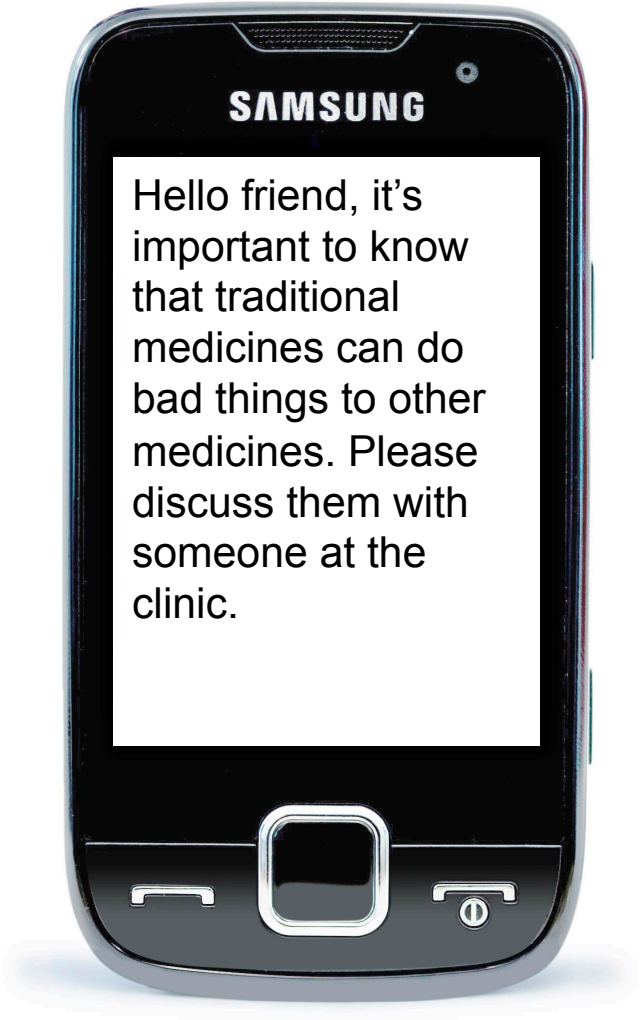


Cell·Life

SMSs for HIV medication adherence

Lessons

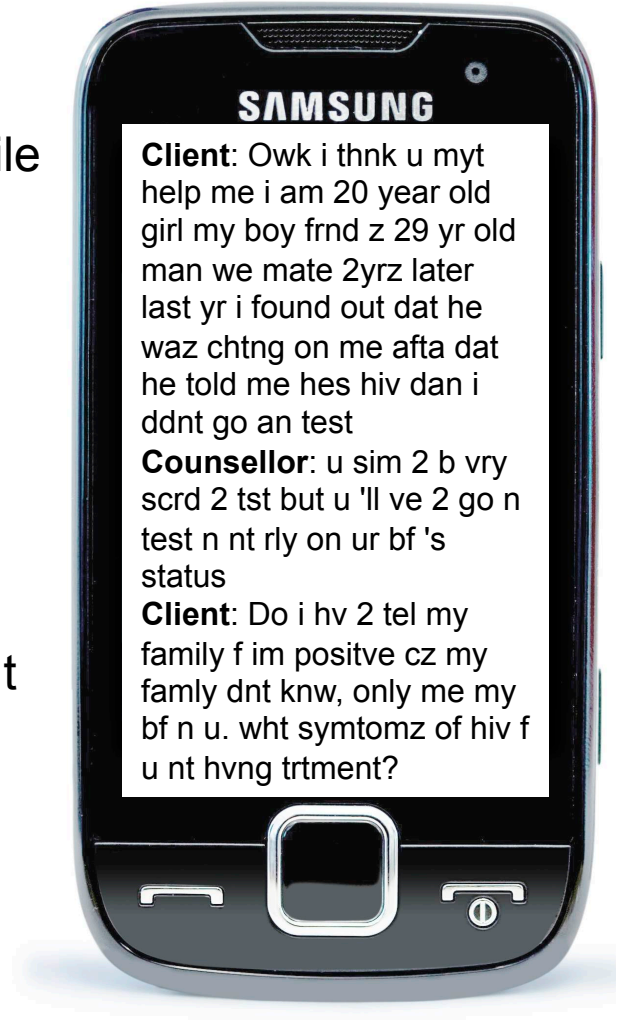
- Some people worry about HIV words in the SMSs, some don't
- A 4-arm trial in Kenya showed that short SMSs sent 1x week were the best. They had a particular approach to SMSs, it seems, with the same SMSs being sent a lot.
- Even if there is no medical benefit (improved adherence or better retention in care), there are psychosocial benefits



