

Cardiovascular health promotion among Nepalese mothers with young children: Need assessment, development, implementation, and impact of the HARDIC trial

AKADEMISK AVHANDLING

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av

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Avhandlingen baseras på följande delarbeten:

- I **Oli N, Vaidya A, Subedi M, Krettek A.**
Experiences and perceptions about cause and prevention of cardiovascular disease among people with cardiometabolic conditions: findings of in-depth interviews from a peri-urban Nepalese community.
Glob Health Action 2014; 7: 24023.
- II **Oli N, Vaidya A, Subedi M, Eiben G, Krettek A.**
Diet and physical activity for children's health: a qualitative study of Nepalese mothers' perceptions.
BMJ Open 2015; 5:e008197.
- III **Oli N, Vaidya A, Pahkala K, Eiben G, Krettek A.**
Knowledge, attitude and practice on diet and physical activity among mothers with young children in the Jhaukhel-Duwakot Health Demographic Surveillance Site, Nepal.
Submitted
- IV **Vaidya A *, Oli N *, Eiben G, Krettek A.**
The Heart-health Associated Research, Dissemination and Intervention in the Community (HARDIC) Trial for Nepalese Mothers regarding Diet and Physical Activity: A Process Evaluation. (* Equal contribution)
Kathmandu Univ Med J 2017; 58(2):107-116.
- V **Oli N, Vaidya A, Eiben G, Krettek A.**
Impact of health promotion regarding diet and physical activity among Nepalese mothers with young children: The Heart-health Associated Research, Dissemination and Intervention in the Community (HARDIC) Trial.
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ABSTRACT

Background

Nutritional transition toward a high-fat and high-energy diet, decreasing physical activity level, and poor knowledge about cardiovascular health contribute to a rising burden of cardiovascular disease in low-income countries such as Nepal. Dietary and physical activity behaviors are formed early in life and influenced by family, particularly by mothers in the social context of Nepal.

Aims

This Thesis aimed to understand a community's perception of cardiovascular health from the patients' viewpoint. More specifically, it aimed to assess knowledge, attitude, and practice (KAP) including perceived barriers of mothers with young children regarding their own diet and physical activity and also how mothers perceived their children's behavior. Based on these findings, the Thesis aimed to develop and implement a health promotion intervention tailored to the mothers' needs and assess its impact on mothers' KAP and their children's behavior.

Methods

A mixed methods research approach was applied in the Jhaukhel-Duwakot Health Demographic Surveillance Site (JD-HDSS). Qualitative studies were conducted to identify beliefs, perceived barriers, and level of awareness regarding cardiovascular disease among cardiometabolic patients, and also to explore perceptions of mothers with young children regarding diet and physical activity. A quantitative baseline study evaluated KAP regarding diet and physical activity of all mothers with young children in the study area. A health promotion intervention targeting mothers was developed and applied in the randomly selected intervention area. A follow-up study assessed the impact of the intervention among mothers in the intervention and control areas. A process evaluation was applied throughout the implementation process.

Results

In-depth interviews with the cardiometabolic patients revealed inadequate awareness of cardiovascular disease in the community. Focus group discussions with mothers showed gaps in mothers' perceptions and practices regarding their children's diet and physical activity. The baseline study found that mothers with higher education scored higher for KAP, and children's behavior score reflected their mother's education level. Overall, respondents in JD-HDSS had "good" knowledge, "good" attitude, and "poor" practice (57%, 44.6%, and 90%, respectively). The process evaluation showed that participants were satisfied with course content and the training modality of the intervention. The follow-up study revealed significant improvement in the mothers' KAP and children's behavior in the intervention area compared to the control area.

Conclusions

The successful implementation of the intervention to improve cardiovascular health proves the feasibility of health promotional activities in a Nepalese community.

Keywords: Attitude, cardiovascular disease, diet, health promotion, knowledge, mothers, peer education, physical activity, practice, young children

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