

Confiance numérique et fourniture de services de base en Afrique

Is mHealth an effective and viable solution to provide healthcare to Africans in times of COVID?

Josselin Thuilliez

Centre d'économie de la Sorbonne-UMR 8174



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Traditional barriers on the demand side (cf Dupas and Miguel, 2017)



- 1 The price is wrong!
- 2 Liquidity/income: credit and cash transfer
- 3 Information: tailored or not, targeted or not, willingness to pay
- 4 Health at school, health education
- 5 Psychological aspects, framing, intentions
- 6 Non monetary costs
- 7 Present bias
- 8 Commitments

Traditional barriers on the supply side (cf Dupas and Miguel, 2017)

- 1 Costly infrastructural public health investments for elimination programs (especially in low population density areas)
- 2 Level of state capacity, road safety
- 3 Absenteeism, Quality of providers or drugs; limited knowledge and training; important know-do gap
- 4 Limited availability of diagnostic testing, leading to high rates of inappropriate treatment
- 5 Audit and monitoring are used to align the incentives of trained providers with the overall objective of improving health



Objectives of mHealth

- Behavioral changes, beliefs, stigma, Peer mentoring, signaling intentions to others
- Information system, data collection: increase the speed, accuracy and volume of collected information
- Logistics/supply management: help track commodities, manage stocks
- Service delivery and quality
- Financial transactions and monetary incentives/transfers
- Workforce development, training, support



Is mHealth effective in times of Covid? A recent example

Recent NBER paper: Banerjee et al. 2020

- During health crises, like COVID-19, individuals are inundated with messages promoting health preserving behavior.
 - Does additional light-touch messaging by a credible individual change behavior?
 - Do the features of the message matter?
- **Methods:** large-scale messaging campaign in West Bengal, India. Twenty-five million individuals were sent an SMS containing a 2.5-minute clip, delivered by West Bengal native and 2019 Nobel laureate Abhijit. Banerjee.

Recent NBER paper: Banerjee et al. 2020

- **Main findings:** The campaign
 - ① doubled the reporting of health symptoms ($p = 0.001$ for fever, $p = 0.024$ for respiratory symptoms);
 - ② decreased travel beyond ones village and increased estimated handwashing when returning home;
 - ③ spilled over to behaviors not mentioned in the message (mask-wearing, distancing and hygiene);
 - ④ spilled over onto nonrecipients within the same community, with effects similar to those for individuals who received the messages.



Is mHealth viable?

What is the economic evidence for mHealth?

- *Iribarren et al. 2017, Plos One*: 74.3% reported that the mHealth intervention was cost-effective, economically beneficial, or cost saving at base case.
- The answer may depend on:
 - Costs of mHealth or eHealth infrastructure
 - Regulatory structures that:
 - Provide incentives at different levels of the health delivery system to encourage investment in;
 - Protect people and privacy;
 - Effective use of mHealth; and measuring the outcomes of successful eHealth utilization, including anticipated return on investment;
 - Dropout rates remains a challenge in such programs.

Challenges for research in economics

- Behavioral decision theory and applications to health: leverage for better health decisions?
- Economic Epidemiology theory: modelling epidemic dynamics, taking behaviors into account and epidemic externalities and uncertainty.
- Economic evaluation may be strongly influenced by the use of mHealth, both experimentally and in real-life conditions.

- mHealth as *complement* or *substitute* for routine healthcare?

THANK YOU FOR YOUR ATTENTION