Cell·Life

HIV counselling via IM chat

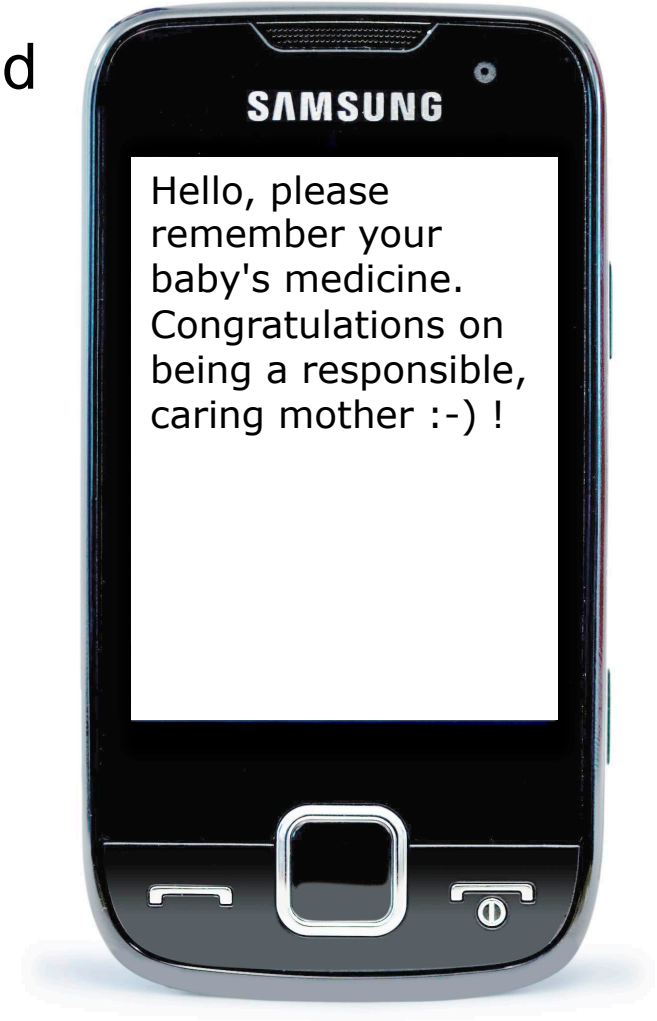
- IM = instant messaging
- Tech:
  - Clients can use gtalk, but most use MXit, a mobile IM chat application with 10M active users in SA
  - An online system allows counsellors to run multiple concurrent chat sessions with clients
- Cheap for users – about 3c US for a session
- Lessons:
  - Overwhelming need. You're going where youth are already (IM chatting)!
  - Youth are bored and want to chat
  - Can insert prevention messaging: if chat is about relationships, can bring HIV into that chat
  - Disclose a lot, quickly
- HIV info via MXit; also available on mobisite redhiv.mobi



