



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Health Sciences

Fakulteit Gesondheidswetenskappe
Lefapha la Disaense tša Maphelo

Adapting nursing interventions to Africa: Challenges and opportunities

Prof FM Mulaudzi
Department of Nursing Science
UNIVERSITY OF PRETORIA



27 June 2016

OUTLINE OF THE PRESENTATION

- Introduction
- Common NCDs
- Main risk factors
- Case study on nutritional studies
- Intervention through ubuntu inclusion
- Conclusion
- Recommendations



INTRODUCTION

- The World health Organization (WHO) stated that non communicable diseases (NCDs) is on the rise, no longer a disease of rich nations (WHO, 2015).
- The prevalence of non communicable diseases (NCDs) is steadily increasing globally especially in the middle-income countries (Africa) (WHO, 2015).
- NCDs kills 38 million people yearly, 74 % of the death occur in developing countries

INTRODUCTION cont.

- 16million of the people die before the age of 70 annually (WHO, 2015)
- 4 out of 5 death from NCDs occur in the developing countries (WHO, 2015)
- Evidence has shown that the premature death caused by NCDs can significantly be prevented and reduced through intervention of health workers such as nurses

INTRODUCTION cont.

- The WHO strategic directions for strengthening nursing and midwifery 2011-2015 emphasised the vital role that nurses can play in reducing the global burden of NCDs.
- Nurses form the bulk of the health workforce in developing countries.

COMMON NCD

There 4 major types of NCDs

- Cardiovascular diseases (like heart attacks and stroke)
- Cancers
- Chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma)
- Diabetes

GLOBAL STATUS REPORTS ON NCDs.

Causes of NCDs death

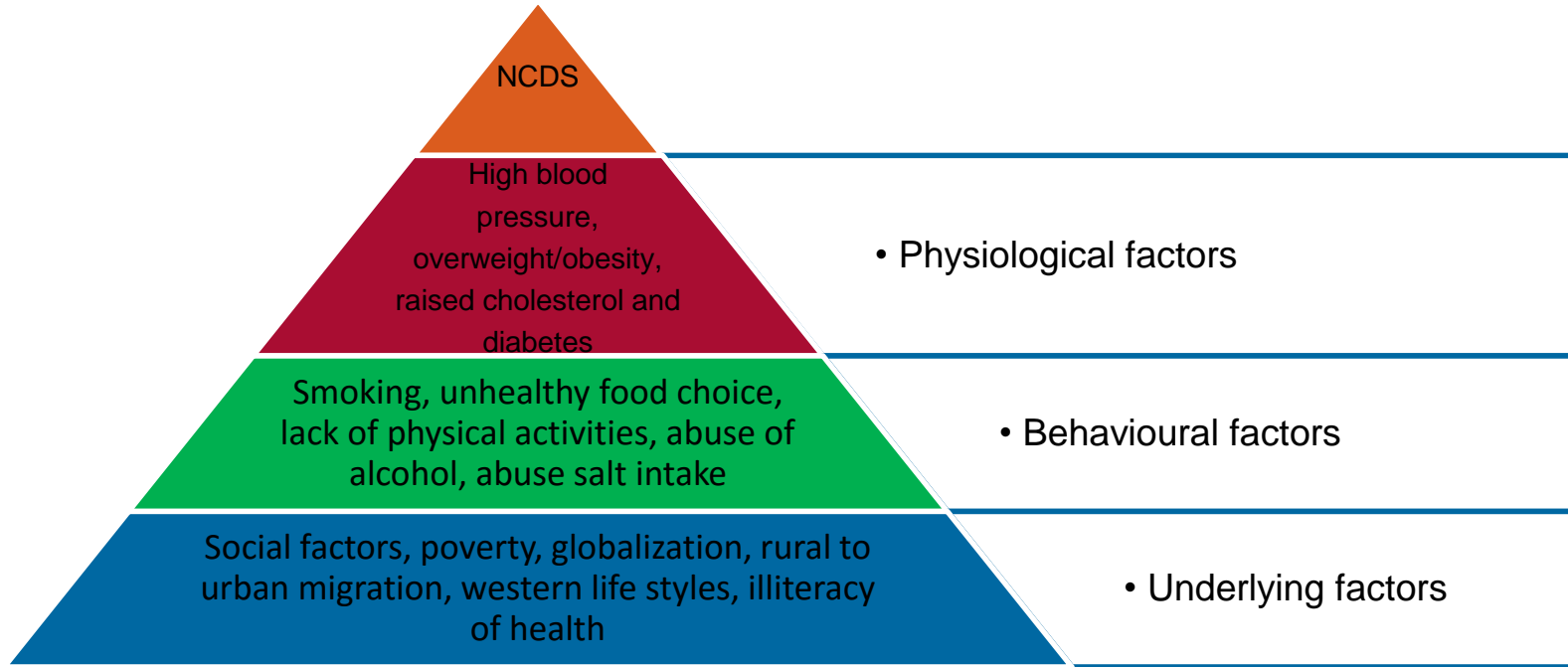
- Cardiovascular diseases is the leading cause of NCD deaths (17.5 million people die annually)
- Cancers (8.2 million)
- Respiratory diseases (4 million), and
- Diabetes (1.5 million).
- These 4 groups of diseases account for 82% of all NCD deaths.
- Tobacco use, physical inactivity, the harmful use of alcohol and unhealthy diets all increase the risk of dying from an NCD.



