Integrated short draft as of 4 May 2017

GLOBAL PUBLIC HEALTH CURRICULUM
SPECIFIC GLOBAL HEALTH COMPETENCES

The 2nd edition of the Global Public Health Curriculum has been published in the South Eastern European Journal of Public Health, end of 2016 as a special volume (editors Ulrich Laaser & Florida Beluli) at: http://www.seejph.com/index.php/seejph/article/view/106/82.

The curriculum targets the postgraduate education and training of public health professionals including their continued professional development (CPD). However, specific competences for the curricular modules remained to be identified in a systematic approach. To that end from the international literature the following references have been used as a general orientation:

A) Armed Forces Medical College (AFMC) Resource Group, GHEC Committee, India: Global health essential core competencies. At: https://lane.stanford.edu/portals/ihealth-pdfs/BasicCore_Competencies_Final2010.pdf

B) Dias M. Et al.: Global Health Competencies for UK Health Professionals. TECHNICAL REPORT · SEPTEMBER 2015. At: http://www.researchgate.net/publication/283086441

C) Association of Schools and Programs of Public Health (ASPPH): The Global Health Competency model. At: www.aspph.org/educate/models/masters-global-health/

D) World Health Organisation (WHO): WHO GLOBAL COMPETENCY MODEL. At: www.who.int/employment/competencies/WHO_competencies_EN.pdf

E) Jogerst K et al.: Identifying Interprofessional Global Health Competencies for 21st Century. At: https://www.cfhi.org/sites/files/files/pages/global_health_competencies_article.pdf

An overview of the published modules is available in the background section of the curriculum as an introductory module (numbered 1.1):

1.0 Background
1.1 Introduction (Ulrich Laaser)
1.2 Global public health functions and services: the history (Ehud Miron)
1.3 Global public health definitions and challenges (Joanna Nurse)

2.0 Global health challenges
2.1 Demographic challenges (Charles Surjadi et al.)
2.2 Burden of disease (Milena Santric-Milicevic et al.)
2.3 Environmental health and climate change (Dragan Gjorgjev et al.)
2.4 Global migration and migrant health (M. Wasif Alam et al.)
2.5 Social determinants of health inequalities (Janko Jankovic)
2.6 Gender and health (Bosiljka Djikanovic)
2.7 Structural and social violence (Fimka Tosija)

2.8 Disaster preparedness (Elisaveta Stikova)
2.9 Millennium Development Goals (Marta Lomazzi)
2.10 Health and wellbeing (Francesco Lietz)
2.11Global financial crisis and health (Helmut Wenzel)

3.0 Governance of global public health
3.1 Global governance of population health and well-being (George Lueddeke)
3.2 Health programme management (Christopher Potter)
3.3 Role of the civil society in health (Motasem Hamdan)
3.4 Universal health coverage (Jose Moreno et al.)
3.5 Public health leadership in a globalised world (Katarzyna Czabanowska et al.)
3.6 Public health ethics (Alexandra Jovic-Vranes)
3.7 The global public health workforce (Milena Santric-Milicevic et al.)
3.8 Education and training of professionals for global public health (Suzanne Babic et al.)
3.9 Blended learning (Željka Stamenkovic-Nikolic et al.)
3.10 Global health law (Joaquin Cayon)
3.11 Human rights and health (Fiona Haigh)
3.12 Global financial management for health (Ulrich Laaser)

4.0 Going global (Ulrich Laaser)

The two main categories for the grouping of essential competences have been adopted from A. Foldspang (Public Health Core Competences for Essential Public Health Operations, Volume 3, ASPHER 2016 at: http://aspher.org/download/76/booklet-competencesephos-volume-3.pdf):

1.0 The public health professional shall know and understand:

2.0 The public health professional shall be able to:

For these two categories competences have been drafted for all modules in sections 2.0 on Global Health Challenges and 3.0 on Governance of Global Public Health. Sections 1.0 (Background) and 4.0 (Going global) are of a different character and in principle allow only for the first category, therefore not included here.

2.1 DEMOGRAPHIC CHALLENGES (Charles Surjadi, Luka Kovacic[1], Muzaffar Malik)

Introduction:
There is growing interest in demography, among the public, politicians, and professionals: "demographic change" has become the subject of debates in many developed and developing countries. This is because it impacts on all aspects of people`s life, social relations, economy, and culture. The world population will continue to grow in the 21st century, but at a slower rate compared to the recent past. The annual growth rate reached its peak in the late 1960s, when it was at 2% and above. Better health, economic and social conditions resulted in longer life and an ageing population. It is projected that by 2025 more than 20% of Europeans will be 65 or over. Better living conditions in cities lead to higher urbanisation, more than 55% of the world's population residing in urban areas in 2015.

1.0 The public health professional shall know and understand:

1.1 The definitions of demography, aging, social status, and urbanisation.
1.2 The major determinants of population dynamics.
1.3 The global distribution of major diseases according to climate, gender and age, social status and culture.

2.0 The public health professional shall be able to:

2.1 Develop specific population projections and identify their determinants.
2.2 Identify the problems accruing from population growth, aging, and urbanisation.

2.2 BURDEN OF DISEASE (Milena Santric-Milicevic, Zorica Terzic-Supic)

Introduction:
Health systems today face challenges in the management of available resources. The implemented set of interventions and the criteria used for resource allocation are publicly debated. During reforms and in particular due to tough squeezing of resources, it is crucial to understand a proposed health plan and to have it supported by the public, health professionals, policy makers from other relevant sectors and international community. However, data on health and mortality in populations are not as comprehensive and consistent nor relevant as professionals require, rather are fragmentary and sometimes heterogeneous. The framework of burden of disease and injury study provides information and tools for integration, validation, exploration, and distribution of consistent and comparative descriptors of the burden of diseases, injuries and attributed risk factors, over time and across different health systems. As of 1992, when the first Global Burden of Diseases Study was executed, many national burden of disease studies have been undertaken and this framework is currently refining and updating.

[1] See obituary at: http://www.seejph.com/index.php/seejph/article/view/19/17

1.0 The public health professional shall know and understand[2]:

1.1 Health data sources and tools; surveillance of population health and disease programmes; surveillance of health system performance; data integration analysis and reporting;
1.2 Identification and monitoring of health hazards; occupational health protection; food safety; road safety;
1.3 Primary prevention; secondary prevention; tertiary/quaternary prevention; social support;
1.4 Setting a national research agenda; capacity-building; coordination of research activities; dissemination and knowledge brokering

2.0 A public health student should be able to:

2.1 Efficiently access global health data from sources such as the WHO Global Burden of Disease measures and understand the limitations of these data.
2.2 Identify the composite measures of morbidity and mortality and their roles and limitations for health program monitoring, evaluation and priority setting.
2.3 Examine the major categories of morbidity and mortality used by the World Health Organization (WHO) and Institute of Health metrics and Evaluation IHME (Communicable and parasitic diseases, maternal, perinatal and childhood conditions, and nutritional deficiencies, Non-communicable conditions importance and Injuries)
2.4 Describe the concept of premature mortality including age, sex and cause specific mortality rates, life expectancy and years of life lost (YLL). This will involve the ability to undertake calculation of indicators such as under 5 mortality rate, maternal mortality and HIV/AIDS mortality rates and YLL due to selected causes of deaths in a target population.
2.5 Demonstrate knowledge of the major global causes of morbidity and health risks, by describing the concepts of years lived with disability (YLD) and disability adjusted life-year (DALY).
2.6 Describe how the relative importance of each category, and of the leading diagnoses (15 causes) within each category, vary by age, gender and time, and explain potential contributors to the observed variations.
2.7 Explain how life expectancy, YLD, YLL and DALY may be used to make general health comparisons within and/or between countries and WHO regions, and between high, middle and low-income regions, and draw implications for policy and practice.
2.8 Perform a health economic assessment (e.g. Cost-effectiveness analysis) for different procedures or programmes.

