

## Module C2:

### Application of a Public Health Framework to the Health of Young People Aged 10-19

**General Goals: for learners. By completing the module the participant will be able to:**

- I. Understand the core concepts of public health
- II. Consider the health problems of adolescence within a public health framework
- III. Utilise a public health framework to develop effective action to improve the health of young people

**Entry Scenario:** *The entry scenario addresses a variety of issues and problems associated with the module topic. It may be used at the beginning of the course to stimulate the students to identify their own needs and interests. The results may be utilized by the individual to assess own learning process, or be integrated with class objectives.*

#### **Entry Scenarios**

1. You are working as a senior paediatrician in a city where there is a large petroleum chemical plant that is the single major employer of the immediate population. Your patients include young people with respiratory infections. Recent news stories raise the question of the dangers to the population of the ammonia from the chemical factory. You become aware that the respiratory diagnoses you are making may relate to this public health concern. What considerations will you make in deciding your course of action?
2. The hospital data of your country show an increase in admissions of injured adolescents with high alcohol blood level. Recent entry of your country into the EU has resulted in a decrease of the price of all alcoholic beverages. The legal age at which an adolescent can purchase and consume alcohol in a public place is 16. The son of the minister of health was recently admitted in a hospital in semi-coma with a 2% alcohol level. Your new minister of health has been lobbied both by the wine makers and the main alcohol control group to take action. You, as the director of public health, are asked to advise your minister.

## Goal I: Understand the core concepts of public health

|      | Training objectives  | Methodology  | Activities, issues and question   |
|------|--|--|---|
| KNOW | <p><b>A. Select/produce a definition of ‘public health’ that best illustrates how PH serves the goals of adolescent health, giving consideration to the following elements:</b></p> <ul style="list-style-type: none"> <li>- Population focused</li> <li>- Health concerns of an entire community</li> <li>- Determinants of injury, disease and health</li> <li>- Ecological model</li> <li>- Focus on population outcomes</li> <li>- Promotion of healthy practices and behaviours</li> <li>- Prevention orientation: primary, secondary, tertiary</li> </ul> <p><b>B. Describe the scope of public health practice, using the wheel (annex 1)</b></p> | <p>Class discussion using the Visualisation in participatory programming (VIPPP) technique</p> <p>Group discussion</p> | <p>As an introduction to the topic, each participant writes on a separate sheet 3 concepts that for them define public health. These sheets are then pinned on the wall in clusters according to the common ideas. Compare the different concepts with some commonly held definitions of public health, such as:</p> <p>‘Health is a state of complete physical mental and social wellbeing and not merely the absence of disease or infirmity.’ (WHO)</p> <p>‘The art of using science in the context of politics, to achieve optimal health for the greatest number of people.’ (Anonymous)</p> <p>‘The science and art of preventing diseases, prolonging life and promoting health through organised efforts of society.’ (Acheson)</p> <p>‘Promoting the ability to resist the strains and stresses of a physical, mental and social nature, so that they do not lead to a reduction in life-span, function or well-being.’ (Kohler)</p> <p>Discuss how ‘public health’ relates to the purposes of adolescent health and what distinguishes it from the clinical approach.</p> <p>Divide the participants into four groups. Each group is assigned four spokes of the wheel at left to do the following exercise. Using one of the entry scenarios or the scenario in annex 2, discuss how a public health person would take action according to the sixteen areas in the wheel. After the group work, reconvene the class to put ‘the wheel together’ with each group presenting an action they would take for each spoke of their wheel.</p> |

