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Women and minorities have historically been underrepresented in health research and data collection. This monograph-a collaboration between the National Institutes of Health's (NIH) National Cancer Institute (NCI) and the Office of Research on Women's Health (ORWH)—serves as a comprehensive source of data on cancer in nine populations of women of color: African Americans, Mexican Americans, Puerto Ricans, Cuban Americans, Asian Americans, Native Hawaiians, American Samoans, American Indians, and Alaska Natives. For several of the smaller populations, this monograph represents the second time that cancer data on women have been synthesized into an accessible format. With contributions from experts representing the respective racial or ethnic population, each monograph chapter discusses the cancer experience of the population in terms of the social and historical context, current demographics and health indicators, and comprehensive statistics. Each chapter also highlights risk factors for cancer, as well as prevention and control interventions that have proven successful, and each makes recommendations for filling in data gaps and pursuing effective cancer control efforts.

We are living in an era of astounding scientific discovery that has begun to provide valuable insight into the fundamental processes that lead to cancer. The National Cancer Institute's central mission—to reduce pain, suffering, and deaths due to cancer—must be accomplished through the development of new knowledge and by finding ways to apply that knowledge to prevent and treat cancer in all populations.

Few families in America have not been touched by cancer. But there is some good news. After rising steadily from the 1930s through the 1980s, total cancer mortality in the United States has seen a sustained period of decline in recent years (1992 to 1998). These declines in mortality are particularly evident for the four most common cancers (breast, lung, prostate, and colon). However, because of the increasing size and escalating age of our population, the number of Americans likely to face a cancer diagnosis is expected to increase in coming years.

While declining mortality indicates that many Americans have benefited from recent progress, certain segments of the population have not kept pace with improvements. For instance, African American women still experience a 20 to 30 percent higher rate of death due to breast cancer than do U.S. White women. Likewise, Asian American women have experienced a proportionately smaller drop in all cancer mortality compared with White women. And while the cancer profile of Native Hawaiians (examined in this monograph separately from Asian women) has improved somewhat, large disparities in cancer incidence and mortality persist between this population and the majority White group.

It is clear that we must redouble our efforts to eliminate cancer disparities, and many of the research programs of the National Cancer Institute have set that as a goal. Toward reducing and eventually eliminating the disproportionate death rates from cancer in underserved populations, NCI has established the Center to Reduce Cancer Health Disparities. Recently, we have enjoyed some heartening successes in the fight against cancer in women. Researchers are developing new tests based on knowledge gained from molecular biology. For example, using computers with artificial intelligence, scientists have succeeded in developing a new diagnostic test for ovarian cancer that is based on patterns of proteins in blood samples. This accomplishment provides hope for diagnosing ovarian cancers early enough for new treatments to be successful. Additional research is designed to reduce the risks women face from cancer treatments and to better define the populations that will benefit most from a particular therapy.

Ensuring participation in clinical research by women and members of population groups with disparate cancer rates is a high priority for the Institute, and accrual patterns in cancer treatment trials confirm that women and ethnic/racial minorities are proportionately represented. Nearly 20 percent of the more than 20,000 patients entering treatment clinical trials every year are from a ethnic/racial minority group. NCI disseminates information and strategies to maintain and improve upon this record.

The success of mammography screening and community based early detection programs, many of which are described in this monograph, provide concrete evidence that we can successfully translate research into widespread practical use. Because of increased early detection, 65 percent of breast cancer is now detected as localized disease, compared with 40 percent just 20 years ago. NCI continues to pursue advances in mammography, magnetic resonance imaging, and other noninvasive imaging technologies for screening and diagnosis. The Institute also encourages adaptation of successful community based screening strategies for diverse populations.

However, celebration of recent successes must be tempered by our knowledge that progress in cancer research does not always reach every segment of our population. Our understanding of the causes of cancer, particularly among underserved populations, leaves much room for improvement. Tobacco use among women has not declined as it has among men, and several populations discussed here have higher-than-average tobacco consumption. Dietary choices, alcohol consumption levels, and other lifestyle factors undoubtedly also play a role in differential rates of cancer incidence and mortality. These same factors also play a role in serious, chronic ailments such as obesity, diabetes, and hypertension.

The expansion of NCI's Surveillance, Epidemiology and End Results (SEER) Program will enable us to better quantify the cancer burden in minority populations. The chapters in this monograph highlight some unique data collection challenges, including difficulties with collecting, analyzing, and interpreting data that are stratified by race, ethnicity, gender, and cancer type; problems of racial and ethnic misclassification in population based cancer databases; lack of continuous support for data collection in minority subpopulations; and the danger of assuming that data collected in a single location or subpopulation apply to all members of the entire population, though members may differ by gender, race, or ethnicity. Both data collection and cancer prevention require that we

work harder to build trust and reduce barriers to the meaningful involvement of previously underserved populations.

We must learn how to transform research-based knowledge effectively into prevention and medical practice that benefit all. Much remains to be learned before we can effectively intervene in many areas, but it is imperative to apply knowledge we have gained even as we continue to learn. We can start now to encourage institutions, including government and private sector researchers and the medical establishment, to participate in building the infrastructure to ensure that knowledge gets translated into practice.

In this new century, continued progress against cancer demands scientists and physicians who can cross disciplinary boundaries. We must find ways to attract more minority students into medicine and the biomedical sciences.

The goal of this monograph is to establish a baseline for further research and intervention toward eliminating health disparities. It represents only one step of many that NCI is taking to support and disseminate research to remove the shadow of cancer from all women's lives.