References:
1) Foldspang, A. on behalf of ASPHER: From Potential to Action, Public Health Core Competences for Essential Public Health Operations (edition for comments). Volume 2,

[2] Taken from reference (1), p. 36 ff.: 1A1, 1A2, 1A4; 1B1-3, 1B7-14; 1C3, 1D2.3-1D2.5, 1D3-5; 2A1; 3B5, 3B6; 3C2,3E2, 5A, 5B, 5C, 5D, 10A,10B,10C,10E,10D;

Brussels: May 2016. At: http://www.aspher.org/download/75/booklet-competencesephos-volume-2.pdf

2.3 ENVIRONMENTAL HEALTH (Dragan Gjorgjev, Fimka Tozija)

Introduction:
The concept of limits of growth – how far we can go? The ecological concept of health, ecological public health – reshaping the conditions for good health. From demographic to democratic transitions to be addressed by public health; different DPSEEA models of environmental health assessment – conceptual framework of environmental health wellbeing. Environmental and Climate Change (CC), Burden of Diseases (DALY, YLL). Environment and health inequalities. Environment and health risk assessment studies. Environmental health indicators to assess health effects of Climate Change – threats to be reduced and opportunities to be adopted. Importance of the intersectoral work. Vulnerability, mitigation, and adaptation of the health sector**.**

1.0 The public health professional shall know and understand:

1.1 The basic concept of relationships between ecosystem, environmental degradation, pollution, and human health.
1.2 The dependence of human health on local and global ecological systems and the context of policies, practices and beliefs required to address global environmental changes (such as climate change, biodiversity loss and resource depletion).
1.3 The impact of major driving forces like industrialization, transport , rapid population growth and of unsustainable and inequitable consumption on important resources essential to human health including air, water, sanitation, food supply and living/housing and know how these resources vary across world regions.

2.0 The public health professional shall be able to:

2.1 Use an ecological public health model within a specific social-economic context to discuss how global forces impact health aiming to improve the promotion of health and management of environment and health risks and effects.
2.2 Applying the basic methods for Environment and Health Impact Assessment (EHIA)
2.3 Analyse the effects of air pollution on acute and chronic lung, cardiovascular disease and other systems diseases
2.4 Analyse the interactions between inadequate clean water supplies and good sanitation and diarrheal and parasitic diseases.
2.5 Analyse the relationship between the availability of adequate nutrition, potable water and sanitation and risk of communicable and chronic diseases.
2.6 Analyse the relationship between environmental pollution and cancers (air pollution, Radon and lung cancer; benzene and leukaemia etc.).
2.7 Analyse the relationship between Climate change and human health.

2.8 Communicate the environment and health risks and inform the public how the driving forces like globalisation and others affects environment and health inequalities within and between countries.
2.9 Develop the skills to provide evidence based support to policy makers in order to mitigate the effects of global environmental change on health.

2.4 GLOBAL MIGRATION AND MIGRANT HEALTH (Muhammad Wasif Alam, Vesna Bjegovic-Mikanovic)

Introduction:
Nowadays, global migration is considered even more important than in the past. The main reason for that is the number of migrants, which is steadily increasing at the end of the 20th century and will continue to grow in the twenty-first. In general, migrants are supposed to have bad opportunities for health as a consequence of their migrant status. The most important issue in analytical models for the health effects of migration is the type of migration – whether it is voluntary, involuntary, or irregular migration. Usually, migration does not bring improvement in social well-being and health. The wide variety of health conditions and consequences is associated with the profile of the mobile population: "what migrants bring, what they find, and what they build in the host country". Many authors stress three temporal and successive phases associated with individual movements: the pre-departure phase, the journey phase, and the post-journey phase. Though different in many ways they suffer from globally dominant health problems: Tuberculosis, trauma/rape/torture/PTSD, HIV/AIDS, cardiovascular disease etc. Prevention of the public health consequences is particularly relevant and important among the migrants and classified in three levels: primary, secondary, and tertiary. A clear strategy at the local, regional, and international levels is needed for efficient interventions. There is human right of migrants to be treated properly.

1.0 The public health professional shall know and understand:

1.1 The concept of a pandemic and how global commerce and travel contribute to the spread of pandemics.
1.2 The interplay between national and international conflict, interpersonal violence, and health as well as the direct and indirect threats to both individual and population.
1.3 Health threats posed by violent conflict and natural disaster, and ways in which such threats may extend beyond the borders of the country directly affected.
1.4 The health challenges (including accessing healthcare) that refugees, asylum seekers and other migrants are faced with during life in their country of origin.

2.0 The public health professional shall be able to:

2.1 Analyse the health risks related to migration, with emphasis on the potential risks and appropriate resources.
2.2 Consider the utility and limitations of common infection control and public health measures in dealing with local or global outbreaks.

2.3 Control outbreaks of communicable diseases such as measles in a context of local and international populations with varying levels of immunization.
2.4 Liaise with local or regional public health authorities and be aware of national and international public health organizations responsible for issuing health advisory recommendations.
2.5 Analyse general trends and influences in the global availability and movement of health workers.
2.6 Regard the impact on health of cross-border flows, including international trade, information and communications technology, and health worker migration.

2.5 SOCIAL DETERMINANTS OF HEALTH INEQUALITIES (Janko Jankovic)

Introduction:
The largest contribution to health inequalities both within and between countries around the world is attributable to the social circumstances in which people live and work, i.e. to the social determinants of health. Educational attainment, income, occupational category and social class are probably the most often used indicators of current socioeconomic status in studies on social inequalities in health which present differences in health that are unnecessary, avoidable, unfair and unjust. They are also systematic (not distributed randomly) and socially produced and therefore modifiable. The fairest way to combat against social inequalities in health is to improve the health of the most disadvantaged faster than that among the rich.

1.0 The public health professional shall know and understand:

1.1 The relationship between health and social determinants of health, and how social determinants vary across world regions.
1.2 The major social determinants of health and their impact on differences in life expectancy, major causes of morbidity and mortality and access to healthcare between and within countries (topics include absolute and relative poverty, income, education, employment status, social gradient, gender, ethnicity and other social determinants).
1.3 The relationship between health, human rights, and global inequities.

2.0 The public health professional shall be able to:

2.1 Define health inequity and health inequalities.
2.2 Demonstrate how one can inform policy makers about the importance of addressing health inequalities, and advocate for strategies to address health inequalities at a local, national or international level.
2.3 Describe major public health efforts to reduce disparities in global health (such as Sustainable Development Goals, Europe 2020 and Health 2020).
2.4 Analyse local, national or international interventions to address health determinants such as strategies to engage marginalized and vulnerable populations in making decisions that affect their health and well-being.

2.5 Analyze distribution of resources to meet the health needs of marginalized and vulnerable groups.

References:

1) Armed Forces Medical College (AFMC) Resource Group, GHEC Committee, India: Global health essential core competencies. At: https://lane.stanford.edu/portals/ihealth-pdfs/BasicCore_Competencies_Final2010.pdf (accessed 9th April 2017).
2) Dias M. Et al.: Global Health Competencies for UK Health Professionals. TECHNICAL REPORT · SEPTEMBER 2015. At: http://www.researchgate.net/publication/283086441 (accessed 9th April 2017).
3) Association of Schools and Programs of Public Health (ASPPH): The Global Health Competency model. At: www.aspph.org/educate/models/masters-global-health/ (accessed 9th April 2017).
4) Jogerst K et al.: Identifying Interprofessional Global Health Competencies for 21st Century. At: https://www.cfhi.org/sites/files/files/pages/global_health_competencies_article.pdf (accessed 9th April 2017).