## Goal II: Consider the health problems of adolescence within a public health framework

|             | Training objectives  | Educational Methodology                          | Activities, issues and question  |
|-------------|--|--|--|
| <b>KNOW</b> | <p><b>A. List the major threats to health (morbidity and mortality) of young people in general (e.g. accidents)</b></p> <ul style="list-style-type: none"> <li>- Prevalence</li> <li>- Impact on health</li> </ul> <p><b>B. Consider the multifactorial determinants of major health related behaviours of young people and their long-term impact on health</b></p> <ul style="list-style-type: none"> <li>- Determinants</li> <li>- Ecological model</li> <li>- Role of politics and profit motives</li> </ul> | <p>Interactive lecture.<br/>Group discussion</p> | <p>Participants bring and present epidemiological data from their own country/region, by gender and age.</p> <p>Using an ecological model (see Annex 3) discuss how the determinants of health (including: gender, biological, psychological and sociological/political/legal, socio-economic, geographic influences) impact the causes of mortality and morbidity and how these influences vary over time and in different settings.</p> <p>Discuss the relationship between young people's behaviours and their future adult behaviours and health status.</p> |

### Goal III: Play an active part in developing effective public health action to improve the health of young people

|        | Training objectives   | Educational Methodology                             | Activities, Issues and Questions   |
|--------|---|---|--|
| SKILL  | <b>A. Identify the major sources of information concerning <i>effective</i> public health interventions in the field of adolescent health</b>   | Mini lecture<br>Group discussion                    | Lecturer briefly reviews search approaches and presents some results from using Cochrane and other data bases, pointing out the limitations of transferring interventions into different contexts (i.e. cultures).<br><br>Discuss the criteria for assessing the evidence of effectiveness of an intervention. Also, discuss criteria for assessing interventions that have <i>not</i> been evaluated.<br>(See reference 3)  |
| KNOW   | <b>B. Understand the impact of policy and policy making in the process of developing and implementing interventions</b>   |   | Participants write down policies for their countries that affect adolescent health-related behaviours. Pin up these policies under groupings of 'national', 'regional' or 'local', noting whether policies are guidelines or grounded in law. Does a policy affect institutions or professional conduct? Do different countries have opposite policies for the same behaviour and why?<br>Compare the impact the policies would have on the development and implementation of public health initiatives for adolescents. What kinds of policies facilitate and what kind hinder effective interventions for adolescents?   |
| SKILLS | <b>C. Identify the stakeholders and others who can implement effective public health interventions. Be knowledgeable about advocacy (see module).</b><br><br><b>D. Consider the factors which are likely to influence the implementation of effective public health interventions in the field of adolescent health</b> | Objectives C and D: role play with group discussion | For Objectives C and D: role play entry scenario 2 with participants taking the different parts of parents, politicians, health professionals, wine makers, alcohol control group and young people. What concerns and influencing factors (e.g. political willingness, economic, cultural, religious, and other social factors) does each group bring to the discussion? How can these be integrated in the process of formulating a response to the problem?<br>Suggest criteria to evaluate and prioritise interventions such as cost, effectiveness, political expediency, and expected outcomes. Propose strategies to address the political and profit interests in alcohol consumption.<br>Consider the value of including national and local politicians, leaders of businesses, religious leaders, sporting figures, and young people themselves to implement an |

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| ATTIT | <b>E. Review one's own personal preparedness and willingness to be involved.</b> | Discussion in pairs | intervention.<br><br>Briefly discuss in pairs what personal factors (e.g. time, professional reputation, beliefs about role) affect one's ability and willingness to participate in public health initiatives for the health of young people. Reflect on the role of the health professional in society. |
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## Resources

Epidemiology teaching materials from CDC

<http://www.cdc.gov/excite/>

The Hong Kong Polytechnic University. Adolescent Health Concerns: A Public Health Approach in Planning For Adolescent Health & Development

