WHO report: alarming increase in cancer rates

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Global cancer rates are expected to increase 50 percent by the year 2020, according to the latest report from the International Agency for Research on Cancer (IARC), a branch of the World Health Organization (WHO). The 351-page study, titled World Cancer Report, begins by explaining that 10 million people developed malignant tumors and 6.2 million died from the disease in the year 2000.

Cancer was responsible for 12 percent of the nearly 56 million deaths worldwide from all causes in 2000. In industrialized countries more than one in four people will die from the disease, a rate more than twice as high as developing countries. Over 22 million people in the world were treated for cancer in 2000, representing an increase of approximately 19 percent in incidence (cases) and 18 percent in mortality since 1990.

The report notes that the most common cancers worldwide, excluding non-melanoma skin cancers, are cancers of the lung, breast and colorectal tissue. The cancers which cause the greatest proportion of deaths are those of the lung, stomach and liver, because the relative success of early intervention in breast and colorectal cancers.

Investigations into cancer causation have revealed, according to the WHO report, that the most important human carcinogens include tobacco, asbestos, aflatoxins and ultraviolet light. In addition, nearly 20 percent of cancers are associated with chronic infections, the most significant ones being hepatitis B and C viruses (liver cancer), human papilloma viruses (cervical and ano-genital cancers) and Helicobacter pylori (stomach cancer). In developed countries chronic infection causation amounts to only 8 percent of all malignancies, whereas in developing countries up to 25 percent of tumors are associated with chronic infections.

The WHO’s press release announcing its cancer report contains a section entitled “Poverty, affluence and the global burden of cancer.” It notes that while those who live in industrialized countries are twice as likely to be diagnosed with cancer than those living in developing countries, the death rates are shifted in the reverse direction, with 50 percent of cancer patients dying in rich countries, while 80 percent of victims die of the disease in poor countries.

More than half of today’s cancer patients live in developing countries. According to Paul Kleihues, MD, Director of IARC and co-editor of the World Cancer Report, “Cancer has emerged as a major public health problem in developing countries for the first time, matching its effect in industrialized nations. This is a global problem, and it’s growing.”

Industrialized countries with the highest overall cancer rates are: the US, Italy, Australia, Germany, The Netherlands, Canada and France.

Although industrialization is suggested to be a major factor in the prevalence of cancer, the report reveals that the majority of investigative studies on occupational exposures and the risk of cancer were published between 1950 and 1975, adding that few occupational carcinogens have been identified in the last 25 years. This is a reflection of the shift to the right in social policy in all the major industrialized countries, as well as the complete prostration of the official labor movements, which have abandoned workers to being the guinea pigs for industrial poisoning.

The fact that there has been an admittedly decreased interest in studying exposure to occupational carcinogens is itself a condemnation of the attitude of governments and corporations to the safety and well-being of workers. This, despite the fact that the World Cancer Report’s foreword states that one of the main reasons “‘for the greater cancer burden of affluent societies’ is “the earlier exposure to occupational carcinogens.”

The section on environmental pollution—that is, contaminants of air, water and soil—is meager, containing an estimate that pollution accounts for only 1-4 percent of all cancers. A brief reference to the destruction of the ozone layer by chlorofluorocarbons, which has greatly enhanced the risk of skin cancer through increased ultraviolet radiation, appears in the summary of that section. The study finds that “[t]he evidence for an increased risk of cancers other than lung cancer from outdoor air pollution is inconclusive at present.”

Further, although the environment may be polluted by a range of toxic organic compounds that may accumulate in the body’s fatty tissue, in most cases, these compounds are only recognized as a carcinogenic hazard to humans when small clusters of people have been heavily subjected to either occupational exposures or exposures resulting from industrial breakdowns or malfunctions. Therefore, concludes the report, “the hazard posed to the general population can only be determined on the basis of extrapolation using mathematical models.” In other words, there is no way of concretely measuring to what extent environmental pollution is responsible for the increased cancer rates within the general population. Concomitantly, the study finds that “[t]he burden of cancer attributable to food contaminants is difficult to quantify.”

Sources of electromagnetic fields, such as equipment using electricity, television, radio, computers, mobile telephones, microwave ovens as well as radars and equipment used in industry have seen an unprecedented increase, but the carcinogenicity of these fields is not clear, according the study. However, exposure to ionizing radiation, such as medical X-rays and occupational exposures, particularly in the medical and nuclear industries, can cause a variety of neoplasms, including leukemia, breast cancer and thyroid cancer.

Such a low risk factor ascribed to environmental contamination
seems incongruous with the report’s conclusion that only about 5 percent of all cancers can be attributed to genetic susceptibility, and that even this susceptibility may itself be a product of “environmental insults.” The section called “Gene-environment interactions” concludes: “It is hoped that a more unified approach to cancer epidemiology and genetics will identify those combinations of genetic susceptibility and environmental exposures that lead to significant increases in risk at the individual and population level.”