Cell·Life

SMSs for PMTCT loss to follow-up

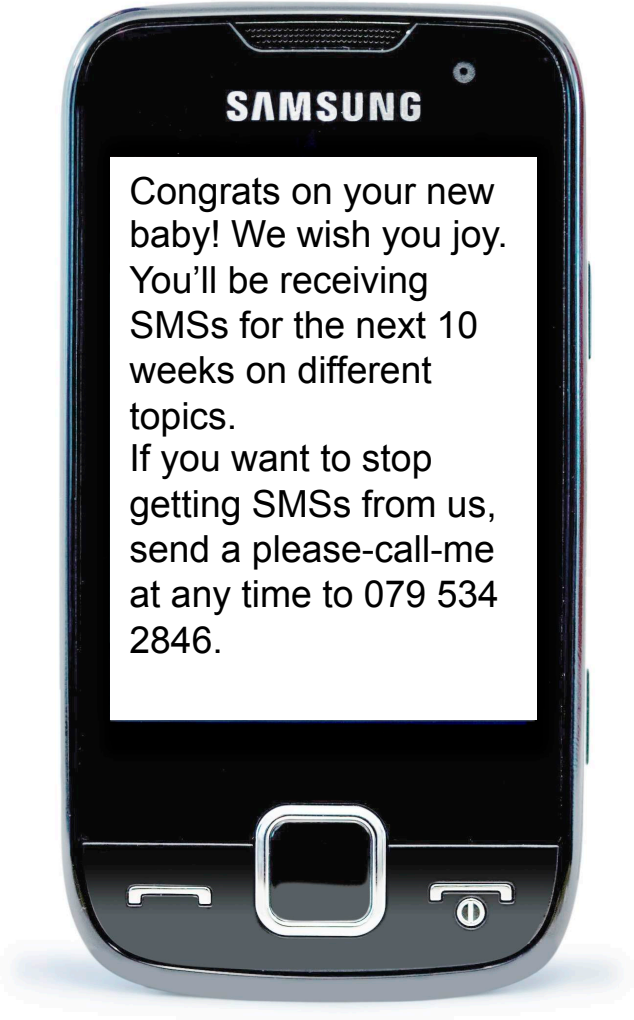
- PMTCT = prevention of mother-to-child transmission of HIV
- Why?
  - 30% SA women of childbearing age are HIV+
  - Can reduce transmission to 5% if women get drugs during labour and baby gets afterwards – but women have to stick to the programme. This is a problem.
  - Drugs are only part of what is needed to stop babies getting HIV – behaviour change is needed on the part of mothers. ➔ we use SMSs for that.



Cell·Life

SMSs for PMTCT loss to follow-up

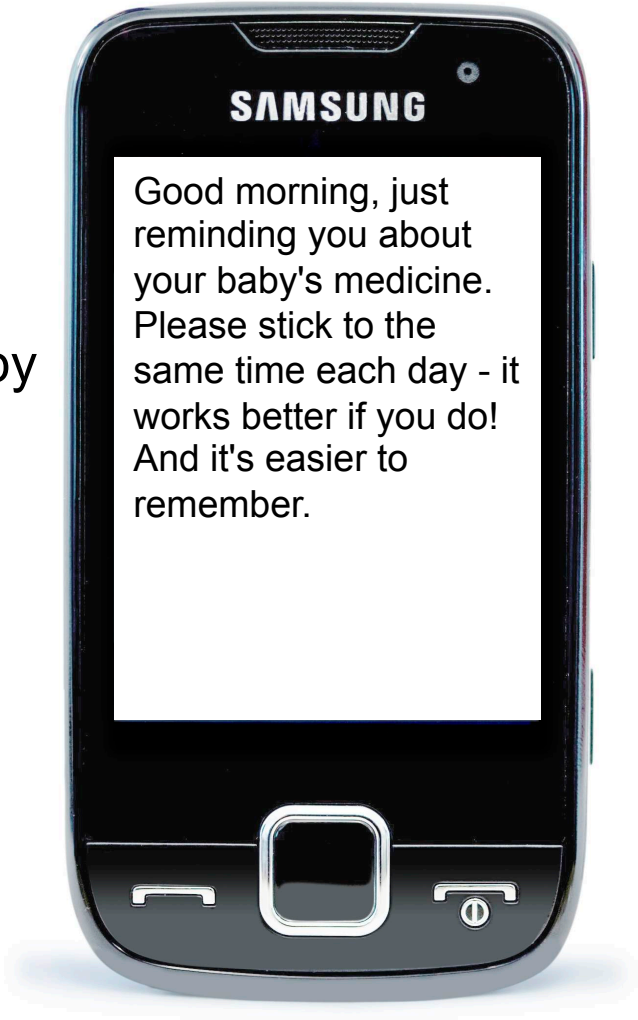
- Tech:
  - Same system as for ARV adherence SMSs
  - To stop the SMSs, mothers could send a free ‘please-call-me’