<http://www.youthnet.org.hk/jobaid/Module%202.pdf>

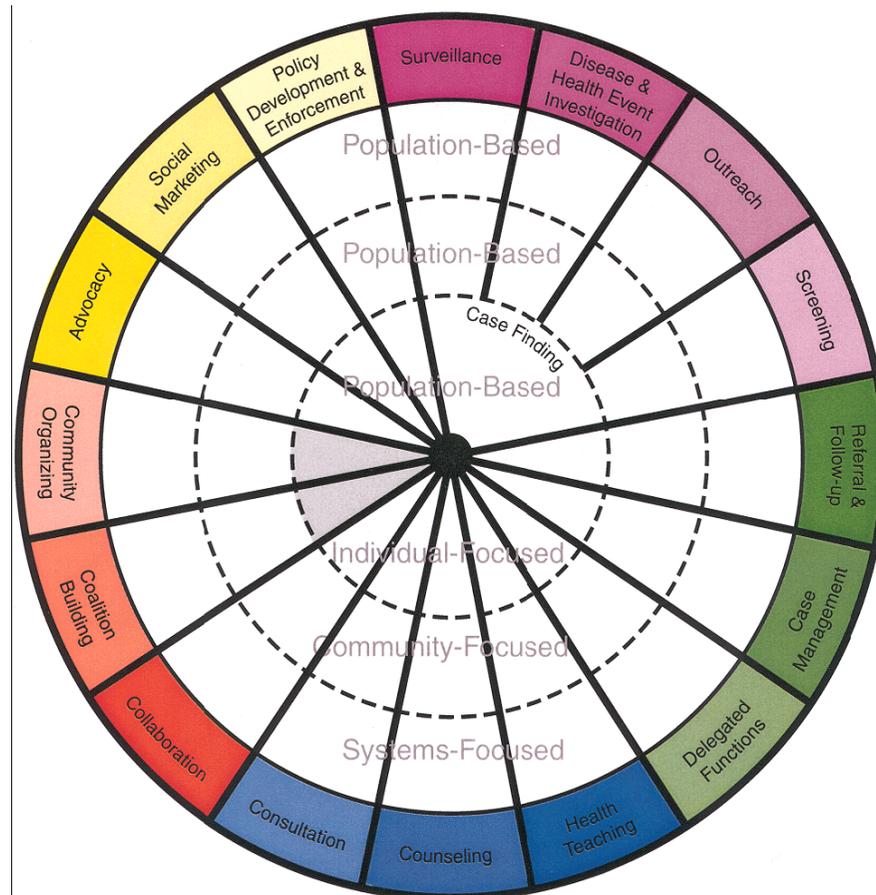
Databank in the field of evidence based medicine, prevention and health promotion

<http://www.cochrane.org>

A document on evidence in the field of public health

<http://www.alliance4usefulevidence.org/assets/Squaring-the-Circle-by-Derrick-Johnstone.pdf>

**Annex 1:** 'Scope of Public Health Wheel' definitions



The PH Interventions Model, commonly called "The Wheel of Interventions," focuses on 16 population-based interventions, each of which can be performed at 3 different levels of practice: individual and family-focused interventions, community-focused interventions, or systems interventions. A 17<sup>th</sup> intervention, case-finding, is focused at the individual and family level only. The *PHN Interventions Model*, developed by public health nurses at the Minnesota Department of Health, describes the scope of public health practice (Keller, Strohschein, Lia-Hoagberg, & Schaffer, 1998; Rippke, Briske, Keller, & Strohschein, 2000). The PHN Interventions Wheel defines the varied leadership roles of health professionals on individual, community and systems levels and speaks to the need for multidisciplinary teams that encompass the array of skills and knowledge for all aspects of public health. It embraces health



professionals' capacity to envision and provide a unifying force that creates synergy among a host of disciplines and resources. All Minnesota public health nursing departments throughout the state, as well as across the nation, have adopted the PHN Wheel as their framework for practice.

**Annex 2:** scenario:

You are a primary care clinician whose office is in a deprived part of a large city. On a regular basis (averaging three a week) you are seeing young women aged between 14 and 17 who are pregnant, a majority of which want to have an abortion. After six months of referring these cases to the local hospital gynaecology clinic, you realise that if anything the problem is getting worse. A review of your case records confirms your impression. You begin to realise that you should have a greater role in preventing these girls from getting pregnant in the first place, particularly as a large number of them attend local schools in which you provide services. Where do you go from here in order to improve the situation?

**Annex 3: Ecological Model for Adolescent Health and Behaviors**

