

Advances in Public Health (MMD-995)

Credit Hours 3 (3-0)

Course Description

The importance of Public Health in the 21st century cannot be denied. The emerging threats of novel diseases like COVID, their ease of transmission to populations all over the world, production of bioweapons and their use in terrorism, pandemic health challenges like obesity, maternal & child health, drug abuse, mental health issues, environmental & occupational impacts on people's health and the socio-political impact of health policies, are all linked to Public Health. Through Public Health education, the health of the populations can be improved and the responsibility of providing health protection to the less privileged can be effectively addressed.

Educational Objective

- The goal of this course is to prepare students for the multi-disciplinary approaches of Public Health by exposing them to the various facets of Public Health concepts.
- This course aims to provide an overview of the Public Health by examining current challenges presented by globalization, malnourishment, financial complications and social inequality and unavailability of health services etc.
- This will create knowledge-based awareness in students and encourage to work towards solving the issues affecting Public Health at large.
- Investigate, justify and interpret current approaches addressing Public Health issues.

Course Outcomes

On successful completion of this subject, students will be able to:

- Examine Public Health through its historical context
- Understand demographic and epidemiological transitions of Public Health

- Critically examine and reflect on current Public Health issues and challenges (malnourishment, globalization, financing health)
- Analyze Public Health problems and evaluate interventions and policy alternatives using the problem-solving methodology and use this information in the evaluation of current Public Health issues
- Understand how using health informatics, digital health and social marketing can help ensure better and swift health services to citizens.
- Investigate, justify and interpret current approaches addressing Public Health issues.

Course Contents

1. Introduction to Public Health

- Introduction
- History of Public Health
 - Evolution of Public Health
- Multiple determinants of health/ foundations of Public Health
- Measuring health status

1. Trends in Public Health

- Demographic and epidemiological transitions
- Economics to equity in health
- Globalization and its impact on Public Health

2. Population health/ global health

- Global Public Health
 - Social, behavioral and cultural factors in Public Health
- Global health challenges and governance
- Global health innovations
 - Precision health

3. Nutrition and Public Health

- Public Health nutrition & nutrition promotion
- Food & nutrition monitoring and surveillance
- Maternal and child nutrition
 - Child health

- Maternal health
 - The sexual and reproductive health agenda
 - The long shadow of childhood undernutrition
 - Precision nutrition
4. Health systems
 - Introduction to health systems
 - Delivering health services/ access to medicine
 - Health systems financing
 - Political economy of health systems and universal health coverage
 - Working towards health for all
 5. Public Health informatics
 - Introduction to health informatics
 - Information design and content management
 - Concepts and issues in healthcare computing
 - Digital health
 6. Critical and upstream social marketing
 - Social marketing principles and practice
 - Applying theory and research in social marketing
 7. Public Health in the 21st century
 - Health and sustainable development
 - The threat of antibiotic resistance
 - The challenge of ageing populations
 - Ethical challenges in Public Health intervention
 - The future of Public Health

Recommended Books

1. Basch, P. F. (1999). *Textbook of international health*. Oxford University Press, USA.
2. Brownson, R. C., Baker, E. A., Deshpande, A. D., & Gillespie, K. N. (2017). *Evidence-based public health*. Oxford university press.

3. Detels, R., Beaglehole, R., Lansang, M. A., & Gulliford, M. (2011). *Oxford textbook of public health*. Oxford University Press.
4. Malin, N., Manthorpe, J., & Wilmot, S. (2002). *Key Concepts and debates in Health & Social Policy*. Open University Press.
5. Porter, D. (2005). *Health, Civilization and the State: A History of Public Health from Ancient to Modern Times*.
6. Lederberg, J., & Davis, J. R. (Eds.). (2000). *Public health systems and emerging infections: assessing the capabilities of the public and private sectors: Workshop summary*. National Academies Press.
7. Burnham, G. M., & Abdallah, S. A. (2008). *Public health guide for emergencies. Disaster definitions. 2nd ed. Baltimore: Johns Hopkins Bloomberg School of Public Health Publishing*.
8. Kappas, M., Groß, U., & Kelleher, D. (2012). *Global health-a challenge for interdisciplinary research*. Universitätsverlag Göttingen.