

Scientific Hangman



Gamifying the Understanding of Cervical Cancer Screening

Reminder Letters

Sagar Sen, Waqas Moq22am, Trude Andreassen, Mari Nygård- Email: sagar@simula.no
Simula Research Laboratory | University of Oslo | Cancer Registry of Norway

Introduction

- Reminder letters improved screening coverage from 67% to 75% in Norway (2011). Expected optimal coverage was 80%
- How can we make reading scientific evidence in health more engaging?

Methods

- We present "Scientific Hangman", a mobile app, to gamify health communication. It challenges players to solve puzzles requiring understanding evidence provided as clues.

Focus Group Interview

- We created puzzles and clues from content in screening reminder letters
- 10 women of age 34 to 69 on 13th Oct 2014 played 'Scientific Hangman' and helped us perform an interview-based qualitative evaluation.

Results

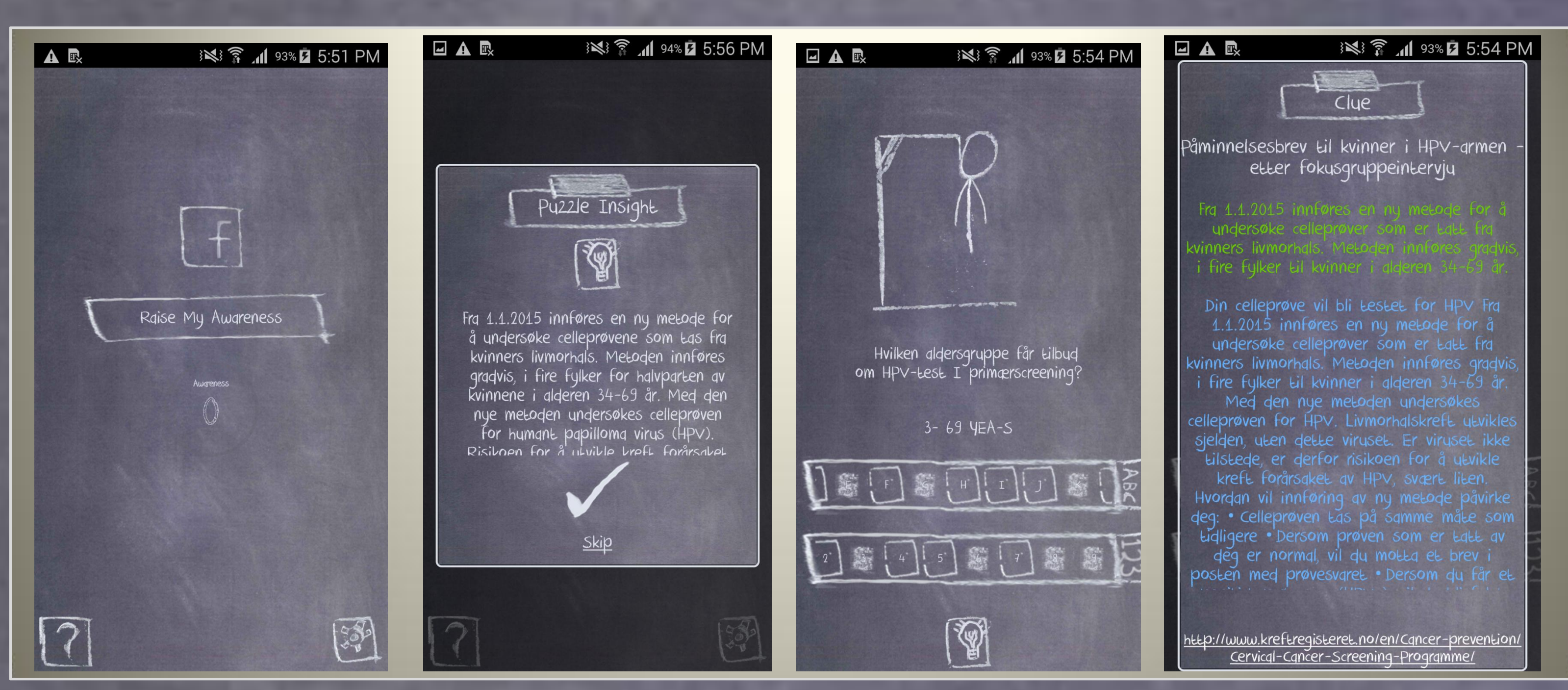
- Puzzles narrow player focus to one information element at a time.
- Challenging with puzzles compelled players to understand information in reminder letters
- Participants agreed that gamification can increase knowledge about HPV and Cervical Cancer

Suggested Limitations

- Reluctance to download game on phones. Better if on Facebook (share and compete)
- Participants thought that game is more suitable for younger girls

Conclusion

- Health communication can be improved by challenging people in a game context
- Well-known games such as Hangman, Scrabble and Typing master are easy to learn and useful platforms to communicate evidence in health



- We created a web service for professionals to create evidence-based puzzles and clues

Create game content

Paper Name	Does the primary screening test influence women's anxiety and intention to screen for cervical cancer? A randomized survey of Norway
Paper Abstract	Background: Countries must decide whether or not to replace primary cytology-based screening with primary human papillomavirus (HPV)-based screening. We aimed to assess how primary screening for an HPV, a sexually transmitted infection (STI), and the type of information included in the invitation letter, will affect screening intention.
Paper URL	http://www.biomedcentral.com/1471-2458/14/360
Puzzle Question	How many women in the study were merely known to HPV?
Puzzle Answer	Almost half
Puzzle Clue	Questions eliciting general knowledge and anxiety indicated that 42% of the respondents identified the primary cause of cervical cancer as a virus and approximately half (53%) of the women reported having previously heard of HPV. Of those women who had heard of HPV, 82% identified HPV as an STI. Nearly all women (93%) felt that Pap smears were either quite important or very important for the prevention of cervical
Puzzle Insight	The causal link between cervical cancer and human papillomavirus (HPV), a common sexually transmitted infection (STI), diagnostic tests, which explicitly detect the presence of HPV, have been developed.

[Get suggestions from a summarization tool](#) Create