Cell·Life

SMSs for PMTCT loss to follow-up

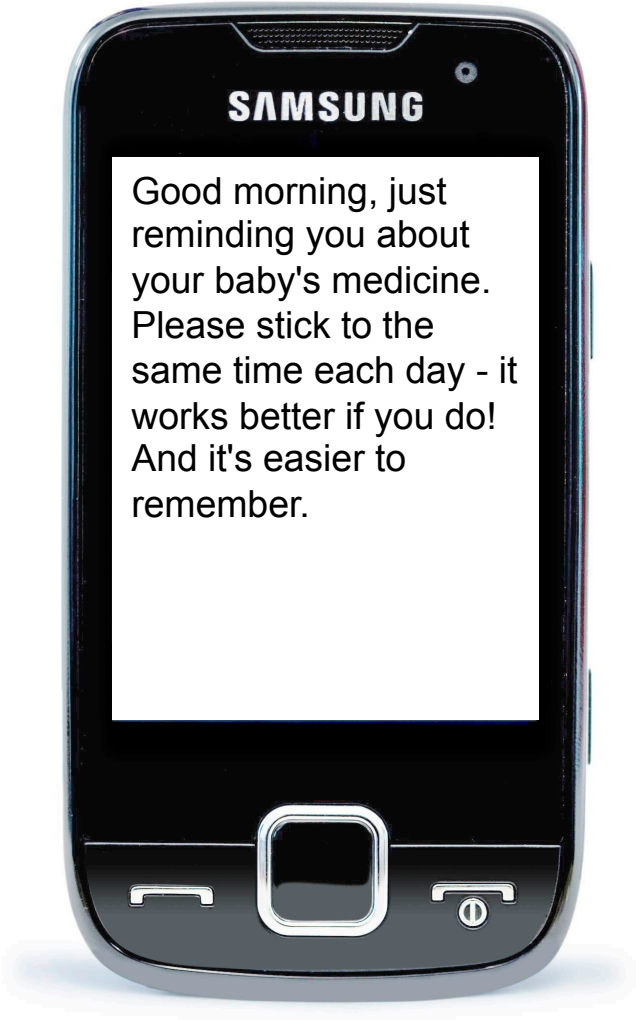
- Content:
  - Developed in partnership with a doctor at the study clinic, who knows of the challenges faced by mothers in this situation
  - SMS streams: new mother tips; medication reminders; appointment reminders; exclusive feeding reminders
  - Vanilla and chocolate SMSs, though we could have done vanilla only



Cell·Life

SMSs for PMTCT loss to follow-up

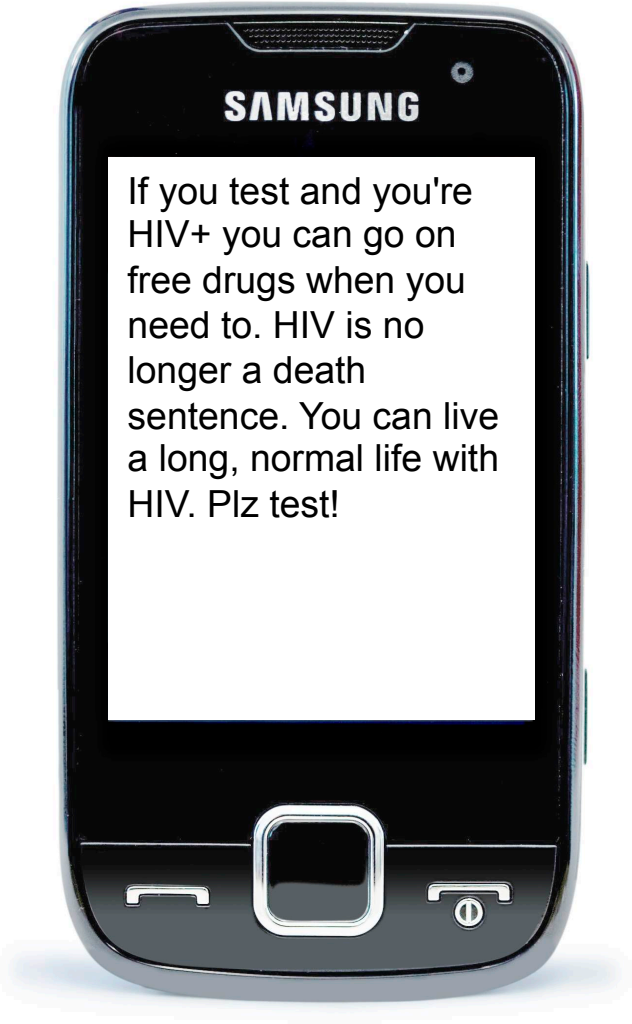
- Lessons:
  - Study still underway
  - Even if no proven medical benefit, definite psychosocial ones.
  - 10% optout
  - Focus groups: SMSs didn't cause problems with partner; mothers learnt things; felt like someone was there for them.
  - Exit interviews show that some even said SMSs helped them accept their HIV+ status