GLOBAL STATUS REPORTS ON NCDs cont.

- More than 3.1 million of deaths annually can be attributed to insufficient physical activities (Lim et al, 2012)
- Excessive salt intake have been attributed to the cause of 1.7 million annual deaths from cardiovascular (Mozaffarian et al, 2014).

THE MAIN RISK FACTORS OF NCDS



RESOLUTION AND SUPPORTS OF NCDS PROGRAMME IN AFRICA

- Resolutions WHA53.17 (May 2000) on the Prevention and Control of Non-Communicable Diseases and WHA61.14 (May 2008) on Prevention and Control of Non-Communicable Diseases: Implementation of the Global Strategy
- The report of the WHO Commission on Social Determinants of Health (2008);
- The Ouagadougou Declaration on Primary Health Care and Health Systems in Africa: Achieving better health for Africa in the new millennium (2008);
- The Libreville Declaration on Health and Environment in Africa (2008);
- The Nairobi Call to Action (2009);

RESOLUTION AND SUPPORTS OF NCDS PROGRAMME IN AFRICA cont.

- The Mauritius Call for Action (2009);
- WHO Framework Convention on Tobacco Control (2003);
- 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Non Communicable Diseases;
- The WHO Global Strategy to Reduce the Harmful Use of Alcohol (2010);
- Global Strategy on Diet, Physical Activity and Health (2004) and other relevant international strategies to address Noncommunicable Diseases;

RESOLUTION AND SUPPORTS OF NCDS PROGRAMME IN AFRICA cont.

- WHO Set of recommendations on the marketing of foods and non-alcoholic beverages to children (2010)
- Resolution WHA 55.23 on Diet, Physical Activity and Health(2002)
- WHO Global Recommendations on physical activity for health (2010). United Nations Convention on the Rights of Persons with Disabilities, 2008

PROBLEM

- The majority of nurse scientists are involved in research and some have developed evidence best practices that can be used by health care professionals. However it has become clear that some of the methods designed in developed countries may not be appropriate and relevant in Africa where collectivism and people involvement are at the core of introducing new programmes.
- There is a lot of literature addressing the risk factors however there are barriers to conforming to policies on adhering to measures to minimise risk factors such as social, cultural norms , behavioural, environmental and economic determinants.

