Postprint version	:	1.0
Journal website	:	www.sciencedirect.com/journal/patient-education-and-counseling/vol/109/suppl/C
Pubmed link	:	https://pubmed.ncbi.nlm.nih.gov/36753828/
DOI	:	10.1016/j.pec.2023.107651

Implementing lifestyle interventions in clinical practice: the importance of adherence

Sandra van Dulmen[a,b,c,*], Hilde Eide[d], Arnstein Finset[e]

[a] Nivel (Netherlands Institute for Health Services Research), Utrecht, the Netherlands
[b] Radboud University Medical Center, Radboud Institute for Health Sciences, Department of Primary and Community Care, Nijmegen, the Netherlands
[c] Faculty of Caring Science, Work Life and Social Welfare, University of Borås, Borås, Sweden
[d] Centre for Health and Technology Faculty of Health and Social Sciences, University of South-Eastern Norway, Drammen, Norway
[e] Patient Education and Counseling and Department of Behavioural Medicine University of Oslo, Norway

Over the years, Patient Education and Counseling has published many papers on campaigns and interventions, with or without e-health technology, designed to increase patients' intrinsic motivation to adopt a healthier lifestyle, such as quitting smoking, increasing physical activity and eating healthy. Many studies show efficacy in controlled studies; however, very few interventions find their way into usual clinical practice [1]. In spite of numerous well-designed interventions, many patients keep having difficulties to break their firmly entrenched unhealthy habits. As pointed out by Varsi et al., it is important to apply an implementation strategy including management support and engagement, internal and external facilitation, training, and audit and feedback when planning educational interventions, addressing organizational as well as technological implications [1].

An important problem in designing and implementing lifestyle interventions is the fact that adherence to lifestyle programmes tend to be rather poor. Just providing advice is not enough. In order to improve patients' health and lower healthcare expenditure due to preventable lifestyle-related conditions, active counseling by health professionals is needed to increase patients' adherence and, subsequently, enhance more healthy behavior.

This asks for a change in behavior in health professionals too; their adherence to guideline-concordant counseling may need to be addressed in a similar way as the adherence behavior in their patients. Yet, currently, health professionals' adherence to lifestyle counseling appears to be insufficient. Intervention programmes for health professionals might help to increase the uptake of lifestyle counseling interventions. Ironically, this means that adherence needs to be addressed threefold: health professionals need to (1) adhere to programmes, which aim to (2) stimulate their adherence to lifestyle counselling guidelines regarding smoking cessation designed to (3) increase

patients' adherence to lifestyle interventions. At each step of this trajectory, one risks to lose part of the target group. Carefully designing interventions and learning from the experiences of developers, might help to counter the burden of unhealthy lifestyles on individuals and society.

As it is well-known that necessity and concern beliefs are strongly associated with using any healthcare intervention, health professionals' beliefs might have to be addressed as well. In this issue of Patient Education and Counseling, Hoving et al. present the lessons learned following the development and implementation of an effective online eHealth programme to stimulate primary health care professionals' lifestyle counselling guideline adherence, tailored to their beliefs [2]. This so-called STAR programme included an implementation strategy by providing feedback based on needs and preferences explored in interviews with general practice nurses, such as a need for an online forum for peer support and a practical overview of the counselling steps and instructions on how to apply them. Despite the attention to these important determinants for using an intervention programme, most practice nurses used the tailored feedback feature only once and the majority did not (regularly) interact with other programme features. The practice nurses experienced the programme as too time-consuming and as showing no new features when accessed once more. So apparently, personalising the feedback and tailoring the content of the programme to the individuals' beliefs and personal circumstances was helpful, but not enough.

The recommendations formulated by the authors to secure better implementation focus on applying alternative communication strategies (e.g., videos, graphs, animation) and integrating the intervention in general practice administrative systems to improve accessibility so it can be used not only before and after a consultation, but also during consultations with patients [2] The paper by Hoving et al. shows how important it is to be transparent about the barriers encountered in designing and testing an online intervention. In this respect, the very fact that they published their lessons learned may serve as a lesson learned for researchers and developers. Patient Education and Counseling will encourage researchers to write papers such as the one by Hoving et al. with critical discussions of barriers and facilitators seen in implementing lifestyle interventions and other examples of patient education programmes.

References

[1] Varsi C, Solberg Nes L, Kristjansdottir OB, Kelders SM, Stenberg U, Zangi HA, et al.Implementation strategies to enhance the implementation of eHealth programs for patients with chronic illnesses: realist systematic review. J Med Internet Res 2019; 21(9):e14255. https://doi.org/10.2196/14255.

[2] Hoving C., de Ruijter D., Smit E. Using tailored eHealth programmes to stimulate primary health care professionals' lifestyle counselling guideline adherence – Lessons learned from the STAR project. Patient Educ Counsel, xxx.