



“Investing in Africa’s future”

COLLEGE OF HEALTH AGRICULTURE & NATURAL SCIENCE

DEPARTMENT OF PUBLIC HEALTH AND NURSING

MASTER OF PUBLIC HEALTH EXAMINATION

SPH 516: NON-COMMUNICABLE DISEASES

END OF FIRST SEMESTER FINAL EXAMINATIONS

NOVEMBER, 2021

LECTURER: DR F. MUTSEYEKWA

DURATION: 5 HRS

INSTRUCTIONS

Answer **one** question from a total of three

All questions carry equal marks (100).

DO NOT repeat material.

Write legibly.

QUESTION 1

Question 1a

As shown in Figure 1, “The proportion of people who die *prematurely* from NCDs is highest in the poorest countries.”

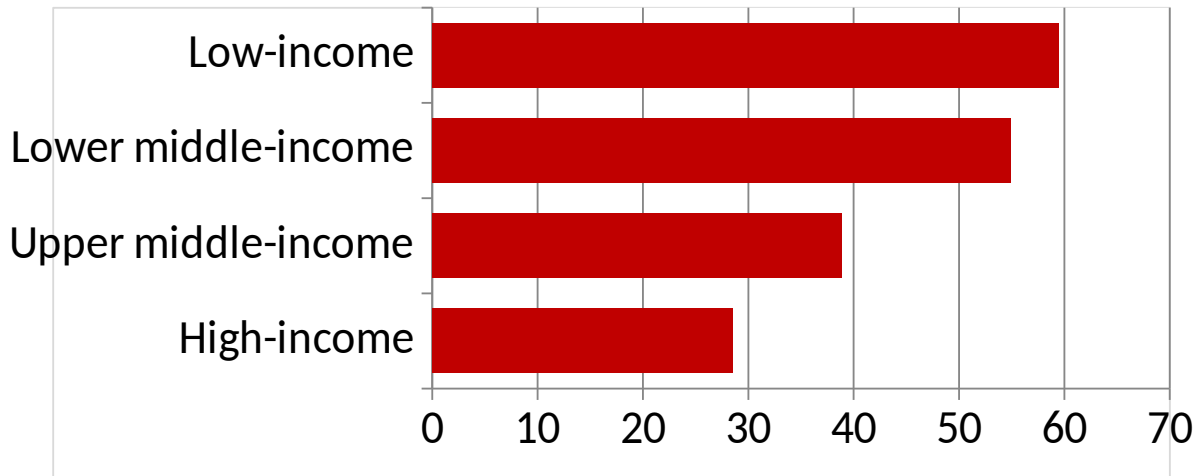


Figure 1. Deaths from NCDs before the age of 70 as a percentage of total deaths from NCDs

- i. Highlight five factors that contribute to this observation and state one potential strategy for mitigation of each contributory factor. [10]
- ii. Detail the processes/activities that you would undertake towards producing a Country Action Plan to address premature mortality due to NCDs in a LMIC setting like Zimbabwe [15]

Question 1b

By focusing its ‘best-buys’ on the 5x5 Model, the **Global Action Plan in the prevention and control of NCDs** has come under fire for being “too narrow, and failing to address the needs, perspectives and rights of the poor” (*Lancet Global NCDI Poverty Commission, 2020*).

Evaluate the authenticity of this argument based on our understanding of the NCD epidemiology, burden and programming in low income settings. [25]

Question 1c

You have been hired as a Consultant to set up the Package of Essential NCD (PEN) in a Southern African country. Draft a concept note detailing the main activities that you would carry out under each of the 4 steps in the implementation science research framework proposed by D-Esposito et al (cited in the *WHO 2016 Practical Guide for Implementation research to improve the prevention and control of NCDs*). [25]

Question 1d

- i) Describe the components of any one surveillance system that can be used to monitor the burden and/or risk factors of Malnutrition in terms of type, purpose, data collection, data analysis and data dissemination [5]
- ii) Highlight any five barriers to accessibility of clinical and public health interventions for malnutrition in the local context in terms of affordability, availability and acceptability. [5]
- iii) Design a facility-based/community-based program that you could implement to address any one (or more) of the barriers emerging from your discussion in (ii) above. In answering this question describe and explain the following elements of your program:
 - Goal and objectives
 - Intended beneficiaries
 - Strategies and activities
 - Resources necessary in order to carry out the activities suggested [15]