DESIGN AND METHODS

- A desk top review was conducted using research and technical reports, Journal articles, online databases and the Internet. Available literature were analysed to identify preventive and promotive methods that can be local relevant and user friendly for clients and nurses in Africa.
- Current umbrella projects on nutrition will also be shared as a case study

TOOLS IN CONTROLLING AND PREVENTING NCDs

Promote activities that can reduce mortality from NCDs such as:

- Encourage physical activity
- Healthy food choice
- Encourage activities that can lead to reduction in salt intake
- Support reduction in harmful use of alcohol
- Increase advocacy on tobacco use reduction
- Encourage healthy lifestyles to end the rise in raised blood pressure, diabetes and obesity

Physical inactivity

- Physical activities are in a form of traditional dances, activities and a form of ceremonies, However with urbanisation people have lost their traditions and are now assimilated in the western culture of doing things
- The traditional ways have been replaced by sedentary life styles
- Recreational facilities are scarce and are often not affordable
- Walking is an accessible common physical activity however safety issues remains a challenge
- Physical activities among the youth and school children is often compulsory at schools



Physical activity cont.

Traditional way of playing game



Western way of playing game





Insert date under view on slide master

Tobacco use

- Around 6 million deaths every year is linked to tobacco (including and is projected to increase to 8 million by 2030).
- No person may smoke any tobacco products in any place which is open to the public



Alcohol use

- Globally, 3.3 million people die yearly resulting from harmful use of alcohol, this represents 5.9 % of all deaths.
- Traditional alcohol has been replaced by industrialized beverages which are more harmful
- The WHO global strategy to reduce harmful use of alcohol is based on current scientific knowledge, evidence on effectiveness and cost-effectiveness, and these should inform policy to address alcohol use and alcohol abuse

CASE STUDY ON NUTRITIONAL STUDIES

- A nutrition education intervention for adults with type 2 diabetes in a resource limited settings of South Africa led to an improved dietary behaviour (Mulchiri et al, 2015).
- Nutrition education intervention was found to be effective:
 - ✓ In reducing cardiovascular risk factors among adults with preexisting health problems in India (Pomerleau et al, 2005)
 - ✓ Improving fruits and vegetables intake in the US (Cohen et al, 2013)

Indigenous food; Build on what people already have

- Building an AAUN coalition to support improved nutrition and health of children under 5 years, pregnant and lactating mothers



- An analysis of the value chain for indigenous edible insects and their potential role in mother and child nutrition in Eastern and Southern Africa: Focus on Mopani



- Reducing hypertension in sub-Saharan Africa through salt reduction strategies





CURRENT PORTFOLIO

- Building an AAUN coalition to support improved nutrition and health of children under 5 years, pregnant and lactating mothers



- An analysis of the value chain for indigenous edible insects and their potential role in mother and child nutrition in Eastern and Southern Africa: Focus on Mopani



- Reducing hypertension in sub-Saharan Africa through salt reduction strategies



BUILDING AN AAUN COALITION TO SUPPORT IMPROVED NUTRITION AND HEALTH OF CHILDREN UNDER 5 YEARS, PREGNANT AND LACTATING MOTHERS

- The literature review was conducted to gather information on the identified parameters (framework was provided) that would help to understand the nutrition situation of children aged less than 5 years and women of child bearing age in South Africa, Nigeria, Kenya, Malawi, Uganda and Mauritius
- The literature study included childhood nutrition status (stunting, underweight and wasting, micronutrient status) and maternal nutritional status, food quality and production (crops and animals), people living with HIV and poverty levels



AN ANALYSIS OF THE VALUE CHAIN FOR INDIGENOUS VALUE CHAIN AND THEIR POTENTIAL ROLE TO MOTHER AND CHILD NUTRITION IN EASTERN AND SOUTHERN AFRICA: FOCUS ON MOPANI WORMS

The aim of the across selected countries in eastern and southern Africa with a view of enhancing maternal and child nutrition and health.

