Urbanization and Health in the Developing World

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Learning objectives

1. Describe current changes in the demographics of urban centers
2. Discuss the emerging health problems related to increased urbanization
3. List the components of a healthy city
4. Describe core components of a healthy cities project
5. List possible solutions to the emerging health problems caused by urbanization
Demographic Trends in Urban Centers

• The world in becoming increasing urbanized.
• In 2007, for the first time in human history, more than half of the people will be living in cities.  
  Between 1990 and 2025 the urban population worldwide is expected to:
  – double
  – increase from 2.4 billion to 5.5 billion people
  – rise from 63% to 85% of the population in developing countries

Demographic Trends in Urban Centers

• Sustainability of these urban centers is a concern due to the increase in the percent of the population living there combined with the overall population increase

• Fundamental to the issues of sustainable development is human health

“Human beings are at the centre of concern for sustainable development. They are entitled to a healthy and productive life in harmony with nature.”

While the trends of urbanization are occurring worldwide, it is accelerating in developing countries. This growth has lead to concerns about the sustainability of these urban centers. Growth in the world population, combined with the movement toward living in urban centers, is causing a justified concern about the quality of life in these urban centers and the life-supporting capacity of the planet ecologically and socially. Therefore, an emphasis needs to be placed on the environmental concerns within a social and economic framework, starting with the needs of the people.

References:
Emerging Health Problems

- Environmental
- Housing
- Social
- Lifestyle

The emerging health problems in urban areas are integrated. For example, when the air quality is poor (an environmental issue) and people smoke (a lifestyle issue) the combined factors of the individual issues may cause the health problems to evolve or worsen.

In addition, one problem can cause another. For example, if there is a high crime rate (a social problem) then the people living in the area may be physically inactive (a lifestyle issue) because of the fear of playing in the parks, going for walk, etc. caused by the high crime rate.
Emerging Health Problems

Environmental

- The problems related to the environment can stem from two factors, (1) global changes and/or (2) other problems related to overpopulation. Some of these problems are a combination of both factors.
- Examples include air, water, and noise pollution; ozone depletion; food safety; natural resource depletion; and climate changes

These environmental problems can cause or exacerbate many other problems such as:

- Poor air quality can trigger asthma and allergies or contribute to physical inactivity
- An unclean water supply can cause the transmission of infectious diseases though the water supply or through food (waterborne and foodborne diseases)
- Climates changes can cause deaths from extreme heat or cold
- Noise can cause sleep disturbances, and hence poor performance at work and in school
- Lead poisoning leading to developmental and behavior problems
- Second-hand smoke and exposure to carcinogens can cause cancer
- Overall, poor environmental quality contributes to 25–33% of global ill health.
Emerging Health Problems

Housing

• Physical, mental, and social health is effected by living conditions
• Examples include lead exposure, noise, asbestos, mould growth, crowding, respiratory disease, spread of infectious diseases, accidents, and mental illness

Health impacts of inadequate housing conditions are a complex issue involving a variety of exposures (physical, chemical, biological, building, and social factors) and diverse health outcomes (asthma and allergies, respiratory diseases, cardiovascular effects, injuries, poisoning, mental illnesses, etc.). Although some of the linkages between housing conditions and health outcome have been well documented, an overall magnitude of burden of housing-related disease has not been synthesized.
Emerging Health Problems

Social

• With issues such as overcrowding, lack of resources, poverty, unemployment, and lack of education and social services, many social problems can evolve.

• Examples include crime, violence, drug use, high school drop-out rates, and mental health problems.
Notes on Emerging Health Problems:

Social problems can lead to health problems such as:
- Accidents and cirrhosis of the liver caused by alcohol
- Malnutrition caused by poverty
- Suicide lack of mental-health services
- Injury caused by drugs or stress

Poverty is the single largest determinant of health, and ill health is an obstacle to social and economic development. Poorer people live shorter lives and have poorer health than affluent people. This disparity has drawn attention to the remarkable sensitivity of health to the social environment.

Mental health accounts for almost 20% of the burden of disease in the WHO European Region and mental health problems affect one in four people at some time in life. Of the 10 countries with the highest rates of suicide in the world, 9 are in the European Region. But services across the Region often do not provide people with the help they need. There is a large treatment gap. For example, half of the people suffering from depression receive no treatment at all. This example illustrates how lack of social-support services relates to health.
Emerging Health Problems

Lifestyle

• Many of the major killers today are related to lifestyle factors. These problems are caused by several factors such as lack of education, access to health care, or access to social services; poverty; stress; and overcrowding

• Examples include noncommunicable diseases such as heart disease, cancer, stroke, obesity, and diabetes

Major noncommunicable diseases such as cardiovascular diseases, cancer, diabetes and chronic obstructive respiratory diseases, are responsible for 86% of deaths and 77% of the disease burden in the WHO European Region. Worldwide, rates of people who smoke and are overweight or obese are steadily increasing.

