SYNOPSIS

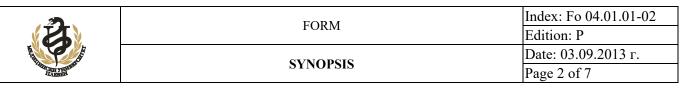
FACULTY OF PUBLIC HEALTH DEPARTMENT OF PUBLIC HEALTH SCIENCIES

EXAMINATION SYNOPSIS IN SOCIAL MEDICINE 2015/2016

Specialty "Medicine", Second year students (January 2016 examination session)

I. FUNDAMENTAL PART OF PUBLIC HEALTH – SCOPE AND METHODS OF PUBLIC HEALTH

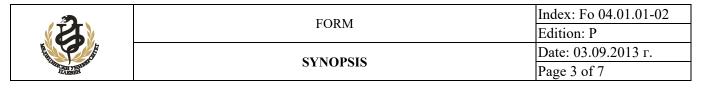
- 1. Social medicine as a science. Subject matter. The disciplines of sociology, demography, epidemiology, statistics and their relation to social medicine. Descriptive and prescriptive parts of social medicine. Methods of social medicine.
- 2. The concept of health and disease. Dimensions of health. Positive health. Determinants of health.
- 3. Sociological approaches in social medicine sources and methods of collecting sociological data. Questionnaire design questions and questionnaire formats. Self-administered questionnaire.
- 4. Interview: types, methods of conducting, interview process. Sociological observation: types, advantages and disadvantages, observer roles.
- 5. Epidemiology definition and scope of epidemiology. Achievements in epidemiology. Uses of epidemiology. Basic concepts risk, risk factors, population at risk, rate, ratio, proportion.
- 6. Measuring health and disease. Measuring disease frequency prevalence, incidence rate, cumulative incidence. Relationships between different measures.
- 7. Comparing disease occurrence. Absolute comparison risk difference, attributable fraction, population attributable risk. Relative comparison relative risk, odds ratio.
- 8. Types of epidemiological studies classification. Descriptive studies. Analytical studies (ecological and cross-sectional studies).
- 9. Cohort studies types, design, conducting, advantages and disadvantages of cohort studies. Potential errors in cohort studies.
- 10. Case-control studies types, design, conducting, advantages and disadvantages. Potential errors in case-control studies.



- 11. Causation in epidemiology. The consept of cause. Establishing the cause of disease.
- 12. Demographic approach to health assessment. Population size and population composition by sex and residence. Population age structure types, dependency ratios, medical and social consequences of population aging.
- 13. Fertility-related indicators: definitions of different indicators, assessment scales, worldwide trends.
- 14. Population reproduction rates Total fertility rate, Gross reproduction rate, Net reproduction rate definitions, worldwide trends, problems.
- 15. Mortality-related indicators: definitions of different indicators, assessment scales, worldwide trends, problems. Leading causes of deaths in developed and developing countries. Standardization standard populations, standardized death rates.
- 16. Infant mortality-related indicators definitions of different indicators, scale, worldwide trends, leading causes of infant mortality in developed and developing countries. Under 5 mortality rate.
- 17. Life expectancy definition, life tables, worldwide trends.
- 18. Morbidity-related indicators: measures of morbidity incidence, point and period prevalence, iceberg of morbidity. Factors, influencing incidence and prevalence.
- Morbidity sources and methods of studying morbidity. International classification of diseases 10th revision.

II. THE PRACTICE OF PUBLIC HEALTH

- 20. Communicable diseases worldwide trends, leading causes of infectious morbidity. Global burden of infectious diseases. Principles of infectious disease control.
- 21. Major non-communicable diseases significance for the population health, worldwide trends of CVD, cancer, COPD, accidents and diabetes. The burden of noncommunicable diseases DALYs.
- 22. Major determinants of non-communicable diseases life style risk factors, environmental risks, biological and genetic factors, health care services factors.



- 23. Health care system as a social system definitions of main terms (health system, health care, medical care), objectives, evolution, reforms. WHO approach to health systems assessment.
- 24. The concept of health care. Main characteristics of health care. Levels of health care.
- 25. Typology of health systems in developed countries. State monopoly system. Health insurance system. Health system of liberal pluralism. Reforms in health systems in UK and USA (ObamaCare motivation, goal, main characteristics).
- 26. Health policy. Priorities of health policy in developed countries.
- 27. International health collaboration. World Health Organization. Other UN agencies. Millennium goals.
- 28. Development, main goal and basic targets of WHO global strategy "Health for all in the 21 century".
- 29. Primary health care definition, elements. WHO strategy for primary health care. Declaration of Alma-Ata.
- 30. Hospital care mission, structure and goals. Assessment of utilization of hospital beds. Quality of hospital care.
- 31. <u>Public health needs of specific population groups: mothers.</u> Maternal mortality, family planning. Health services for mothers antenatal, intranatal, post-natal care. Risk approach. Delivering health care to mothers.
- 32. <u>Public health needs of specific population groups: children and adolescents.</u> Health problems of children and adolescents. Health services, community health and policies.
- 33. <u>Public health needs of specific population groups: people with disabilities.</u> Assessment. Measures of health and disability. Public health services and interventions.
- 34. <u>Public health needs of specific population groups: older people.</u> Health problems and health needs of older people. Health promotion and prevention. Public health implications of ageing.
- 35. <u>Public health needs of specific population groups: family health.</u> Processes within families and health effects. Macro-level processes: demographic, technological, economic and political factors. Future challenges.