Objectives:

- To do a situational analysis of insect consumption, initially, in four countries, South Africa, Zambia, Uganda and Malawi.
- To do literature review on available information on nutrient content, harvesting, processing and storage of the most commonly eaten insects in Southern Africa
- To conduct nutrient analyses on mopani worms (protein content and quality – amino acid composition)
- To evaluate potential key roles the insects may play in mother and child nutrition

SALT REDUCTION IN SOUTH AFRICA: SUCCESSIONS IN POLICY DIRECTIVES



- To lessen the burden of NCDs related to hypertension in sub-Saharan Africa by influencing food policy through the development of population-wide salt-reduction strategies.
- **South Africa first country globally to mandate salt levels in processed foods**
- *Department of Health. Regulations relating to the reduction of sodium in certain foodstuffs and related matters. Government Gazette, 20 March 2013, no 36274.*
- **Aim: To reduce mean population intake of salt from the current level of 8 – 10 g per day to < 5 g per day by 2020.**



METHODS TO STRENGTHEN NUTRITION FOR CHILDREN UNDER FIVE AND PREGNANT WOMEN

- Trans-disciplinary studies
- Participatory rural appraisal
- Ethics- research with developmental opportunities
- women empowerment programs
 - Food preparation
 - Food preservation
 - Crop development-women crops
 - Poultry farming
 - Monitoring growth measurements



UBUNTIC INCLUSION

- The model is based on the proverb Umuntu ngumuntu nga bantu (a person is a person through other persons)
- Emphasis is on people-centeredness and collectivism
 - Connection
 - Care
 - Communication
 - Intrapersonal inclusion
 - Mentoring and coaching
 - Visibility and reward
 - Fairness and trust
 - ***External stakeholders***

Smith & Lindsay 2014

CARE

- The findings showed different challenges and opportunities and innovative, local relevant methods that can be used to tackle NCDs.
- “downstream” interventions- largely biological and target the individual,
- “midstream” – target groups of people such as institutions or communities
- “upstream” interventions - focus on society as a whole
- It was clear that the methods used must be cultural safe and people-centered to ensure sustainability.

CONNECTION

- Involvement of indigenous peoples and communities in the development, implementation, and evaluation of non-communicable disease prevention
- Recognising the cultural heritage and traditional knowledge of indigenous peoples
- Respecting, preserving and promoting, as appropriate, their traditional medicine, including conservation of their vital medicinal plants, animals and minerals

INTRAPERSONAL INCLUSION

- Recognise further the potential and contribution of traditional and local knowledge
- Respect and preserve the knowledge and safe and effective use of traditional medicine, treatments and practices in each country
- Strengthen nationally driven, sustainable, cost-effective and comprehensive responses in all sectors for the prevention of non-communicable diseases

MENTORING AND COACHING

- Empowering women at community level to address health illiteracy
- Training of more health care professionals
- The strengthening of the training and proper utilisation of community health care workers
- Inclusion of cultural diversity methods of care in the current curriculum of all health care students

COMMUNICATION

- Develop, strengthen and implement, multi-sectoral public policies and action plans to promote health education
- Mass media campaigns to promote health literacy using materials and platforms relevant and accessible to community members
- Strengthen information strategies and programmes in and out of schools,
- Encourage public awareness campaigns,
- Health promoting community activities

FAIRNESS AND TRUST

- Involvement of local and regional Governments for legislative and regulatory actions
- ensure buy-in and support from policy makers
- Ensure community ownership of the projects

RECOMMENDATIONS

- Support of nurses in education,
- trans-disciplinary research
- Strengthening primary health care
- Multiple intervention methods which are derived from the bottom-up approach based on meta-leadership

REFERENCES

- Lim SS, Vos T, Flaxman AD, Danaei G, Shibuya K, Adair-Rohani H et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet*, 2012; 380(9859):2224-2260.
- Mozaffarian D, Fahimi S, Singh GM, Micha R, Khatibzadeh S, Engell RE, Lim S et al.; Global Burden of Diseases Nutrition and Chronic Diseases Expert Group. Global sodium consumption and death from cardiovascular causes. *N Engl J Med*. 2014;371(7):624–34. doi:10.1056/NEJMoa1304127.
- National Department of Health. Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2013-17. Pretoria: NDoH, 2013.
- Smith & Lindsay 2014. Beyond Inclusion Worklife Interconnectedness, Energy, and Resilience in Organizations. Macmillan, Palgrave: USA