Many of the health problems are largely preventable i.e, diabetes, lung cancer, hypertension. Education, social services programs, changes in systems (i.e., making low-fat foods available in school cafeterias and creating walking paths) are a few examples of how to combat these major contributing factors to disease.
Possible Solutions to Emerging Problems Caused by Urbanization

- The World Health Organization (WHO) has established the Healthy Cities project
- Started in late 1980’s
- Approach is built on the assumption that health can be improved by modifying living conditions
- Projects are occurring around the world
Notes on Possible Solutions to Emerging Problems

The World Health Organization (WHO) started the healthy cities movement in Europe. Similar activities and meetings are now taking place in other parts of the world such as Latin America, the United States, Canada, Africa, and Asia.

The health cities initiative aimed to improve the physical, mental, environmental, and social wellbeing of people who live and work in urban areas. People from diverse backgrounds, including community members to government representatives, from cities were organized and encouraged to come together and collaborate in order to address the problems that occur in urban environments. This network of people shared strategies, success stories, and resources to address the concerns of the local communities.
Components of a Healthy City

- So what is a healthy city?
- In Len Duhl's book, "The Social Entrepreneurship of Change," he identified six core components of a healthy city. Those components are:
  1. Healthy cities/communities have a sense of history to which their citizens relate and upon which their commonly held values are grounded.
  2. Healthy cities are multidimensional...and have a complex and interactive economy.
  3. Healthy cities strive for decentralization of power and citizen participation in making decisions about policy.

According to WHO, “A healthy city is one that is continually creating and improving the physical and social environments and expanding the community resources that enable people to mutually support each other in performing all the functions of life and in developing to their maximum potential.”
Components of a Healthy City

4. Healthy cities are represented by leadership that focuses on the whole of a city and can visualize both parts and "wholes" simultaneously.

5. Healthy cities can adapt to change, cope with breakdown, repair themselves, and learn both from their own experience and that of other cities.

6. Healthy cities are those that support and maintain their infrastructures.
WHO Healthy Cities Project

• At the time this module development, over 1200 cities and towns from more than 30 countries are in the WHO European Region are healthy cities.
• The projects promote comprehensive and systematic policy and planning with a special emphasis on health inequalities and urban poverty, the needs of vulnerable groups, participatory governance and the social, economic and environmental determinants of health.
• The project began to highlight the interconnectedness of what appeared to be diverse social problems.
Notes on WHO Healthy Cities Project

The success of the WHO project lies in the collaboration and multi-level approach.

Collaboration: WHO brought together practitioners, government officials, and community members to work on the project. These networks and coalitions have been established within cities, between cities, and between sectors. This collaborative network enables the activities to take place on a large-scale, and the plans are being built from top-down and grass-roots approaches.

Multi-level and integrative approach: The breath of WHO’s vision is striking. They did not focus on single discrete components of urban planning; they focused on the holistic nature of human settlements and the interconnectivity between the elements on individual and social levels. As illustrated below, the interrelatedness of urban planning and health is multi-layered, and that is the perspective that the planners used.
Components of a Sustainable City

- The model with three overlapping circles illustrates that health and sustainable development is holistic and ecological. A healthy city includes a wide range of interacting social, economic, and environmental components.
WHO Healthy Cities Project Goals

The six strategic goals of the WHO healthy cities project are:

1. to promote policies and action for health and sustainable development at the local level and across the European Region, with an emphasis on the determinants of health, people in poverty, and the needs of vulnerable groups;

2. to increase the accessibility of the WHO European Network to all Member States in the European Region;

3. to promote solidarity, cooperation, and working links between European cities and networks and with those participating in the Healthy Cities movement in other WHO regions;
WHO Healthy Cities Project Goals

4. to strengthen the standing of Healthy Cities in countries' policies for health development, public health and urban regeneration;

5. to play an active role in advocating health at the European and global levels through partnerships with other agencies concerned with urban issues and networks of local authorities; and

6. to generate policy and practice expertise, good evidence and case studies that can be used to promote health in all cities in the region.
Healthy Cities Projects

• The focus of the healthy cities project is reflective of the health problems experience in the region
• Some regions have overlapping goals, while other regions have unique priorities
• For example, some areas, such as sub-Saharan Africa, have problems such as high rates of AIDS/HIV and while the Eastern Mediterranean has sanitation as a major source of their health problems
Notes on Healthy Cities Projects

Because of the city-specific focus of the projects, it is not possible to develop a list of the activities that are taking place. Some examples of activities are:

• Mass media for education
• Support and training of non-government organizations to undertake worker education in small-scale industries
• Programs for improving family relations and inter-personal violence
• Distribution of oral rehydration salts (in order to reduce infant mortality from diarrhea)
• Increasing urban immunization services
• Creating areas for play and leisure activities
• Creating environmental groups to replant trees and clean the lakes, and
• Housing projects for low-income groups
• Common standards for alcohol sales
• Monthly safety and community promotions
Healthy Cities Projects