2.6 GENDER AND HEALTH (Bosiljka Djikanovic)

Introduction:
While sex in genetically and biologically determined, gender is socially constructed identity that shapes many aspects of person's functioning and has implications on health as well. There are historically present gender disparities that are related to the power, decision making, and different societal expectations of women and men. Although gender norms and values are deeply rooted in the culture, they are not fixed and unchangeable. They might evolve over time and may vary substantially in different environments. Gender analysis aims to identify gender differences that will inform actions to address gender inequality. Gender mainstreaming in medical education is important for eliminating gender biases in existing routines of health professionals.

1.0 The public health professional shall know and understand:

1.1 The basic differences between sex and gender and their overall importance on health.
1.2 How different levels of development of civil society and human rights affect identification and respect of gender differences.
1.3 The factors that influence construction of gender identity, and the impact of gender identity on achieving full potentials for health, including an access to health promotion and disease prevention.
1.4 The historical perspective of gender differences and their impact on social functioning and health
1.5 The relationship between sex and other mediating factors with different health outcomes.
1.6 How gender affects different risk-taking behaviours and other mediating factors of the importance for disease prevention, treatment and rehabilitation.
1.7 How transgender identity is associated with different health outcomes.

2.0 The public health professional shall be able to:
2.1 Elaborate on differences and interrelationship between sex, gender and health, and corresponding challenges that appear at primary, secondary and tertiary level of prevention.
2.2 Identify windows of opportunities in public health for addressing gender differences that have an impact on health.
2.3. Use different tools and mechanisms that better recognise, identify and articulate gender differences in health-related matters.
2.4. Conduct proper gender analysis in order to identify gender inequities and gender inequalities that exist in certain communities and societies, with the relevance for health.
2.5 Apply gender mainstreaming, as a process of assessing implications for women and men of any planned action, including legislation, policies or programs, in any area, and at all levels.
2.6 Apply gender mainstreaming as an integral part of the design, implementation, monitoring and evaluation of policies and programs in all political, economic and societal spheres, so that women and men benefit equally.
2.7 Propose set of actions that would overcome gender gap in achieving the fullest potential for health.

2.7 STRUCTURAL AND SOCIAL VIOLENCE (Fimka Tozija)

Introduction:
Theoretical and conceptual basis is provided for understanding structural and social violence, collective violence and armed conflicts as a public health problem: definitions, typology, burden, context, root causes and risk factors, public health approach, structural interventions and multilevel prevention. General overview of public health approach, ecological model and human rights approach is presented. The Module also explains the impact of structural and social violence on health, human rights, the role of the health sector and suggests a number of practical approaches for prevention and policy intervention.

1.0 The public health professional shall know and understand:

1.1 The main concepts of Structural and social violence, collective violence and armed conflicts, human rights, public health approach, structural interventions and multilevel prevention.
1.2 The theoretical and conceptual basis of structural and social violence, and armed conflicts as a public health problem: definitions, typology, burden and context.
1.3 Root causes and risk factors for structural and social violence.
1.4 The main analytical methods and tools for structural and social violence: public health approach, ecological model and human rights approach as defined by the WHO.
1.5 The impact of structural and social violence on health and human rights.
1.6 The role of the health sector for prevention of structural and social violence.
1.7 Evidence-based multilevel prevention programmes for structural and social violence.
1.8 Health in all policies for prevention of structural and social violence.

1.9 Practical approaches for prevention and policy intervention for structural and social violence prevention.
1.10 The impact of resilient factors on structural and social violence prevention.

2.0 The public health professional shall be able to:

2.1 To demonstrate a basic understanding of the relationship between health, human rights and structural and social violence.
2.2 Apply analytical tools for structural and social violence: public health approach and ecological method.
2.3 Determine the magnitude, burden and economic consequences of structural and social violence applying WHO methodology.
2.4 Identify root causes and risk factors for structural and social violence at different levels and compare in different countries.
2.5 Perform literature review and critical reading for structural and social violence.
2.6 Do case problem analysis and review of evidence-based multilevel prevention measures for structural and social violence.
2.7 Translate knowledge in practice - consider and apply successful practices from other countries for structural and social violence.
2.8 Develop multilevel prevention programs for structural and social violence.
2.9 Identify methods for assuring prevention program sustainability.
2.10 Identify resilient factors to strengthen community capabilities, and contribute to reduction of structural and social violence.

References:
5) Armed Forces Medical College (AFMC) Resource Group, GHEC Committee, India: Global health essential core competencies. At: https://lane.stanford.edu/portals/ihealth-pdfs/BasicCore_Competencies_Final2010.pdf (accessed 20th December 2016).
6) Foldspang A, Otok R, Czabanowska K, Bjegovic-Mikanovic V. Developing the Public Health Workforce in Europe: The European Public Health Reference Framework (EPHRF): It's Council and Online Repository. Concepts and Policy Brief. Brussels: ASPHER, 2014. Available from:
http://www.aspher.org/download/27/ephrf_concept_and_policy_brief.pdf (accessed 21st December 2016).
7) Association of Schools and Programs of Public Health (ASPPH): The Global Health Competency model. At: www.aspph.org/educate/models/masters-global-health/(accessed 15th December 2016).
8) WHO. Global strategy on human resources for health: Workforce 2030. Geneva: Health Workforce Department 2016. Available from:
http://www.who.int/hrh/resources/pub_globstrathrh-2030/en/ (accessed 21st December 2016).
9) World Health Organisation (WHO): WHO GLOBAL COMPETENCY MODEL. At: www.who.int/employment/competencies/WHO_competencies_EN.pdf (accessed 1st December 2016).
10) Jogerst K et al.: Identifying Interprofessional Global Health Competencies for 21st Century. At:
https://www.cfhi.org/sites/files/files/pages/global_health_competencies_article.pdf (accessed 9th December 2016).

Further background reading:
1) EU Joint Action on Health Workforce Planning & Forecasting. http://healthworkforce.eu/ (accessed 19th December 2016).
2) WHO. Models and tools for health workforce planning and projections. Geneva: WHO Press 2010
3) TEACH-VIP 2 users' manual Training, Educating and Advancing Collaboration in Health on Violence and Injury. Geneva: VIP Department 2012.

2.8 DISASTER PREPAREDNESS (Elisaveta Stikova)

Introduction:
The Disaster and Emergency Preparedness and Response Core Competences were created to establish a common performance goal for the public health preparedness workforce. This goal is defined as the ability to proficiently perform assigned prevention, preparedness, response, and recovery role(s) in accordance with established national, state, and local health security and public health policies, laws, and systems. Much of an individual's ability to meet this performance goal is based on competences acquired from three sources: foundational public health competences, generic health security or emergency core competences, and position-specific or professional competences.

1.0 The public health professional shall know and understand:

1.1 The main definitions of disaster and emergencies (similarities and differences); role of the hazard and vulnerability in disaster occurrence.
1.2 The theoretical and conceptual basis of single and compound disaster, measurement of the consequences and threshold level of the responsibilities of the local/national/international communities in the scope of the required resources for planning and response during the local or statewide incident, disaster, and crisis.
1.3 The aim of the disaster/emergency management and main components of the disaster's management cycle
1.4 The basic principles for development of disaster preparedness and importance of the appropriate risk assessment analysis
1.5 The differences of the generic preparedness i.e. "all-hazard" and "specific" hazard's related preparedness process
1.6 The importance and the scope of the preparedness plan for the protection and of the critical infrastructure, across the ten community's essential sectors
1.7 The meaning and main components of the governmental, population/individuals and business preparedness planning activities
1.8 The definition of public health emergency and importance of appropriate public health emergency preparedness in the scope of the public health emergency functions
1.9 The specificity of the public health emergency preparedness plan and importance of the early warning and surveillance systems as a key elements for assessing of the state of emergency
1.10 The opportunities for using a combined remote sensing technology, Geographic Information Systems (GIS), spatial statistical techniques and mathematical models which can

help in modeling of the dispersion of the harmful agent and exposure of the population to the harmful agent.
1.11 The use of the new rapid detection and identification of unknown agents or confirmation of known agents that can cause disaster.
1.12 Being familiar with the structure and component of the hospital preparedness plan and infrastructure safety.

