

## Gamification Strategy on Prevention of STDs for Youth

Elia Gabarron<sup>a</sup>, Thomas Schopf<sup>b</sup>, J. Artur Serrano<sup>a</sup>, Luis Fernandez-Luque<sup>b</sup>, Enrique Dorronzoro<sup>c</sup>

<sup>a</sup> NST-Norwegian Centre for Integrated Care and Telemedicine, University Hospital of North Norway, Tromsø, Norway

<sup>b</sup> Norut, Tromsø, Norway

<sup>c</sup> Salumedia Tecnologías, Sevilla, Spain

### Abstract and Objective

*Sexually transmitted diseases (STDs) and especially chlamydia is a worrying problem among North-Norwegian youngsters. Gamified web applications should be valued for sexual health education, and thus STDs prevention, for their potential to get users engaged and involved with their healthcare. Aiming to achieve that youngsters become more aware of STDs we have developed "sjekkddeg.no", a gamified web application focused on sexual health targeting North-Norwegian youngsters. Gamification techniques like avatars, achievement-based gifts and social network sharing buttons have been implemented in the site that includes educational content on sexual health and a STDs symptom checker. Preliminary results show that the game-style web app could be useful to encourage users to learn more on sexual health and STDs and thus changing their risky behaviors and preventing sexually transmitted diseases.*

**Keywords:** Sexually transmitted diseases, Risk reduction behavior, Social media

### Introduction

Sexually transmitted diseases (STDs), and especially chlamydia is a worrying problem in North-Norway, where with a population of 61.875 inhabitants aged between 10 and 29 years old, and the incidence of chlamydia twice the Norwegian average<sup>1</sup>; and seventy percent of those reported cases are found in people below 25 years of age<sup>1</sup>. Online game-style web applications should be valued for sexual health promotion for their potential to get users passionately and deliberately involved with their healthcare<sup>2,3</sup>, and also for their power to engage these young audiences.

### Methods

We have developed [www.sjekkddeg.no](http://www.sjekkddeg.no), a gamified web app concerning sexual health, accessible through laptop, smartphone and tablet computer. Privacy is extremely important when concerning a sensitive topic such as sexual transmitted diseases, therefore the gamification techniques comprise the use of "avatars", a cartoon or game like figure customized by the user. The avatar acts in representation of the user during navigation in the virtual space and can interact with permanent inhabitants like the doctor, teacher and wizard in three different scenarios: 1) The clinic includes interactive game-like functions to teach on STDs, and a symptom checker where a virtual doctor asks questions about symptoms that the avatar has noticed (e.g., itch, pain or vaginal discharge) and

finally says what the diagnosis could be, or suggest that the avatar should get tested; 2) The school consists of lessons (text and photographs on anatomy, physiology, contraception, and behavioral issues) and quizzes linked to lessons; and 3) The cinema comprises short instructional videos covering topics as how to put on a condom, coming out and what happens at a STDs clinic. Additional gamification techniques used are achievement-based gifts that unlock complements to customize avatar by fulfilling different tasks (e.g., watch videos, read FAQ sections); or challenges between users by sharing quizzes results. Social network sharing buttons were implemented in all the educational content except in symptom checker.

Usefulness of web app in prevention of STDs will be assessed one year after the launch and will be based on web app use from North Norway and publically available health data relevant to STDs, like number of chlamydia tests.

### Results

Preliminary results on web app use show 344 unique visitors from North Norway since 1st October 2012; 70,1% of those are returning visitors and 93,3% reached web app through computers. The average of pages/visit was 23.9 and total time spent on site of 7:01 minutes. Public health data related with STDs in North-Norway is being collected.

### Conclusion

The game-style web app seems to be a promising way to encourage users to learn more on sexual health according to preliminary visitor returning rates, average pages visited and time spent on it. If this interest could also be reflected on real data on STDs in North Norway during the active period of web app as an increase in chlamydia tests; this could serve as an affordable and widely accessible intervention model to decrease risky sexual behaviors in younger population.

### References

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**Address for Correspondence:** [elia.gabarron@telemed.no](mailto:elia.gabarron@telemed.no)