QUESTION 2

Question 2a

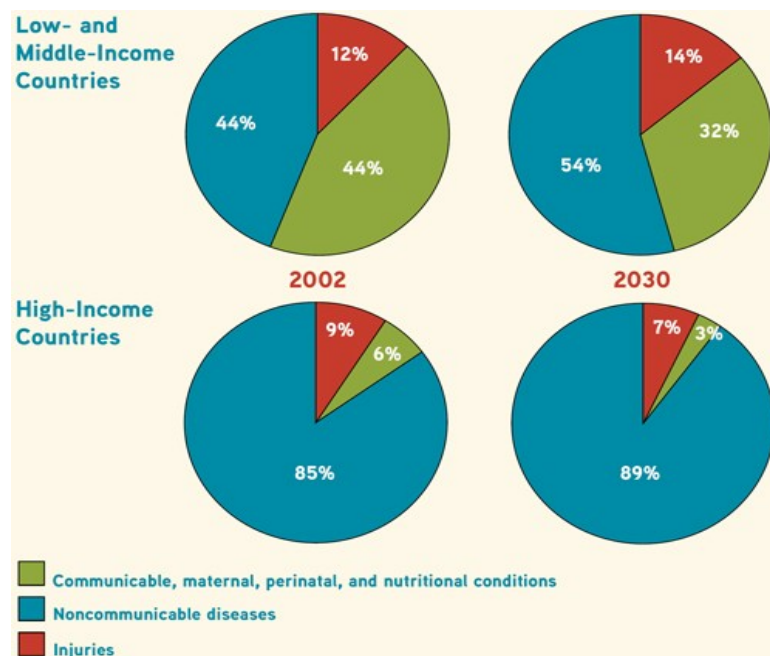


Figure 2. Projected 2030 disease burden by proportion in LMICs and HICs vs 2002 observations

- i. Discuss how the differences in overall disease epidemiology between LMICS and HICs at baseline (2002) may be accounted for. [10]
- ii. Interrogate the assumptions for and against the projected changes in the NCD burden over the three decades from 2002 to 2030 in low socioeconomic environments compared to the more affluent settings. [15]

Question 2b

The 3rd objective of the **Global Action Plan** speaks to reducing modifiable risk factors and social determinants for NCDs through the creation of ‘health promoting environments’. Evaluate the extent to which the law can be utilized in this LMIC context to facilitate achievement of this objective highlighting facilitators and barriers which include ethical arguments, societal norms and acceptability and feasibility issues [25]

Question 2c

You have been hired as a Consultant to set up the recommendations from the **Global Strategy to reduce the harmful use of alcohol** in a Southern African country. Draft a concept note detailing the main activities that you would carry out under each of the 4 steps in the implementation science research framework proposed by D-Esposito et al (*cited in the WHO 2016 Practical Guide for Implementation research to improve the prevention and control of NCDs*). [25]

Question 2d

- i) Describe the components of any one surveillance system that can be used to monitor the burden and/or risk factors of Hypertension in terms of type, purpose, data collection, data analysis and data dissemination [5]
- ii) Highlight any five barriers to accessibility of clinical and public health interventions for Hypertension in the local context in terms of affordability, availability and acceptability. [5]
- iii) Design a facility-based/community-based program that you could implement to address any one (or more) of the barriers emerging from your discussion in (ii) above. In answering this question describe and explain the following elements of your program:
 - Goal and objectives
 - Intended beneficiaries
 - Strategies and activities
 - Resources necessary in order to carry out the activities suggested [15]

QUESTION 3

Question 3a

‘NCDs represent one of the major challenges for development in the 21st century’. Critique the arguments made in support of this statement providing examples from the sub African context. [25]

Question 3b

You have been hired as a Consultant in an NCD Directorate in a LMIC. Select any **one** out of the nine targets of the **Global Action Plan for the prevention and control of NCDs** and create an ‘Advocacy Plan’ for the practical strategies and/or steps that you would deploy as baseline and ongoing work to convince stakeholders of the importance of their contribution towards that one target. [25]

Question 3c

You have been hired as a Consultant to set up an evidence-based cancer screening program in a Southern African country. Draft a concept note detailing the main activities that you would carry out under each of the 4 steps in the implementation science research framework proposed by D-

Esposito et al (*cited in the WHO 2016 Practical Guide for Implementation research to improve the prevention and control of NCDs*). [25]

Question 3d

- i) Describe the components of any one surveillance system that can be used to monitor the burden and/or risk factors of mental ill-health in terms of type, purpose, data collection, data analysis and data dissemination [5]
- ii) Highlight any five barriers to accessibility of clinical and public health interventions for mental ill-health in the local context in terms of affordability, availability and acceptability. [5]
- iii) Design a facility-based/community-based program that you could implement to address any one (or more) of the barriers emerging from your discussion in (ii) above. In answering this question describe and explain the following elements of your program:
 - Goal and objectives
 - Intended beneficiaries
 - Strategies and activities
 - Resources necessary in order to carry out the activities suggested [15]

End of Paper