

Workshop 3: Behaviour & Wellness based approaches

(Room Stephenson)



Moderator:

Didier Houssin

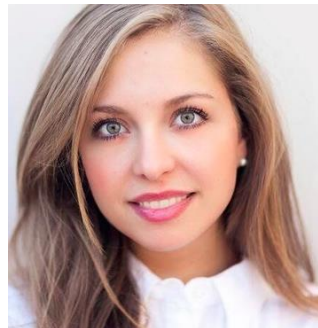
MD, PhD, Former Managing
director of Health, Health
Ministry (FR)



Pierre Arwidson

Deputy Director of
Prevention and Health
Promotion, Santé
Publique France (FR)

[@santeprevention](#)



Evangelia Stavropoulou

Digital health strategist,
eHealth Forum
& Global Health Next
Generation Network (GR)

[@l_stavropoulou](#)



**Quentin Soulet de
Brugière**

Co-founder & CSO,
Rythm (FR)

[@Q_SdB](#)

Organised by

Digital Disruption **PARIS 2017**



Our Goals



1. Use efficiently the new digital tools
2. Build interventions that are evidence-based, theory-based, research-tested
3. Do not widen social inequalities in health, and try to reduce them

Arwidson P, Kreft-Jais C. Introduction. The necessary contribution of science to prevention. Glob Health Promot. 2013;20(2 Suppl):5-7, 63-5, 110-2.

Arwidson P, Quelet S, Bourdillon F. Santé publique France, l'expertise au service de la prévention. Cahiers de la fonction publique. 2017(376):22-5.



Surveys and cohorts are moving on line (1/2)



Launched in May 2009

Initial goal : Recruitment of 500 000 in 5 years

77% of women !



Bienvenue sur le site de l'étude NutriNet-Santé



Une nouvelle interface pour vous connecter partout et tout le temps, sur mobiles et tablettes



Un socle applicatif moderne afin de renforcer la **sécurité** de vos données



Partagez nos contenus sur les réseaux sociaux

277 281

Nutrinautes inscrits depuis le lancement de l'étude

Hercberg S, Castetbon K, Czernichow S, Malon A, Mejean C, Kesse E, et al. The Nutrinet-Santé Study: a web-based prospective study on the relationship between nutrition and health and determinants of dietary patterns and nutritional status. BMC Public Health. 2010;10(242).



Challenges with on line surveys and cohorts

Less or no control on the samples

No random sample generation is possible like with phone numbers

No official mail addresses directory

We and our survey firm depend on third parties to have access to our samples on line (Access panels)

New players : ex Maximiles with 700 000 French panelists (receive incentives to answer)



Our campaigns are moving on line: example THE chlamyweb example



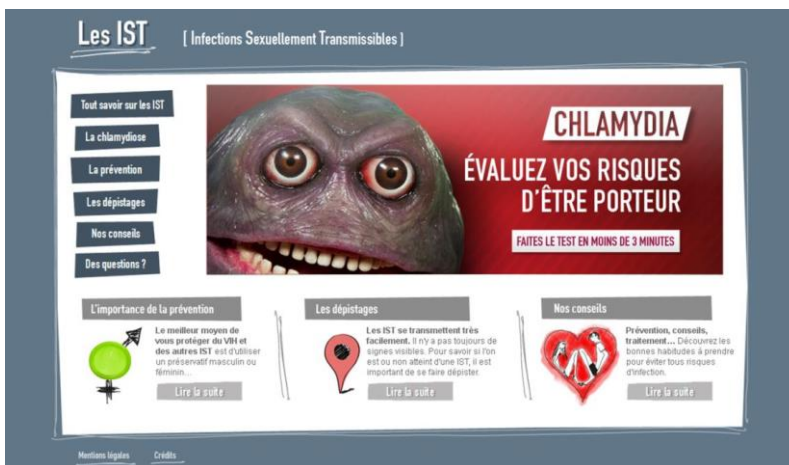
September - October 2012

11 075 participants 18-25 years old
recruited via paid advertisements, social
networks and Youtube

Randomized in 2 arms

Free self home sampling kit
(intervention group) or asked to be
screened in primary care (control group)

Screening frequency was 29,2% in the
intervention group versus 8,7% in the
control group



Kersaudy-Rahib D, Lydie N, Leroy C, March L, Bebear C, Arwidson P, et al. Chlamyweb Study II: a randomised controlled trial (RCT) of an online offer of home-based Chlamydia trachomatis sampling in France. Sex Transm Infect. 2017;93(3):188-95.



Our campaigns are integrating apps



Smoking cessation coaching by mail. A randomized controlled trial

Showed a effect at 3 months but no effect at 6 months.

