

Title: Equal access to HPV-vaccination: A cross-sectoral intervention of school-based HPV-counselling and -vaccination.

Background

Human Papillomavirus (HPV)-related cancers can be prevented with vaccination, but despite free access to vaccination through the Danish Childhood Vaccination Program, children with ethnic minority background attend substantially less than native children (65% vs. 93%). Practical barriers such as language and insufficient understanding of prevention in terms of vaccination, as well as emotional barriers regarding sexuality and cultural taboos, needs to be accommodated in a healthcare service to increase participation. By offering culturally adapted school-based HPV-counselling and -vaccination, we aim to improve HPV-vaccination coverage by 10%-point for ethnic minority pupils.

Method

The study is a non-randomized implementation study. The intervention is a cooperation between health care researchers, the Municipality of Aarhus, Neighborhood Mothers, and school nurses, and developed and conducted according to Complex Interventions Framework. To operationalize elements of the intervention, we have applied a Logic Model.

The intervention is under implementation throughout school year 2022-2023 and consists of three core-elements: 1) school-based parental HPV-counselling, 2) pupil HPV-counselling and 3) school-based HPV-vaccination of pupils. All pathways of counselling, written material, video-material as well as an animation have been developed with user-representatives.

Study population is 670 10-13-year-old pupils at five schools in the Municipality of Aarhus with proportion of pupils with ethnic minority background varying from 26% to 91%. The control group is 2800 children comparable in age and community.

Results

Implementation of element 1, 2 and first vaccination round has been successful. Second vaccination round awaits spring 2023 and hereafter analysis of outcome. Primary outcome is difference in HPV-vaccination coverage between intervention and control group. Secondary outcome is HPV-vaccination coverage for siblings to intervention-group, to investigate the effect of parental HPV-counselling alone. The intervention will be qualitatively evaluated in focus-group interviews regarding user perspectives.

Conclusion

The study has potential of increasing the attendance to HPV-vaccination by breaking down barriers to participation. It has produced generic material for further local and national implementation and may serve as a mean to obtain equal HPV-related cancer prevention for all children regardless of ethnical background.