2.0 The public health professional shall be able to:

2.1 Apply the activities which are necessary for ensuring an effective disaster management in a pre-event (disaster mitigation) and in a post-event (disaster response) period, aiming to ensure an appropriate (pre-event) and effective (post-event).
2.2 Demonstrate basic understandings of disaster preparedness as a most effective disaster mitigation process.
2.3 Demonstrate operational skills to use administrative measures, to implement strategies, and to improve coping capacities in order to lessen the adverse impacts of hazards and to minimize the opportunity for development of disaster.
2.4 Apply analytical tools and to perform early and initial risk assessment.
2.5 Do specific preparedness plan for the protection and strengthen the resilience of the critical infrastructure of the community, across the ten essential sectors.
2.6 Develop the government preparedness actions grouped into five general categories: planning, resources and equipment, exercise, training and statutory authority.
2.7 Determine the differences of the public health functions in the prevention/mitigation and preparedness phases during public health emergencies.
2.8 Identify the 15 public health and health-care preparedness capabilities, divided in six core groups, as the basis for state and local public health and health-care preparedness.
2.9 Develop an emergency response plan (ERP) and associated early warning and surveillance functions, training and exercises using an “all-hazard/whole-health” approach applicable in public health emergency.
2.10 Know to use of remote sensing technology, Geographic Information Systems (GIS), spatial statistical techniques and mathematical models for modeling of the dispersion of the harmful agent and modeling of the exposure of the population to the harmful agent.
2.11 Be able to communicate and manage the need for use of the public national/international network of public health laboratories for rapid detection and identification of unknown agents and/or confirmation of known agents
2.12 Know to develop hospital preparedness plan taking into account such factors as the appropriateness and adequacy of physical facilities, organizational structures, human resources, and communication systems.

References:
1) Armed Forces Medical College (AFMC) Resource Group, GHEC Committee, India: Global health essential core competencies. At: https://lane.stanford.edu/portals/ihealth-pdfs/BasicCore_Competencies_Final2010.pdf
2) Dias M. Et al.: Global Health Competencies for UK Health Professionals. TECHNICAL REPORT · SEPTEMBER 2015. At: http://www.researchgate.net/publication/283086441
3) Association of Schools and Programs of Public Health (ASPPH): The Global Health Competency model. At: www.aspph.org/educate/models/masters-global-health/

4) World Health Organisation (WHO): WHO GLOBAL COMPETENCY MODEL. At: www.who.int/employment/competencies/WHO_competencies_EN.pdf
5) Jogerst K et al.: Identifying Interprofessional Global Health Competencies for 21st Century. At: https://www.cfhi.org/sites/files/files/pages/global_health_competencies_article.pdf

Further background reading:

1) Council on Linkages between Academia and Public Health Practice. Core competencies for public health professionals. At: http://www.phf.org/resourcestools/Pages/Core_Public_Health_Competencies.aspx
2) Centers for Disease Control and Prevention, Centers for Disease Control and Prevention. Public health preparedness capabilities: National standards for state and local planning. Atlanta, GA: Centers for Disease Control and Prevention. 2011
3) Subbarao I, Lyznicki JM, Hsu EB, Gebbie KM, Markenson D, Barzansky B, Armstrong JH, Cassimatis EG, Coule PL, Dallas CE, King RV. A consensus-based educational framework and competency set for the discipline of disaster medicine and public health preparedness. Disaster Medicine and Public Health Preparedness. 2008 Mar 1;2(01):57-68.

2.9 MILLENNIUM DEVELOPMENT GOALS (Marta Lomazzi)

Introduction:
The Millennium Development Goals (MDGs) are eight international development goals to be achieved by 2015 addressing extreme poverty, hunger, maternal and child mortality, communicable disease, education, gender equality and women empowerment, environmental sustainability and the global partnership. Most activities worldwide have focused on maternal and child health as well as communicable diseases, while less attention has been addressed to environmental sustainability and the development of a global partnership. In 2015, numerous targets have been at least partially attained. However, some goals have not been achieved, particularly in the poorest regions, due to different challenges. The post-2015 agenda is now set. The new goals, SDGs, reflect today's geopolitical, economic and social situation and adopt an all-inclusive, intersectoral and accountable approach.

1.0 The public health professionals shall know and understand:

1.1 What are the Millennium Development Goals, including targets and indicators?
1.2 Achievements and failures of MDGS at global, regional and national levels.
1.3 MDGs and inequalities: how and where the goals have or not reduced inequalities and disparities.
1.4 The impact of the MDGs in shaping the public health agenda 2000-2015, mobilizing the public health community and in revitalizing the development aid.
1.5 How progresses have been measured and evaluated. Availability and accountability of data on MDGs achievements and failures.
1.6 Whether and how MDGs have impacted local and global governance, policies set-up and education approaches.

2.0 The public health professional shall be able to:

2.1 Demonstrate a basic understanding of the relationship between MDGs, health, economic growth and governance.
2.2 Understand the tools and reports used to evaluate MDGs and make a critical reading of the results and articles. This should include also analysis and critical evaluation of the impact of donors in shaping the agenda and achieving the targets.
2.3 Determine the impact of MDGs at local, regional and global level.
2.4 Identify root causes and facilitators that impacted most the failure or achievements of MDGs.
2.5 Translate knowledge in practice - consider and apply successful practices from effective MDGs activities that can be applied in other contexts. Develop preventive programs on that basis.
2.6 Identify methods for assuring prevention program sustainability.

References:
1) UN - The Millennium Development Goals Report 2015 http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20%28July%201%29.pdf
2) Health in 2015: from MDGs to SDGs http://www.who.int/gho/publications/mdgs-sdgs/en/
3) Lomazzi, M., et al., MDGs – A public health professional's perspective from 71 countries. Journal of Public Health Policy, 2013. 34(1): p. e1-e22.
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2.10 HEALTH AND WELLBEING (Francesco Lietz)

Introduction:
Teach a man to fish and you feed him for a lifetime" they say: promoting well-being is not so distant a concept from teaching how to fish, since high levels of well-being are correlated to a reduction of diseases and mental disorders, and vice versa. Well-being can be studied at two different levels:
Internal/subjective; whose measures rely on how a respondent places him or herself on a scale; or external/objective; measured through demographics and material conditions.
The promotion of well-being has been indicated by the United Nations as one of the 17 sustainable development global goals SDG 3) to be achieved over the next 15 years. In order to face this workload public health professionals with the ability to think globally and act locally are needed.

1.0 The public health professional shall know and understand:

1.1 Main concepts of well-being, happiness, quality of life, wealth, and life satisfaction.
1.2 Main determinants of well-being: from the definitions to the potential applications in programs and interventions.

1.3 The historical background of the well-being's study.
1.4 The difference between the eudaimonic and the hedonic approach.
1.5 The optimal research tools for well-being in the different cultures and the different life stages.
1.6) The application of the theory in the context of the Sustainable Development Goals.
1.7 The different strategies of the health sector to implement well-being programs and initiatives.
1.8 The latest evidence about well-being from different theoretical perspectives.
1.9 How to predict future pathways of well-being on regional and national plan.
1.10 How can the different trajectories of well-being's determinants influence the health dynamics of a population.

