UNIVERSITY OF JAFFNA, SRI LANKA

SECOND EXAMINATION FOR MEDICAL DEGREES PART II – January 2024

Academic Year 2018/2019

Community and Family Medicine-Paper II

Date: 24.01.2024   9 am to 12 noon. (3 hours)

Answer all the **six** questions.

Answer each question in a separate answer book.

1.

A 35-year-old unmarried three-wheel driver resides with his parents and two sisters. During a community screening, he was diagnosed with type 2 diabetes mellitus, with evidence of a random blood glucose level of 400 mg/dl and HbA1c of 9%. He is currently leading a sedentary lifestyle. He expresses concern about his future, given his unmarried status and the responsibility of being the breadwinner for his family, coupled with economic uncertainties.

1.1. Enumerate the health issues this patient is confronting.   (30 marks)

1.2. Outline the objectives taken into account in managing this patient.

(30 marks)

1.3. Provide a concise overview of the management plan for this patient.

(40 marks)

2.

Climate change is mostly experienced by people as water-related changes. The four Rs (Refuse, Reduce, Recycle, and Reuse) are promoted as a way to protect the planet from climate change.

2.1 List five (05) public health problems that are directly linked to climate change.   (10 marks)

2.2 Briefly explain how the four Rs could be applied to prevent one of the problems listed in question 2.1.   (30 marks)

2.3 Briefly describe the multisectoral approach in public health?

(20 marks)

2.4. Discuss the role of a multisectoral approach in implementing the three Rs in the Jaffna Municipal Council area.

(40 marks)

3.

A researcher conducted a study to describe the quality of life of patients with oral cancer and it's associated factors. The collected data from the set of study participants are given in the table below.

Table 1

A. Serial No.	B. Age (Years)	C. Sex	D. Family income (LKR)	E. Stage of Cancer	F. Duration of disease (Months)	G. Overall Quality of Life (QoL) score (0-100)	H. Level of QoL (0-50- Poor 51-100- Good)
1	55	M	43,000	III	12	43	Poor
2	47	M	28,000	II	18	76	Good
3	68	F	76,000	IV	08	35	Poor
4	74	F	21,000	I	14	68	Good
5	41	M	65,000	I	07	80	Good
6	57	M	80,000	II	36	65	Good
7	62	M	32,000	IV	20	25	Poor

3.1 Indicate the type of variable in the columns B - H in Table 1

(15 marks)

3.2 Indicate the scale of measurement for the variables in the columns B-H given in Table 1.

(20 marks)

3.2 The researcher decided to describe the overall quality of life score of the participants. Name the descriptive statistics suitable for this purpose with reasons.

(20 marks)

3.3 The researcher decided to find the association between the following variables. Name one statistical test to find the association with reasons.

3.3.1 The overall quality of life and the age of the study participants.

(15 marks)

3.3.2 Level of quality of life and sex of the participants. (15 marks)

3.3.3 Stages of cancer and the duration of disease. (15 marks)

4.

In hyper endemic areas, dengue fever (DF) and dengue haemorrhagic fever (DHF) affect mainly children under 15 years of age.

4.1 Define the terms **endemic, epidemic**, and **pandemic** concerning infectious diseases. (15 marks)

4.2 List three (03) reasons children are more vulnerable to DF and DHF.

(15 marks)

4.3 Describe briefly how the school health program could support the control of DF among children. (30 marks)

4.4 Discuss the importance of special surveillance in controlling DF/DHF in Sri Lanka. (40 marks)

5.

5.1. The Nurses & Health Study was initiated in 1976, with 121,700 female registered nurses 30 to 55 years old who were residing in 11 large U.S. states completing a mailed questionnaire on their medical history and lifestyle. Every two years, follow-up questionnaires have been sent to obtain updated information on potential risk factors and identify newly diagnosed coronary heart disease cases.

5.1.1. Name the study design used in the study. (10 marks)

5.1.2. Briefly describe the advantages and disadvantages of the study design mentioned in 5.1.1 (25 marks)

5.2. A study with 5209 individuals aged 30 to 62 at entry. After 34 years of follow-up, it was observed that Cigarette smoking was significantly related to coronary heart disease in men 45 to 64 years old (**Odd ratio-OR** = 1.9; **95% Confidence Interval**-CI: 1.5 to 2.4).

Freund KM, Belanger AJ, D'Agostino RB, Kannel WB. The health risks of smoking. The Framingham Study: 34 years of follow-up. Ann Epidemiol [Internet]. 1993 [cited 2024 Jan 4];3(4):417–24. Available from: https://pubmed.ncbi.nlm.nih.gov/8275219/

5.2.1. Define the terms in bold letters.   (20 marks)

5.2.2. Interpret the findings.   (20 marks)

5.2.3. Briefly discuss the public health implications of the finding.

(25 marks)

6.
Write short notes on the following.
6.1 Empty Nest Syndrome   (25 marks)
6.2 Feeding expressed breast milk   (25 marks)
6.3 Fitness for work assessment   (25 marks)
6.4 Social determinants of health   (25 marks)