The paper is not yet published (under review at Nicotine and Tobacco Research).

But coaching by mail is now obsolete

New enriched service (CNAMTS PHF) : Tabac Info Service app linked to a website, a quitline, a Facebook page, etc.

This app has been downloaded 118 000 times

We are recruiting participants via the National Health Insurance website Ameli for a new RCT. 3000 have signed in but the majority do not answer the T0 questionnaire. We have to call them by phone !!!



Cambon L, Bergman P, Le Faou A, Vincent I, Le Maitre B, Pasquereau A, et al. Study protocol for a pragmatic randomised controlled trial evaluating efficacy of a smoking cessation e-'Tabac Info Service': ee-TIS trial. BMJ Open. 2017;7(2):e013604.



Behaviour change interventions: challenges THAT ARE NOT specific to the digital world



Behaviour change interventions are not correctly described in the scientific literature

Should be described with a common language (Behaviour Change Taxonomy)

Should use behaviour change techniques and theories that have been linked to effective interventions

Wood CE, Hardeman W, Johnston M, Francis J, Abraham C, Michie S. Reporting behaviour change interventions: do the behaviour change technique taxonomy v1, and training in its use, improve the quality of intervention descriptions? Implement Sci. 2016;11(1):84.



Challenges THAT Are specific to the digital behaviour change interventions (1/2)



Devices and programs using digital technology to foster or support behavior change (digital interventions) are increasingly ubiquitous, being adopted for use in patient diagnosis and treatment, self-management of chronic diseases, and in primary prevention.

They have been heralded as potentially revolutionizing the ways in which individuals can monitor and improve their health behaviors and health care by improving outcomes, reducing costs, and improving the patient experience.

However, we are still mainly in the age of promise rather than delivery.

Developing and evaluating these digital interventions presents new challenges and new versions of old challenges that require use of improved and perhaps entirely new methods for research and evaluation.

Michie S, Yardley L, West R, Patrick K, Greaves F. Developing and Evaluating Digital Interventions to Promote Behavior Change in Health and Health Care: Recommendations Resulting From an International Workshop. J Med Internet Res. 2017;19(6):e232.



Challenges THAT ARE specific to digital behaviour change interventions (DBCI) (2/2)





- Rapid technological change and iterative development cycles make it necessary to continually update and adapt interventions.
- Efficient, continuing relationships between academics and intervention developers are needed for implementation, continued development, and evaluation.
- Engagement with digital interventions is often too limited to support behavior change.
- Engagement is multidimensional and cannot be evaluated simply by DBCI usage.
- Engagement with DBCIs may be unequal between different groups and at risk of reinforcing disparities or inequalities.
- It is difficult to specify comparator interventions or control conditions that allow meaningful evaluation of the intervention of interest.

Michie S, Yardley L, West R, Patrick K, Greaves F. Developing and Evaluating Digital Interventions to Promote Behavior Change in Health and Health Care: Recommendations Resulting From an International Workshop. J Med Internet Res. 2017;19(6):e232.




STOPADVISOR: on line coaching intervention specially designed for less educated smokers





Personalised **expert advice** on
Stopping Smoking

Keep a look out




It is **good to see you are doing well**. Having low cravings is a sign you are making progress. Especially in these early stages because this is when a lot of smokers find it very difficult.

It is **important you keep up this good work**. The best way to do this is to always keep a check on how you are feeling.

Cravings can sometimes creep up on you even when you think it is going well.

Even if you feel like you have it under control, **it may still be worth avoiding places where people smoke** – just in the early stages – this will make it easier for you.

If you do get stronger cravings, **select the 'very bad' button** when we ask how they are. We will then give you some tips that are particularly helpful for stronger cravings.

next page 

Brown J, Michie S, et al. Internet-based intervention for smoking cessation (StopAdvisor) in people with low and high socioeconomic status: a randomised controlled trial. The Lancet Respiratory medicine. 2014;2(12):997-1006.

Arwidson P, Guignard R, Nguyen-Thanh V. BEH. 2016;16-17:321-5.



Proposition: toward a prevention system approach



- Started as a purely information phone line (info)
- Became a quitline (service) with call back by smoking cessation specialists
- Coaching modules were added
- By mail
- With an app (social networks, enabling posts, call the quitline from inside the app, etc.)

Missing
No outreach
No links to the primary care professionals

StopBlues, suicide prevention intervention



- Cluster randomized controlled trial
- App + website
- 3 arms
- 12 towns no promotion of the programme
- 12 towns promotion of the programme
- 12 towns promotion of the programme + involvement of general practitioners

Karine Chevreul UR ECO