2.0 The public health professional shall be able to:

2.1 Effectively differentiate well-being from other similar concepts, such as happiness and quality of life.
2.2 Choose the best measurement tools according the environment's requests.
2.3 Looking at the literature in order to determine the quality of well-being at every given moment.
2.4 Understand the importance of cross-culturality and different population groups in well-being assessment.
2.5 Analytically review the literature.
2.6 React on the base of the researches' results.
2.7 Optimize the process of communication knowledge in the scientific environment.
2.8 Taking under consideration the multidimensional aspect of well-being when developing prevention programs.
2.9 Anticipate future trends in order to assure program sustainability.
2.10 Empower the stakeholder at all levels so that they can strengthen community capabilities.

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2.11 THE GLOBAL FINANCIAL CRISIS AND HEALTH (Helmut Wenzel)

Introduction:
The economic situation influences the health status of a population in many ways. The financial crisis has now given greater weight on an old debate about the financial sustain-ability of health systems in Europe. Drivers of health expenditures will be critically analyzed. The vulnerability of public budgets and its consequences for health budgets is depicted. The toolset of politics, and policies applied by policy-makers will be analyzed. Managed care approaches are presented and evaluated.

1.0 The public health professional shall know and understand:

1.1 The interdepencies of health and "structural determinants of health"
1.2 The principles of the global financial market
1.3 The interdependencies of health and national economies at times of global market and global competition
1.4 The impact of competitive production processes at times of a global market on worker's health. E.g., the place of production heavily depends on the local production cost.
1.5 The relationship between unemployment, unsecure living conditions and related health problems
1.6 How fragile national economies cause falling budgets on all levels of a country
1.7 The interdependencies of national budgets and allocation of resources on health budgets
1.8 The financing gaps of health care and its possible causes
1.9 The constraints of financing and setting up health budgets
1.10 Understand the various policy measures to cope with decreasing budgets
1.11 Common measures to cope with discrepancy between needs and financial power
1.12The interdependencies of the financial crisis and economic crises in a global market and its dynamic nature
1.13 The concept of financial market and "frozen market" leading to shortage in the real economy
1.14 The four channels through which the "disease" spreads
1.15 The reasons of changing demand of health care by quantity and quality
1.16 The main drivers of health care demand

1.17 The operation and financing of health care systems with respect to their underlying national premises (Beveridge, Bismarckian etc.).
1.18 The advantages and disadvantages of the various national concepts to organise health care systems
1.19 Approaches to improve health care efficiency and sustainable financing
1.20 Managed Care approaches, their organisational structures and their operations
1.21 Integrated care approaches and their opportunities to improve cooperation and increase efficiency of provision of care

2.0 The public health professional shall be able to:

2.1 Demonstrate a basic understanding of the relationship between global economy and health
2.2 Critically analyse health care systems and their connected budgeting processes
2.3 Apply knowledge and skills needed for recommending a redesigning of health care systems
2.4 Apply analytical tools to identify particularly vulnerable areas of health care in constrained environment such as neonatal medical care
2.5 Identify imbalances in care delivery like the affordability of out-of-pocket purchased medicines among the elderly and retired citizens
2.6 Identify imbalances in access to the most expensive medical technologies such as targeted biologicals indicated in cancer and autoimmune diseases, radiation therapy; various implant-based interventional radiology, orthopedic and cardiovascular surgical procedures
2.7 To understand the relevance of catastrophic household expenditure imposed by illness among the world's poor residing in low and middle income countries (increased vulnerability during crisis evidenced)
2.8 Review the literature and design a case study for analysing the impact of the crises on health outcomes, based on secondary statistics.

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3.1 GLOBAL GOVERNANCE OF POPULATION HEALTH AND WELL-BEING (George Lueddeke)

Introduction:
Strengthening the health of populations and the health systems requires a "glocal" perspective being aware of the essential role of governments and to consider the adoption of a new mindset in meeting global challenges to planet health and well-being, applying, where appropriate and feasible, the 'One World, One Health' concept. Furthermore, there is the need for a new form of global governance that is 'fit for the 21st century' and is able to effectively respond to unprecedented environmental, societal, economic and geopolitical hurdles and lead the way to a safer, fairer and equitable future for all.

1.0 The public health professional shall know and understand:

1.1 How global trends in public health practice, commerce and culture contribute to health and the quality and availability of health services locally and internationally.
1.2 The role of key actors in global health including the World Health Organization, United

Nations, World Bank, multilateral and bilateral organisations, foundations, nongovernmental organisations (NGOs); and their interactions, power, governance and different approaches to global health (for example, emergency aid versus long term development and horizontal versus vertical approaches: Horizontal approach addressing a range of diseases and determinants of health, e.g. comprehensive primary care, versus a vertical approach focusing on one disease, e.g. a disease-specific immunization programme).
1.3 How global actors provide resources, funding and direction for health practice and research locally and globally, and the effects that this has on individual and population health.
1.4 How global funding mechanisms can influence the design and outcome of research strategies and policies, and how policies made at a global or national level can impact on health at a local level.

2.0 The public health professional shall be able to:

2.1 Describe different national models for public and/or private provision of health services and their impact on the health of the population and individuals.
2.2 Give examples of how globalization and trade including trade agreements affect availability of public health services and commodities such as patented or essential medicines.
2.3 Promote the function/intention of the SDGs and identify health-related objectives, including:

1. Reduce child mortality
2. Improve maternal health
3. Eradicate extreme poverty and hunger
4. Combat HIV/AIDS, malaria, tuberculosis and other diseases

2.4 Critically comment on policies with respect to impact on health equity and social justice.
2.5 Explain the advantages of collaborating and partnering and to select, recruit, and work with a diverse range of global health stakeholders to advance research, policy, and practice goals, and to foster open dialogue and effective communication.
2.6 Identify barriers to health and health services in low resource settings locally and internationally.
2.7 Describe barriers to recruitment, training and retention of human resources in underserved areas such as rural, inner-city and indigenous communities within high- and low-income countries.
2.8 Analyse the effect of distance and inadequate infrastructure on the delivery of health services (effects of travel costs, poor roads, lack of mailing address or phone system, lack of medicines, inadequate staffing, and inadequate and unreliable laboratory and diagnostic support).
2.9 Identify barriers to appropriate prevention and treatment programs in low-resource settings (low literacy and health literacy, user fees, lack of health insurance, costs of medicines and treatments, therapies and procedures, advanced presentation of disease, lack of provider access to management guidelines and training including continuing professional development, concerns regarding quality of care, real or perceived, cultural barriers to care, underutilization of existing resources, issues facing scaling up and implementation of successful programs).
2.10 Develop health service delivery strategies in low-resource settings, especially the role of community-based health services and primary care models.

2.11 Differentiate between and highlight the benefits and disadvantages of horizontal and vertical implementation strategies.
2.12 Refer to the essential medicines list and its role in ensuring access to standardized, effective treatments.
2.13 Explain how international policies affect health locally, for example policies relating to global markets in healthcare (such as the pharmaceutical industry) and global resources for health (such as medications and transplant organs).
2.14 Advise on the impact of trade regulations on health, for example through impact on access to clean water, taxation, tobacco use, alcohol and fast-food consumption, antibiotic use and health service provision.
2.15 Propose how countries may work together to address shared health burdens or threats such as pandemics and natural disasters.
2.16 Give examples how health can be a shared goal in conflict resolution and peace promotion at a local, regional, national and international level and investigate why governments may have competing aims regarding military and health intervention in conflict settings.
2.17 Advocate for global trade regulations that promote public health, for example in relation to tobacco, fast-food and alcohol.
2.18 Identify a organisation's emergency response plans (including pandemic preparedness) and attend local emergency preparedness training to learn about your role during an international health emergency.
2.19 Advocate for effective systems to facilitate global responses to international health emergencies, including timely, well-supported and appropriate movement of health professionals across borders during and after the event.
2.20 Participate in responsible social media use to promote health locally or globally, informed by an understanding of how telecommunications influence global and local health (for example by making health information available globally, and by enabling transnational advocacy about health issues).
2.21 Exhibit interpersonal communication skills that demonstrate respect for other perspectives and cultures.