Cell·Life

Can SMSs get people to test for HIV?

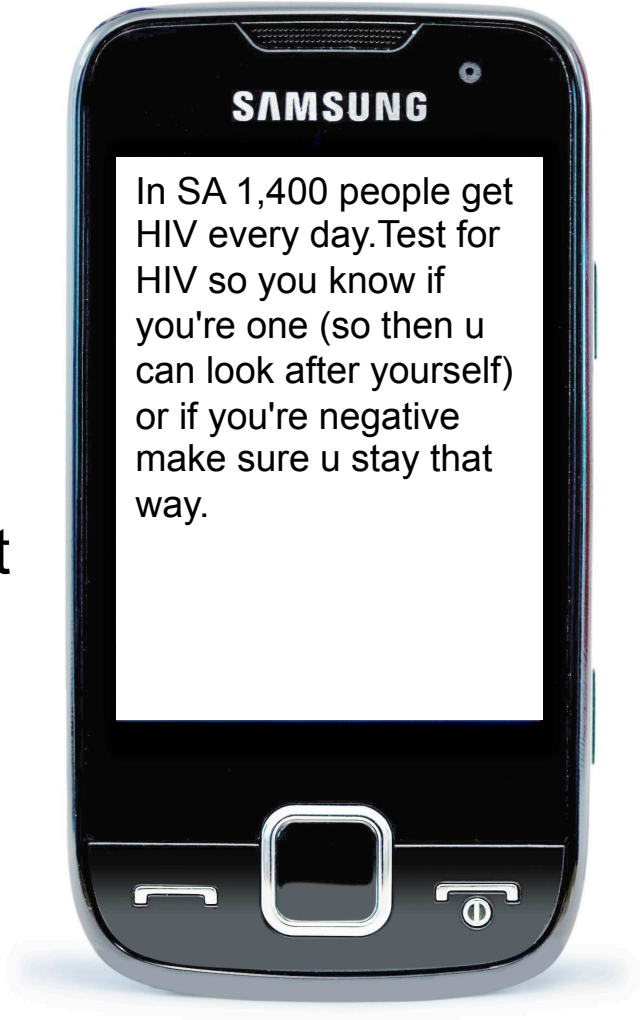
- **Yes!**
  - Cell-Life did a controlled study
  - Tested 2 kinds of SMSs: informational & motivational
  - Tested dosage (3 vs 10 SMSs)



Cell·Life

Can SMSs get people to test for HIV?

