Chapter 2

Developing Countries: Mexico, China, and South Africa

Carol Holtz

This chapter will address the health conditions of three developing countries: Mexico, China, and South Africa. These countries were selected because they differ in culture, economics, politics, geographic regions, and types of health issues. The following sections will discuss such things as:

- Family planning, infertility care, abortion, sterilization, and adoption practices in Mexico, China, and South Africa
- How communism affects health care in China
- The “one child per family” policy in China
- Women rights issues in South Africa

Mexico

Mexico is located in the southern region of North America; its northern neighbor is the United States, and its southern neighbors are Guatemala and Belize. Mexico’s eastern coast is the Gulf of Mexico and the western coast is the Pacific Ocean. The capital and largest city is Mexico City. The government is a federal republic with 31 states and one federal district (World Almanac Education Group, 2004; WHO, 2004).

People

There are approximately 102 million people in Mexico, with about 10 million people living in Mexico City. Mexico City is one of the most populated cities in the world and has very diversified ethnic groups consisting of Mestizo (indigenous Indian and European mixture, about 60%), American Indian (30%), Caucasian (9%), and other (1%). The main religions are Roman Catholic (89%) and Protestant (6%) (World Almanac Education Group, 2004). Ninety-one percent of the people over 15 years of age are literate, but in selective areas, the literacy rate drops to approximately 20% (Pan American Health Organization, 2002). The principal language is Spanish, but 6 million indigenous Indians primarily use one of a variety of 92 other distinct languages (World Almanac Education Group, 2004; WHO, 2004).  
Economy

The Mexican economy has industries of steel, food and beverages, chemicals, textiles, mining, and tourism. Approximately 12% of Mexico’s land is used for farming, and 45% of the land is arid and difficult or impossible to farm. The per capita income is US$8500, reflecting the growth resulting from the 1994 North American Free Trade Agreement (NAFTA) with the United States and Canada (World Almanac Education Group, 2004).

Health

The health and healthcare system in Mexico has experienced numerous challenges in both primary and secondary healthcare delivery and statistical surveillance of healthcare issues. Tables 2-1 and 2-2 show selected epidemiologic data across Mexico. However, it is imperative to know that surveillance data collected in Mexico, just as collected in the United States by the Centers for Disease Control and Prevention (CDC), may vary, depending on regional systems of reporting.

Clean water has always been a challenge for preventing illness and maintaining health of the population. In a study conducted in Mexico City by Cifuentes, Mazari-Hiriart, Carneiro, Bianchi, and Gonzalez (2002), the risk of enteric diseases in children under 5, was linked with environmental indicators in the living area, such as water quality, sanitation, and socioeconomic status. The Mexico City area has 18 million people and has some of the poorest sanitation. The study results indicated that bacteria was found in 32% to 40% of well water, and rates for diarrhea in young children ranged up to 11.5%.

Healthcare System

Mexico has a variety of programs that cover healthcare costs for its residents. The Social Security Administration (SSA) provides leadership for the health system. In addition there are private health organizations that vary in quality and costs. Public health is provided

<table>
<thead>
<tr>
<th>TABLE 2-1 Health and Vital Statistics for Mexico</th>
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<tbody>
<tr>
<td>Life expectancy</td>
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<tr>
<td>Males: 68.7 years</td>
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<tr>
<td>Females: 74.9 years</td>
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<tr>
<td>Birth rate</td>
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<tr>
<td>22.77 births per 1000 people</td>
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<tr>
<td>Death rate</td>
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<tr>
<td>5.02 per 1000 people</td>
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<tr>
<td>Fertility rate</td>
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<tr>
<td>2.4 per 1000 people</td>
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<tr>
<td>Infant mortality</td>
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<td>15 per 1000 live births</td>
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Source: Adapted from World Almanac Education Group, 2004.

Mental Health

Mental health is a major issue in China today because of the rapid social and economic changes. Changes today include financial losses from bad business deals and gambling; higher rates of extramarital affairs, family violence, and divorce; rising rates of substance use and abuse; weakening of the traditional family values and relationships; large numbers of rural migrants seeking employment in larger urban environments; a widening gap between the rich and poor; work-related stress; and a faster pace of life. Eighty percent of the country's healthcare budget goes to the urban residents; yet, the urban people represent only 30% of the total population. Funds for mental health are very limited for the rural population who cannot afford the out-of-pocket costs for mental health care. Shanghai, the largest population in China, boasts having the most comprehensive mental healthcare system in the country (Chang & Kleinman, 2002).