3.2 HEALTH PROGRAMME MANAGEMENT (Christopher Potter)

Introduction:
Health development interventions are described as falling under four modalities: personnel, projects, programmes and policy reform initiatives underpinned by new financial support mechanisms, particularly sector-wide approaches (SWAps). These modalities are briefly analysed to provide an introduction to readers about how and why such interventions are used, and their strengths and weaknesses. It is emphasised that the modalities are not hard and fast entities but frequently overlap. Indeed one of the problems facing those designing and implementing interventions is the fuzzy nature of many management terms. Such issues as vertical and horizontal programme design and the transaction costs to governments who have to deal with many donors in an often relatively short-term and fragmentary manner are considered. SWAps are considered as one way of dealing with some of these issues but it is noted that as many other non-state stakeholders, including industrial and commercial interests, have entered the health development arena, the possible, although contended advantages, of SWAps have been compromised. Finally, it is recognised that the public

health challenges and their socio-political and economic contexts facing poorer countries are ever changing, so finding effective ways to deliver health development to the world's most needy will also be an on-going challenge.

1.0 The public health professional shall know and understand:

1.1 project management techniques throughout program planning, implementation, and evaluation.

2.0 The public health professional shall be able to:

2.1 Apply scientific evidence throughout program planning, implementation, and evaluation.
2.2 Design program work plans based on logic models.
2.3 Develop proposals to secure donor and stakeholder support.
2.4 Plan evidence-based interventions to meet internationally established health targets.
2.5 Develop monitoring and evaluation frameworks to assess programs.
2.6 Develop context-specific implementation strategies for scaling up best-practice interventions.
2.7 Plan, implement, and evaluate an evidence-based programme.

3.3 CIVIL SOCIETY ORGANISATIONS IN HEALTH (Motasem Hamdan)

Introduction:
The role of the civil society for health is increasingly recognized, mainly due to the historical development of Non-Governmental Organisations. Their role in health and social development as well as in global scale is nowadays indispensable. There should be, however, a regulating framework or code of conduct.

1.0. The public health professional shall know and understand:

1.1 The concepts of civil society organisations.
1.2 The historical development and the roots of NGOs work.
1.3 The types, features of NGOs and area of activity in different countries.
1.4 The methods of funding NGOs.
1.5 The role of NGOs in health system development, health policy, and health research.
1.6 The challenges of regulating and coordinating the work of NGOs.

2.0 The public health professional shall be able to:

2.1 To analyze the impact of NGOs on health, and health care systems.
2.2 To identify measures to enhance accountability and regulate the work of NGOs.
2.3 To apply analytical tools to understand the coordination and harmonization of the work of the civil society organizations to national health priorities.

3.4 UNIVERSAL HEALTH COVERAGE (Jose M. Martin-Moreno, Meggan Harris)

Introduction:
Nearly half of all countries worldwide are pursuing policies to achieve Universal Health Coverage. This undertaking has the potential to improve health indicators dramatically, contributing to human development and more generally to global equity. However, the path towards UHC is often rocky, and every country must work to channel resources, adapt existing institutions and build health system capacity in order to accomplish its goals. Global health advocates must understand what elements contribute to the success of UHC strategies, as well as how to measure real progress, so that they will be prepared to substantially contribute to policies in their own country or worldwide.

1.0. The public health professional shall know and understand:

1.1 ?

2.0 The public health professional shall be able to:

2.1 ?

3.5 PUBLIC HEALTH LEADERSHIP IN A GLOBALISED WORLD
(Katarzyna Czabanowska, Tony Smith, Kenneth A. Rethmeier)

Introduction:
Leadership is a well-known concept within organisational science, public health leadership has still not been well-defined. A recent WHO report acknowledges that contemporary health improvement is more complex than ever before and requires leadership that is *"more fluid, multilevel, multi-stakeholder and adaptive"* rather than of a traditional command and control management variety. Today's public health professionals therefore need to be able to lead in contexts where there is considerable uncertainty and ambiguity, and where there is often imperfect evidence and an absence of agreement about both the precise nature of the problem and the solutions to it. The impact of the evolving growth of the EU and its impact on the potential mobility of healthcare professionals to re-locate across many geographic regions has left, in some communities, a gap in the resources of seasoned healthcare leaders. While this trend opens new opportunities for emerging young healthcare professionals to take on greater roles guiding their healthcare systems, it has also produced a significant need for high quality leadership development educational needs. There is a need to discuss and provide professional development with a concentration on the vital role of leadership and governance play in public health globally. Indeed, the presence of competent leaders is crucial to achieve progress in the field. A number of studies have identified the capability of effective leaders in dealing with the complexity of introducing new innovations or evidence-based practice more successfully.

1.0 The public health professional shall know and understand:

1.1 To demonstrate diplomacy and build trust with community partners.
1.2 To communicate joint lessons learned to community partners and global constituencies.
1.3 To exhibit inter-professional values and communication skills that demonstrate respect for, and awareness of, the unique cultures, values, roles/responsibilities and expertise represented by other professionals and groups that work in global health.
1.4 To apply leadership practices that support collaborative practice and team effectiveness.

2.0 The public health professional shall be able to:

2.1 Communicate in a credible and effective way: Expresses oneself clearly in conversations and interactions with others; listens actively.

2.2 To produce effective written communications and ensures that information is shared.

Positive:
Speaks and writes clearly, adapting communication style and content so they are appropriate to the needs of the intended audience
Conveys information and opinions in a structured and credible way
Encourages others to share their views; takes time to understand and consider these views
Ensures that messages have been heard and understood
Keeps others informed of key and relevant issues

Negative:
Does not share useful information with others
Does little to facilitate open communication
Interrupts or argues with others rather than listening
Uses jargon inappropriately in interaction with others
Lacks coherence in structure of oral and written communications; overlooks key points

2.3 To produce and deliver quality results; is action oriented and committed to achieving outcomes.

Positive:
Demonstrates a systematic and efficient approach to work
Produces high-quality results and workable solutions that meet client needs
Monitors own progress against objectives and takes any corrective actions necessary
Acts without being prompted and makes things happen; handles problems effectively
Takes responsibility for own work
Sees tasks through to completion

Negative:
Focuses on the trivial at the expense of more important issues
Provides solutions that are inappropriate or in conflict with other needs.
Focuses on process rather than on outcomes
Delivers incomplete, incorrect or inaccurate work

Fails to monitor progress towards goals; fails to respect deadlines
Delays decisions and actions

2.4 To succeed as an effective and efficient health system manager

Positive:
Personal qualities (leadership):
Manages ambiguity and pressure in a self-reflective way.
Uses criticism as a development opportunity.
Seeks opportunities for continuous learning and professional growth.
Works productively in an environment where clear information or direction is not always available
Remains productive when under pressure
Stays positive in the face of challenges and recovers quickly from setbacks
Uses constructive criticism to improve performance
Shows willingness to learn from previous experience and mistakes, and applies lessons to improve performance
Seeks feedback to improve skills, knowledge and performance

Negative:
Demonstrates helplessness when confronted with ambiguous situations
Demonstrates a lack of emotional control during difficult situations
Reacts in a hostile and overly defensive way to constructive criticism
Fails to make use of opportunities to fill knowledge and skills gaps
Consistently demonstrates the same behaviour despite being given feedback to change
Transfers own stress or pressure to others

3.6 PUBLIC HEALTH ETHICS *(Alexandra Jovic-Vranes)*

Introduction:
The basic concept of public health ethics covers principles and values that support an ethical approach to public health practice and provide examples of some of the complex areas which those practicing, analysing, and planning the health of populations have to navigate; a code of ethics is the first explicit statement of ethical principles inherent to public health.