Epidemiologist and Carnegie-Mellon University Professor Dr. Devra Lee Davis summed up for the WSWS her views on the WHO report: “WHO has done a good job of identifying those things individuals can try to control that are tied in with their risk of developing cancer, such as smoking and poor diet. No matter how diligent people may be in addressing these hazards, many of the proven and suspected causes of cancer, such as those tied in with where we live and work, can only be addressed through public and private policies to identify these risks, and keep them out of our homes, schools, gardens, and factories.”

Interestingly, the study does assert that hormone replacement therapy is associated with an increased risk of breast and endometrial cancers and that certain anti-cancer drugs, such as Tamoxifen—an estrogen-blocker commonly used to treat breast cancer patients—may cause secondary cancers. Surgical implants used for both therapeutic and cosmetic purposes may also cause cancer. “There have been more than 60 published case reports of sarcomas and other kinds of cancers that have developed in humans at the sites of surgical implants or other foreign bodies. However, there are no controlled studies that would allow a conclusion that these cancers were indeed caused by the pre-existing foreign body,” says the study.

Another area discussed in the WHO report is the relationship of increasing life expectancy and population aging to cancer. Globally, life expectancy has increased from 45 years in 1950 to 66 years in 2000, but the population of the world is aging rapidly—the median age will have risen from 23.5 years in 1950 to 36.5 years in 2050. By 2050, more than 20 percent of the population will be 60 years and over, versus 10 percent in 2000. By comparison, the number of cancer deaths increased by 35 percent during the period 1985-1997. The report states that “[w]hile extending life expectancy is desirable in itself, it is equally important that increased expectancy is accompanied by freedom from any prospect of years of suffering as a consequence of chronic diseases, pain or disability.”

After stressing that cancer levels can be greatly reduced by individual choices, such as cigarette smoking cessation, a healthier diet and lifestyle, and safe sex, the report concludes by touching on some important social issues.

“The increasing magnitude of noncommunicable diseases, including cancer, represents one of the major health challenges to global development in the new century.... Medical knowledge is now sufficiently advanced to permit the prevention of at least one-third of all cancers, the cure of a further one-third, given early diagnosis and the administration of effective therapy, and the adequate control of pain and other symptoms, with palliative care for the remainder,” states the section: “Cancer Control: A Global Outlook.”

In order to accomplish this, the report argues that “a country must be prepared to allocate a certain priority to cancer control activities, and possess a basic public health and health care infrastructure.” This advice runs counter to the current trend of governments attacking or even dismantling health care infrastructures. At the United Nations Global Ministerial Environment Forum in February 2003, a very bleak picture of global infrastructure was presented. Clean water and adequate sanitation facilities, “imperative for human health,” are lacking for billions of people. In 2000, 1.1 billion did not have access to an adequate water supply and 2.4 billion lacked access to improved sanitation. Some two-thirds of the world’s population will likely face “water stress” by 2025.

The WHO study admits that cancer is “a problem that cuts across national boundaries, cultures, societies and socioeconomic strata.” It points out that a new approach is necessary for global cancer control. But that such an effort is now hampered by an existing situation, in which “globally, cancer control activities are fragmented, uncoordinated and often categorized and funded by cancer type.”

Expanding on this theme, the report continues: “[T]he development of a Programme following an internationally accepted framework results in an understanding of the broader issues by both health care professionals and the general public. Of particular importance in many countries are avoiding the misuses of available resources, both public and personal, and an ethical obligation to relieve suffering at reasonable costs.” In today’s world, this prescription is essentially chimerical. The report goes on to say that “potential barriers to such an approach include competing interests that could prevent the resources intended for cancer control being allocated for this purpose.” The culpability of the top echelons of society for the cancer epidemic is only alluded to in the report’s summation.

While the World Cancer Report contains a massive compilation of very valuable information, its perspective is focused on the individual rather than the societal responsibility for the global cancer “burden”: “Current smoking levels and the adoption of unhealthy lifestyles, together with a steadily increasing proportion of elderly people in the world, will result in a doubling of new cancer cases, from 10 million worldwide in 2000 to 20 million in 2020, with an annual death toll then reaching 12 million.”

In her 1997 book, Living Downstream: An Ecologist Looks at Cancer and the Environment, biologist Sandra Steingraber writes: “A narrow focus on lifestyle—like a narrow focus on genetic mechanisms—obscures cancer’s environmental roots. It presumes that the ongoing contamination of our air, food and water is an immutable fact of the human condition to which we must accommodate ourselves” (emphasis added).

Unfortunately, the authors of the WHO report adapt themselves to an atmosphere that accepts that nothing can be done to change the social framework that threatens a health catastrophe of enormous proportions.