According to the World Health Organization's 2003 data, 13% of the population has psychological problems, and 16 million people in China suffer from serious mental illness. Every year in China there are 280,000 people who commit suicide, accounting for 25% of the entire world's suicide statistics. Another 20–50 million people per year attempt suicide. Suicide accounts for the fifth leading cause of death of people 15–35 years of age. The suicide rate in China is three times higher in rural areas as compared to urban areas. This rate is 25% higher among women than men, which is contrary to many other nations of the world. Reasons for the higher rates for female suicides in rural areas are due primarily to poverty, low status of rural women, forced marriages, family violence and conflict, chronic stress, and no hope for the future. Men in rural areas are often absent from the homes for long periods of time, leaving the women to work in the fields, take care of children, cook, and care for the house (Pochagina, n.d.).

Nutrition

Throughout China there has been a change in diet and physical activity and overall body composition patterns. During the past 10 years, the number of people living in China in absolute poverty has significantly been reduced. The proportion of those extremely poor decreased from 20% to 6% during the same period. As a result of this change in economics, the prevalence of obesity and diet-related noncommunicable diseases has increased more rapidly than in industrialized societies. Diets have shifted from high carbohydrates to high fat and high-density energy foods leading to diseases from overweight and obesity such as diabetes, stroke, cancer, and cardiovascular diseases (Du, Mroz, Zhai, & Popkin, 2004).

Cardiovascular disease is the leading cause of mortality in the world, and that includes China and other developing countries. China and other developing nations have been
experiencing an epidemic in cardiovascular disease during the last few decades mainly because of lifestyle and diet changes. Currently there is a prevalence of metabolic syndrome and overweight individuals among adults in China. Metabolic syndrome is characterized by a cluster of problems that consists of abdominal obesity, increased blood pressure and glucose concentration, and elevated cholesterol levels. Obesity is a risk factor not only for cardiovascular disease but also type 2 diabetes, hypertension, and cancer. Excess weight is also a cause for osteoarthritis and gall bladder disease (Gu et al., 2005; Dang, Yan, Yamamoto, Wang, & Zeng, 2004).

HIV/AIDS

HIV/AIDS entered China in 1985, and 20 years later the epidemic has continued to spread at an alarming rate (see Figure 2-5). The government estimates that there are about 3 million paid blood donors in China, and 12.5% are HIV positive. The number of yearly reported AIDS cases has increased at an average rate of 30% per year from 1995 to 2000. In 2001 the increase was 58%, and in 2003 the rate increased to 122%. The WHO and the U.S. CDC estimate that 840,000 people are living in China with HIV, and 80,000 have AIDS. Inadequate surveillance systems make it difficult to assess the full magnitude of the epidemic. About 80% of China’s HIV/AIDS population lives in rural areas of the country. Most of those with this disease are IV drug users and blood donators, who gave the disease

![Figure 2-5](image_url)  
**Figure 2-5**  Current and future estimates of people with AIDS in China.  
**Source:** Data from UNAIDS.
influence the risk for numerous chronic diseases. The greatest causes of deaths in South Africa include:

- HIV/AIDS
- Heart disease
- Homicide and violence
- Stroke
- Tuberculosis
- Lower respiratory infections
- Road traffic accidents
- Diarrhea diseases
- Hypertension
- Diabetes

All of the above are chronic diseases, with the exception of homicide and violence and traffic accidents.

Communicable Diseases

Sexually transmitted infections (STIs) continue to be one of the most common problems in adolescents and young adults in South Africa. About 10% of adults who go to a health clinic have concerns about a STI. About 4 million people have these diseases per year. Healthcare workers are involved in treatments and prevention measures, such as counseling, condom promotion, and partner notification (Shabalala et al., 2002).

Tuberculosis is a chronic pulmonary and extrapulmonary disease characterized by positive acid-fast stains or cultures of *Mycobacterium tuberculosis*. A TB skin test provides evidence of the infection, if positive. A chest X-ray is taken to confirm shadowing, reflecting lung invasions. Cervical lymph node swelling may also be present. Tuberculosis is a huge problem in South Africa. South Africa ranks seventh in the world in highest number of cases, with 556 cases per 10,000 people. Part of the reason for the high prevalence is improved case detection brought on by the HIV/AIDS epidemic, especially among young adults. Poverty and overcrowding are also related to the high rate. Other factors include the increase and extent of drug resistance, particularly multidrug resistance (MDR) (Mwinga & Fourie, 2004). A recent study reported that 55% of the people with TB were also HIV positive. Those affected by HIV/AIDS are five times more likely to develop TB. One third of the 40 million in all of Africa with HIV/AIDS also have TB. In sub-Saharan Africa, the numbers are actually even much higher. The South African Medical Research Council forecasts that there will be 300,000 cases of TB this year and 30,000 deaths from it in the country—a fatality rate of 10% compared to having one of the lowest rates in Africa before the advent of HIV/AIDS (Bamford, Loveday, & Verkuyl, 2004; Nullis-Kapp, 2005).