1.0 The public health professional shall know and understand:

1.1 The ability to identify an ethical issue.
1.2 Ethical decision-making.
1.3 Understanding the full spectrum of the determinants of health.
1.4 Understanding basic ethical concepts such as justice, virtue, and human rights.
1.5Building and maintaining public trust.

2.0 The public health professional shall be able to:

2.1 Recognizes the ethical value the public health community gives to prevention
2.2 Considers the full spectrum of the determinants of health
2.3 Identifies the range of options for interventions that correspond to the full spectrum of determinants of health
2.4 Recognizes the tension between community health and rights of individuals
2.5 Identifies the various conceptions of human rights, including those of the community
2.6 Defines the legal authority of public health agencies
2.7 Considers the values of diverse stakeholders when conducting needs assessments and evaluations
2.8 Recognizes the ways that advocacy and empowerment can be done
2.9 Represents the needs and perspectives of all relative stakeholders with particular attention to the disenfranchised
2.10 Describes issues of access and barriers to public health services
2.11 Recognizes the ethical priority the Public Health community gives to the health of the disenfranchised
2.12 Determines research priorities with an understanding of areas of the community that have been underserved
2.13 Specifies the meaning of consent at the individual and group level
2.14 Identifies the range of options for obtaining consent at the individual and group level
2.15 Recalls historical abuses of informed consent
2.16 Discerns the risk and benefits of not acting quickly or not acting at all
2.17 Identifies the range of options for responding to unethical practices observed outside of one's realm of responsibility
2.18 Recognizes that legal rules can fall short of the ethically required action
2.19 Describes the full spectrum of the determinants of health
2.20 Identifies best practices for achieving a particular health objective
2.21 Discerns and applies different methods of maintaining confidentiality
2.22 Describes the potential harms and benefits of giving information about individuals and communities while maintaining confidentiality
2.23 Identifies specific circumstances when maintaining trust may justify with holding or delaying the communication of information
2.24 Identifies best practices for one's areas of responsibility and action
2.25 Determines the range of appropriate actions for addressing unethical behavior
2.26 Identifies interests and conflicts of interest between potential partners
2.27 Articulates how public trust is built or undermined by partner collaboration
2.28 Establishes transparency about collaborations to maintain public accountability

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3.7 THE GLOBAL PUBLIC HEALTH WORKFORCE[3] (Milena Santric-Milicevic, Vesna Bjegovic-Mikanovic, Muhammad Wasiful Alam)

Introduction:
The progress of health sciences and technological innovations including modern medicine and health care technologies has increased our expectations for quality of life and health care. That has influenced the public health vision, the scope of public health interventions, and the composition of public health workforce. The outline the text includes description of the current situation of the public health workforce globally; future needs assessment; public health workforce challenges and mitigation globally. It underscores the demand for valid, reliable data sources and tools for mobilization of capacities of skilled public health staff in order to appropriately address global health challenges.

1.0 The public health professional shall know and understand:

1.1 The concepts of public health and public health workforce, including barriers and limitations of their application in the practice.
1.2 10 essential public health functions (services, operations) and the global framework for public health functions (see: WFPHA. "A global Charter for the Public's Health" and related documents at https://www.wfpha.org/charter/the-charter).
1.3 The roles and responsibilities of public health professionals and wider public health workforce at the global, regional, national and local level.
1.4 The 6 'action fields' of a comprehensive HRH Action Framework of the management systems of human resources for global public health : (1) HR management systems (2) leadership/governance, (3) partnership (4) finance, (5) education, and (6) policy and 4 phases (situation analysis, planning, implementation and monitoring, evaluation and research).
1.5 How global factors and country context influence the functioning of public health systems and the work of public health professionals.
1.6 How global trends in epidemiology, environmental change, economy, technology and medicines development, and resource availability may affect public health services supply and demand within and between countries.
1.7 Methods and tools used for workforce planning in public health.
1.8 How decisions are made about workforce resource allocation in the context of local and global resource constraints and the contribution of economic evaluations and population-based needs assessments to such decisions.

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[3] See also reference (1), p. 36 ff.: 1A1,3,4; 1B,C,D; 2A4; 2B7-9; 2C2; 3A7, 3B3; 3C2; 3D3; 4A,B; 5A,D; 6A; 6B2-5; 6C; 7A; 7B, 7C; 7D; 8 A; 8B;

1.9 In the context of resource limitation, especially workforce, how best to identify key partners and work effectively and efficiently with the stake holders.

2.0 The public health professional should be able to*:*

2.1 Efficiently access global health workforce data from national and international sources such as the WHO Global Health Observatory (GHO) data and understand the limitations of these data.
2.2 Identify and compare services delivered by the public health professionals across countries and the alignment with public health priorities.
2.3 Undertake the public health workforce analysis using the 6 action fields and 4 phases.
2.4 Examine the major governance and organizational structures and mechanisms for provision of public health services nationally and internationally.
2.5 Examine the drivers of health worker migration, and the impacts of such migration on health systems, as well as the wellbeing of health professionals and health service users.
2.6 Consider successful practices from other health systems to improve national public. health services equity, efficiency, access, quality applied to address global public health challenges.
2.7 Identify and compare public health workforce planning and development systems across countries.
2.8 Use methods for assessing the public health workforce requirements (services and capacities) locally and globally.
2.9Design sustainable workforce development strategies for resource-limited settings.

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2) Foldspang, A. on behalf of ASPHER: Public Health Core Competences for Essential Public Health Operations. Volume 3, Brussels 2016. At: http://aspher.org/download/76/booklet-competencesephos-volume-3.pdf

3.8 EDUCATION AND TRAINING OF PROFESSIONALS FOR GLOBAL PUBLIC HEALTH (Suzanne Babich, Egil Marstein)

Introduction:
By addressing the critical need for public health education and training within the global health workforce, we have in this program an opportunity to contribute substantially to efforts to improve the health of people worldwide through improved project management and resource application. Topics introduced and discussed address the complexities of working with country specific agents, organizational representatives and formal and informal stakeholders who may influence the outcome of global health operations.

1.0 The public health professional shall know and understand:

?

2.0 The public health professional should be able to*:*

2.1 Critique policies with respect to impact on health equity and social justice
2.2 Describe the roles and relationships of the entities influencing global health
2.3 Analyze the impact of transnational movements on population health
2.4 Analyze context-specific policy making processes that impact health
2.5 Describe the interrelationship of foreign policy and health diplomacy
2.6 Conduct a situation analysis across a range of cultural, economic, and health contexts

References:
1) Association of Schools and Programs of Public Health (ASPPH): The Global Health Competency model. At: www.aspph.org/educate/models/masters-global-health/

3.9 BLENDED LEARNING (Željka Stamenkovic, Suzanne Babic)

Introduction:
Blended learning is an educational model with great potential to increase student learning outcomes and to create new roles for teachers. In this course you will learn about and then develop tools to build your own blended learning programme.

1.0 The public health professional shall know and understand:

1.1 Main concept of blended learning and 4 basic blended learning models: (1) Rotation model, (2) Flex model, (3) A La Carte model and (4) Enriched Virtual model.
1.2 The differences between blended learning models and when each model should be applied.
1.3 How to integrate face-to-face and online learning in order to improve the learning outcomes.
1.4 How to implement blended learning and successfully accomplished blended learning process.
1.5 The main drivers of blended learning.
1.6 The advantages and disadvantages of blended learning for teachers.
1.7 The advantages and disadvantages of blended learning for students.
1.8 How global trends in technology may affect blended learning in public health in the future.

2.0 The public health professional shall be able to:

2.1 Use the technology tools and resources in order to support blended learning.

2.2 Work in different environments and have the flexible time schedule.
2.3 Know when blended learning is the best choice for the particular course.
2.4 Design a successful blended learning strategy and identify methods for assuring successfully accomplished blended learning process.
2.5 Target learning opportunities.
2.6 Act as a learning facilitator.
2.7 Constantly support students who are learning different things, at different paces, through different approaches.
2.8 Participate in students' process of learning.