- 36. Needs assessment. Health inequalities. Impact of sex and gender on specific health problems. Gender and the delivery of health care. Socio-economic inequalities. Reducing health inequilities.
- 37. Prevention scope and levels of prevention. Primordial prevention. Primary prevention population and high risk strategy.
- 38. Secondary prevention screening. Criteria for screening. Sensitivity, specificity and predictive values of screening test. Screening programmes.
- 39. Health promotion definition, development of the concept and practice of health promotion, basic principles.
- 40. Health education definition, objectives, content, principles. Communication in health education. Practice of health education.

REFERENCE MATERIALS:

I. Main reference materials:

- 1. Textbook: **Public health basic course** (*in print; will be available in Decembre 2015*). Autors: Silviya Aleksandrova-Yankulovska, Gena Grancharova. Publishing center of Medical University of Pleven.
- 2. Lectures 2015

II. Additional reference materials:

1. Bonita R, Beaglehole R, Kjellstrom T. Basic Epidemiology, 2nd edition. World Health Organization, 2006.

Free download available in Internet at:

http://www.google.bg/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CB4QFj AA&url=http%3A%2F%2Fwhqlibdoc.who.int%2Fpublications%2F2006%2F9241547 073 eng.pdf&ei=ysJMVK7uBay17gay6IGYCg&usg=AFQjCNFolv51n0EG44oePL790x2Ui qc48Q&sig2=cSRihTe8elU4FYJ4eIJTCg&bvm=bv.77880786,d.bGQ

3. The Organisation for Economic Co-operation and Development (OECD) Factbook 2014. Health (pp. 236-254). Free download available in Internet at: http://www.oecdilibrary.org/signinredirect?fmt=ahah&docserverurl=http%3A%2F%2Fwww.oecdilibr ary.org%2Fdocserver%2Fdownload%2F3013081e.pdf%3Fexpires%3D1414320028% 26id%3Did%26accname%3Dguest%26checksum%3D7FC07E8BCE04E044361E8084

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- 4. WHO. European Health for All database. Free access available in Internet at: <u>http://data.euro.who.int/hfadb/</u>
- 5. WHO. Health 21 Health for all in the 21st century. An introduction.
 Free download available in Internet at: http://www.google.bg/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCEQFj
 AA&url=http%3A%2F%2Fwww.euro.who.int%2F_data%2Fassets%2Fpdf file%2F00
 04%2F109759%2FEHFA5 E.pdf&ei=09BMV0m0CaSE7gbsyYBY&usg=AFQjCNHPP9CLF9f VIyNjHR X FHDcPHIg
 &sig2=vIRdgefNl6x5eCqsS8ZXfw&bvm=bv.77880786,d.bGQ
- 6. WHO. Global burden of disease. Definitions and statistics by regions and countries.

Free access available in Internet at: http://www.who.int/topics/global burden of disease/en/

- 7. WHO. Women's health. Facts sheets, links to relevant publications. Free access available in Internet at: <u>http://www.who.int/topics/womens health/en/</u>
- 8. WHO. Maternal, newborn, child and adolescent health. Free access available in Internet at: http://www.who.int/maternal_child_adolescent/en/
- Declaration of Alma Ata. International Conference on Primary Health Care, 6-12 September 1978.

Free download available in Internet at: http://www.google.bg/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CB4QFj AA&url=http%3A%2F%2Fwww.who.int%2Fpublications%2Falmaata declaration en. pdf&ei=HtFMVITdJc-M7Abho4GACg&usg=AFQjCNFfHojVtggpww73WmyIYsVvaaR4fg&sig2=8LccDbNi7_0j HeO6dLcWdw&bvm=bv.77880786,d.bGQ

10. Bohm K, Schmid A, Gotze R et al. TranState Working Papers. Classifying OEDC Healthcare systems: A Deductive Approach. Bremen, 2012

Free download available in Internet at: http://www.google.bg/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&sqi=2&ved=0C C4QFjAB&url=http%3A%2F%2Fwww.zes.unibremen.de%2Flib%2Fdownload.php%3Ffile%3D4912881dfe.pdf%26filename%3DAP _165_2012.pdf&ei=0dJMVOSACOGxygOlr4GABw&usg=AFQjCNGRHv2mpfYMx9YxH3odajLjohtnQ&sig2=JLoIc17dsc92W4RhnG0stg&bvm=bv.77880786,d.b GQ

INFORMATION FOR THE EXAM:

- I. Exam consists of two parts:
 - 1. Test of 30 questions on the whole synopsis
 - 2. Theoretical questions:
 - One question from the fundamental part
 - One question from the practice of public health
- II. Assessment criteria:
 - 1. Test assessment criteria:

Number of right answers	Mark
18	3.00
19	3.25
20	3.50
21	3.75
22	4.00
23	4.25
24	4.50
25	4.75
26	5.00
27	5.25
28	5.50
29	5.75
30	6.00

2. Final examination mark is calculated as follows:

Final mark = $(0,40 \times A^*) + (0,40 \times B^*) + (0,10 \times C^*) + (0,10 \times D^*)$

- A mark on the examination test
- B mark on the theoretical questions
- C average mark for the first semester of social medicine course



D -average mark for the second semester of social medicine course

A, B, C, and D should be different from Poor (2.00), i.e. A, B, C, and D should be at least Average (3.00) to proceed to calculation of final mark.

Assoc. Prof. Dr. Silviya Aleksandrova-Yankulovska, MD, PhD, DSc, MAS