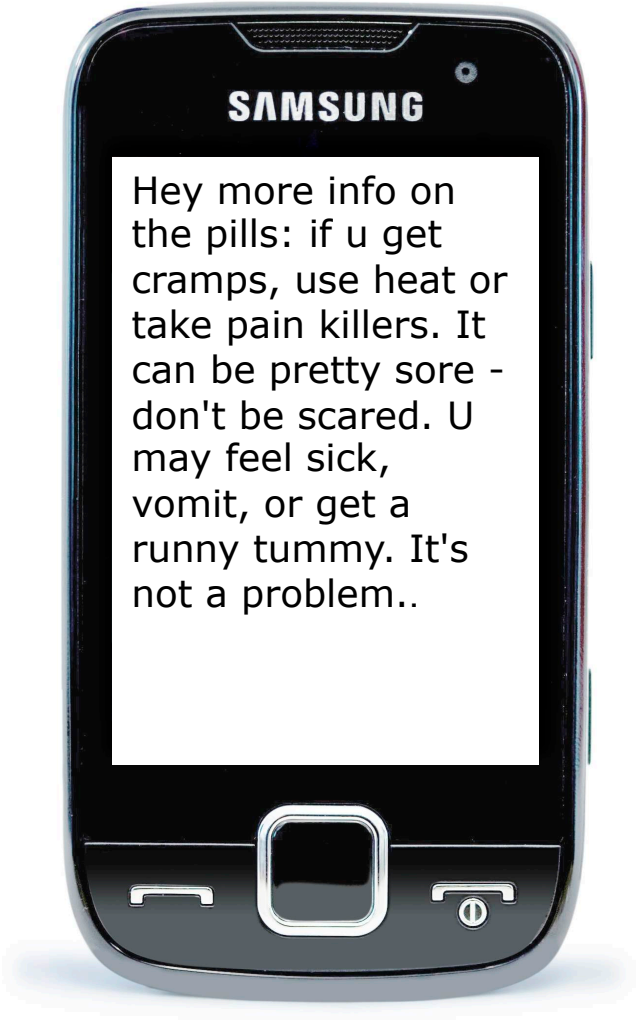
- **Lessons**
  - On the slide is an SMS that didn't work! (informational)
  - 10 works better than 3.
  - Motivational is better.
  - One can use SMS to recruit study participants
  - Journal paper out in Jan/ Feb 2012



Cell·Life

Mobiles in medical abortion

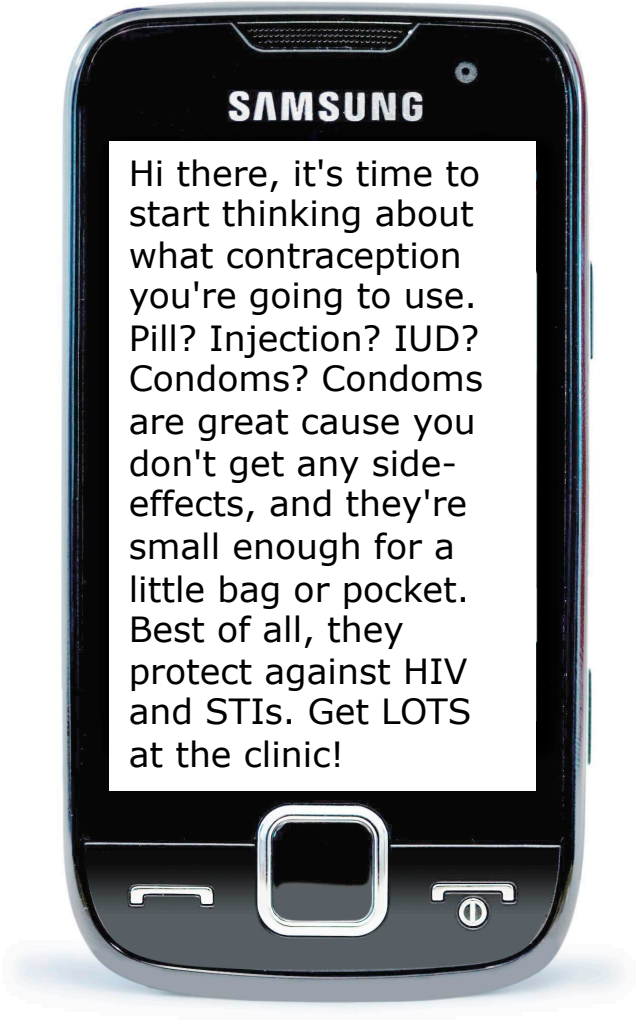
- WHO funded
- 3 interventions:
  - SMSs
  - Questionnaire
  - Family planning info
- Full study just started – no lessons yet



Cell·Life

Mobiles in medical abortion

- WHO funded
- 3 interventions:
  - SMSs
  - Questionnaire
  - Family planning info



Cell·Life

Some overall lessons

- Near ubiquity – almost everyone has a phone. Not smartphones!
- Value of push SMS – all can get them.
- No one size fits all – varying functionality on phones. So sometimes have to do mhealth service in 2 ways, to reach people with different phones
- Sustainability – it's early days. Who pays?
- Support/link to healthcare system – people feel connected
- Success easier when not dependent on health system.
- Lack of medical record systems limits what we can do
- Tech is not a magic bullet! Tech is the easy part
- IM chat very popular
- HUGE demand

Cell·Life