- In 1995 the profiles of 21 cities from 15 countries were reviewed. The results showed the areas covered comprehensively were demography, mortality, and the environment. Socioeconomic conditions were fairly well covered. Other findings in the profiles included:
  - The topic of lifestyles was absent from approximately 25% of the profiles
  - The topic of inequalities was absent from approximately 33% of the profiles
Healthy Cities Projects

- Half the profiles included data on infrastructures
- 42% did not mention public-health policies
- 20% made recommendations about how to resolve the issues


Many of the projects are focused on long-term outcomes, which makes the outcome data somewhat limited at this point in time. In addition, because the projects are varied and the outcome measures differ, it is difficult to compare the project.
Healthy Cities Projects

• Examples of countries that are participating in the healthy cities projects include:
  
  – Austria  
  – Bosnia  
  – Denmark  
  – Finland  
  – Germany  
  – Greece  
  – Spain  
  – Turkey
Healthy Cities Project Case Study

• Place: Fayoum, Egypt
• Background: located approximately 90 kilometers from Cairo, densely populated, main economy is agriculture
• Many health indicators compare unfavorably with national averages
• Project began in 1995 with a workshop with local policy makers

Fayoum is densely populated and have about two million inhabitants. The main economy is agriculture production. Health indicators such as infant and child mortality rates and immunization coverage are unfavorable when compared to national averages. Fayoum has various problems related to basic infrastructure and health and social service provision.

The workshop in 1995 involved key local policy makers and elected leaders who presented their views on how activities in their sector influenced health and the main problems that they felt needed to be addressed.
Healthy Cities Project Case Study

- Three sites were selected for initial project focus
- Data from the sites were collected
- Semi-structured interviews were held
- Surveys data were gathered from women
- Focus groups were held with health-center staff
- Hospital records were analyzed

Three sites for the health cities project were agreed upon with the hope that the healthy cities project activities would then be expanded to other sites.

Existing data related to the city were collected and semi-structured interviews were held with key policy makers, hospital and health center staff, and local leaders. In addition, a brief survey was conducted among local women seeking to understand their health needs and priorities. Focus groups were held with staff at various health centers and hospital records were analyzed.
Healthy Cities Project Case Study

Using the collected data these priorities were established:

- Health and housing
- Income generation
- Sanitation
- Food safety
- Healthy animal husbandry
- Women’s participation
- Youth action
- Healthy schools
- Health and safety at work
- Water
- Land use planning
- Health and hygiene education
- Upgrading health centers

From this list, it can be sent that healthy city projects can address a wide range of problems areas and require inputs from many sectors in local government, the private sector, and the community.
Healthy Cities Project Case Study

- Six priority areas were:
  1. Healthy schools
  2. Water supply
  3. Health and hygiene education
  4. Garbage removal and disposal
  5. Drainage and sanitation
  6. Income generation

A second workshop was held in February 1996, and the steering committee prioritized the six issues to tackle first. Plans were written and included details of what was to be done, by whom, by when, for what purpose, and with what resources. Implementation of the plan was quite successful.

A second plan of action was written in 1996/1997 to address four of the remaining issues. Working groups were formed for each of the issues. Substantial progress has been made on all four issues.

Outcomes of Healthy Cities Projects

• The outcome measures are as varied as the project objectives

• Some examples of outcome measures include immunization rates, infant mortality rates, percent of household water that is contaminated, communicable disease rates, air and water quality, screening rates, and increases in knowledge and behavior changes
Outcomes of Healthy Cities Projects

• Examples of successful projects include:
  – A city in the western United States focused on reducing violent crime. During the period 1993-99:
    • Arrests and assaults fell by 36%
    • Arrests for violent crime fell by 47%
  – In Belfast (Ireland) households that experienced fuel poverty fell from 33% in 2001 to 24% in 2004
Outcomes of Healthy Cities Projects

- Examples of successful projects include:
  - By September 2006 over 300 organizations in Sheffield (UK) had pledged to provide smoke-free environments for their employees to protect them from second-hand smoke hazards
What Can Healthcare Professionals Do to Help Develop Healthy Cities?

• Contact your local urban center to see what is being done in your neighborhood
• If a program is not in existence, then begin setting the stage for the development of one
• For information on how to get one started visit http://www.who.dk/healthy-cities/introducing/20050202_5
Summary

• A worldwide effort is being made to improve the sustainability of urban areas
  – Because of the significant growth in urban areas
  – The interest is reflected in the WHO Healthy Cities Projects
  – Healthy cities projects have different priorities depending on local and regional circumstances
  – The projects have demonstrated success in improving the human health in urban settings

The population of urban setting is rapidly increasing, which is causing an international concern about their sustainability. In response to this concern, the WHO began the healthy cities projects in 1986. Numerous cities and towns are participating, and these projects have demonstrated some success. As the projects move forward, the evaluation approach will focus more on process rather than impact indicators.
Credits

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