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3) Donoghue F (2011). The Strength of Online Learning. The Chronicle of Higher Education. http://chronicle.com/blogs/innovations/the-strengths-of-online-learning/29849 (Accessed on December 31, 2016).
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6) LEPHIE. Leaders for European Public Health. http://www.lephie.eu (Accessed on December 31, 2016).
7) U.S. Department of Education, Office of Planning, Evaluation, and Policy Development, Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies, Washington, D.C., 2010.

3.10 GLOBAL HEALTH LAW (Joaquin Cayon)

Introduction:
Transnational public health problems have been traditionally addressed through international health law whose proper implementation faces two important handicaps: the absence of an international authority that can enforce it, and the absence of a comprehensive concept. Despite this, international agreements and treaties are among the most important intermediate public health goods because they provide a legal foundation for many other intermediate products with global public health benefits. Nowadays, according to the emergence of the idea of global public health, a new concept -"Global Health Law"- has been born. There is an important distinction between international health law and Global Health Law. International health law connotes a more traditional approach derived from rules governing relations among states. On the other hand, Global Health Law is developing an international structure based on the world as a community, not just a collection of nations. There is also an important international trend leaded by some prestigious scholars who have urged adoption of a legally binding global health treaty: a framework convention on global health grounded in the right to health. In this context, an interdisciplinary approach to global public health inevitably requires the study of Global Health Law for any healthcare professional. It is undoubtedly necessary to study and analyze the emergence and development of Global

Health Law just because it arises as an important tool to address the phenomenon of globalization of health. In this regard, the future of global public health is directly dependent on the strength of Global Health Law understood in a comprehensive way.

1.0 The public health professional shall know and understand:

1.1 Theoretical and conceptual basis of Global Health Law.
1.2 The rationale of studying Global Health Law.
1.3 The increasingly interactive relationship between Global Health Law and Global Public Health.
1.4 The role of Global Health Law as an important tool to deal with the phenomenon of globalization of health.
1.5 Differences between International Health Law, Global Health Law and Global Health Jurisprudence.
1.6 How Global Health Diplomacy brings together the disciplines of public health, international law and economics and focuses on negotiations that manage the global policy environment for health.
1.7 How International Trade Law, International Labour Law and International Humanitarian Law impact on national health systems.
1.8 How the human rights approach constitutes an important strategy for challenging globalization's effects.
1.9 The connection between the prevention principle to sustainable development and international legal obligations regarding cross-border pollution.
1.10The challenge of a legally binding Global Health framework convention grounded in the right to health.

2.0 The public health professional shall be able to:

2.1 Demonstrate a basic understanding of the relationship between Global Health Law and Global Public Health.
2.2 Develop skills for critical analysis of legal data and health information.
2.3 Develop critical thinking skills and explore critically health systems from a legal-normative perspective.
2.4 Do literature review and critical reading for globalization of health and the role of law.
2.5 Identify the main international treaties on communicable disease control, world trade, environmental protection and working conditions that impact on public health.
2.6 Employ a comprehensive and multidisciplinary approach for the analysis of the role of global law as a determinant of health.
2.7 Identify key points to be included in a future global framework on public health.
2.8 Identify human rights and public health issues involved and affected by international treaties.
2.9 Compare differences between national and international legal framework on public health and develop proposals to improve health legislation both at national and international level.
2.10 Apply basic legal tools for developing, exploring, and evaluating global health initiatives.

References:
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https://lane.stanford.edu/portals/ihealth-pdfs/BasicCore_Competencies_Final2010.pdf
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www.aspph.org/educate/models/masters-global-health/
4) Berkman BE, Rothemberg KH (2012): Teaching Health Law, J Law Med Ethics 40(1):147-53.
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7) Rowthorn V, Olsen J (2014): All together now: developing a team competency domain for global health education, J Law Med Ethics 42 (4): 550-63.
8) World Health Organisation (WHO): WHO Global Competency Model. At:
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3.11 HUMAN RIGHTS AND HEALTH (Fiona Haigh)

Introduction:
Human Rights and Health are intrinsically linked. Health policies and practice can impact positively or negatively on rights and in turn human rights infringements and enhancements can influence health. Increasingly human rights based approaches are being used to strengthen public health policies and programs and as a powerful tool to advocate for the action on the social determinants of health.

1.0 The public health professional shall know and understand:

1.1 How social, economic, political or cultural factors may affect an individual's or community's right to health services (e.g. availability, accessibility, affordability, and quality).

1.2 The relationship between health and human rights.

The public health professional shall be able to:

2.3 Analyse the right to health and how this right is defined under international agreements such as the United Nations' Universal Declaration of Human Rights or the Declaration of Alma-Ata.

3.12 GLOBAL FINANCIAL MANAGEMENT FOR HEALTH (Ulrich Laaser)

Introduction:
World population growth takes place predominantly in the poor countries of the South whereas most of the resources are available in the North. The economic inequalities are related to key health indicators. Although Official Development Assistance (ODA) and Development Assistance for Health (DHA) grew considerable during the last decade the objective of 0.7% of the Northern GDP to be transferred to the South has not been reached by far. In order to correct the main weaknesses the international community agreed on the so-called Paris indicators but failed the set timelines. The underlying reasons may be sought in the fragmentation and incoherence of international financial assistance.

1.0 The public health professional shall know and understand:

1.1 The major social and economic determinants of health and their effects on the access to and quality of health services and on differences in morbidity and mortality between and within countries.
1.2 The deeper reasons for the gap in wealth between the South and the North corresponding to vast disparities in standards of living, health, and opportunities.
1.3 The structures of international financial management in the health sector.
1.4 The main terminologies of ODA and DAH.
1.5 The five principles of the Paris Declaration on Aid Effectiveness and the results of the subsequent conferences.
1.6 The key global strategies to reduce the North-South gap including SDG 3.
1.7 How to analyse the critical aspects of loans to developing countries regarding intergenerational effects, and monetary back flows to the donors for experts and equipment.
1.8 Why capacity strengthening means sharing knowledge, skills, and resources for enhancing global public health programs, infrastructure, and workforce to address current and future global public health needs.
1.9 Why assistance to developing countries is increasingly considered a moral obligation, although more often declared in resolutions than in deeds.

2.0 The public health professional shall be able to:

2.1 Consider the underlying reasons for the failure in efficiently organizing international assistance as there is the extreme fragmentation and therefore ineffectiveness of international aid, and the insufficient coordinating capacities and competences in the national ministries of health making it difficult to secure ownership.
2.2 Identify the deficits of Global Governance and to implement interim strategies to strengthen regional collaboration.
2.3 Follow up and promote the latest evaluation of the Paris indicators.
2.4 Advocate effectively for an increase in ODA to reach 0.7% of GDP of donor countries and for an increasing share of DAH.
2.5 Argue and act against imbalances in ODA and DAH due to political and economic interests of the donor countries.

2.6 Design global, regional, national and local structures, organisational principles and mechanisms to improve and sustain global health and well-being, including universal health coverage.
2.7 Work in a constructive and contributing way in the environment of a Sector-Wide Approach or pool-funding.
2.8 Contribute to the management of a Medium Term Expenditure Framework and help to establish NHAs.
2.9 Contribute to the improvement of debt and debt relief management as important steps towards addressing the massive inequalities that currently deform global relationships and enable debtor countries to make a fresh start towards genuine social and economic development.
2.10 Promote a code of ethics for NGOs taking into consideration their increasing relevance in channelling aid to developing countries.
2.11 Conduct a situation analysis across a range of cultural, economic, and health contexts.
2.12 Develop a network of international health professionals for enhancement of professional work in areas of mutual interest.