Perceptions and practices of cardiovascular health:
A population perspective from a peri-urban Nepalese community

AKADEMISK AVHANDLING

Som för avläggande av medicine doktorsexamen vid Göteborgs universitet kommer att offentligen förvaras i hörsal Arvid Carlsson, Academicum, Medicinalgatan 3, Göteborg

Tisdagen den 10 juni 2014 kl 09.00

av

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Avhandlingen baseras på följande delarbete:

I Aryal UR*, Vaidya A*, Shakya-Vaidya S, Petzold M, Krettek A.
Establishing a health demographic surveillance site in Bhaktapur district, Nepal: initial experiences and findings. (* Equal contribution)

II Vaidya A, Aryal UR, Krettek A.
Cardiovascular health knowledge, attitude, and practice/behaviour in an urbanising community of Nepal: a population-based cross-sectional study from Jhaukhel-Duwakot Health Demographic Surveillance Site.

III Vaidya A, Krettek A.
Physical activity level and its sociodemographic correlates in a peri-urban Nepalese population: a cross-sectional study from the Jhaukhel-Duwakot Health Demographic Surveillance Site.

IV Vaidya A, Oli N, Aryal UR, Karki DB, Krettek A.
Disparities in fruit and vegetable intake by socio-demographic characteristics in peri-urban Nepalese adults: findings from the Heart-Health Associated Research and Dissemination in the Community (HARDIC) Study, Bhaktapur, Nepal.

V 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. (*Equal contribution)
*Global Health Action 2014; 7:24023

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ABSTRACT

Background
Global phenomena such as urbanization and individual traits such as health literacy affect people’s exposure and vulnerability to cardiovascular risk factors. Nepal, a low-income South Asian country undergoing epidemiological transition, has limited data and understanding of cardiovascular health issues, particularly regarding cardiovascular health literacy, perception and practice on the community level.

Aims
This Thesis investigated issues of cardiovascular health from a population perspective. Specifically, it first aimed to establish a Health Demographic Surveillance Site in a peri-urban Nepalese setting; then, assess knowledge, attitude, and practice (KAP)/behavior regarding cardiovascular risk factors, manifestations, and preventability; understand behavioral and life-style risk factors such as physical activity and diet in terms of their sociodemographic correlates; and finally, explore the perceptions of cardiovascular health and disease among those already affected.

Methods
A health demographic surveillance site was established in Jhaukhel and Duwakot, two peri-urban villages near Kathmandu. A mixed methods research approach was then used. Quantitative studies assessed cardiovascular health literacy, knowledge and attitude in a sample population. Cardiovascular health behaviour, particularly physical inactivity and fruit and vegetable intake, were studied. Additionally, a qualitative study to explore perceptions and experiences of patients with cardiometabolic diseases was conducted.

Results
Forty four percent of the study population had poor knowledge of cardiovascular health. Moreover, only 14.7% and 13.9% of respondents with highly satisfactory knowledge also had highly satisfactory attitude and practices, respectively. Behavioral cardiovascular risk factors were high (low physical activity: 43.3%, inadequate fruit and vegetable consumption: 97.9%) and varied by sociodemographic correlates. Furthermore, patients understood the importance of lifestyle modification only after diagnosis.

Conclusions
The studies presented in this Thesis demonstrate the current inadequacy of health literacy in Nepal. In addition, gaps exist between cardiovascular health knowledge, attitude, and practice/behavior, even among those already affected. The coupling of high behavioral risk burden with low cardiovascular health literacy implies need for multi-sector health promotional strategies in the country.

Keywords: Attitude, behavior, cardiovascular diseases, cardiovascular health, fruit and vegetable intake, health literacy, knowledge, practice, physical activity, urbanization