

E. AN UPDATE ON RECENT CANCER TRENDS IN LEBANON

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Lebanon is a country of approximately 3.5 million residents and an estimated 14 million migrants worldwide. Like most developing countries, Lebanon has no reliable national cancer registry and depends on published data from registers of its larger hospitals, lacking national vital statistics, population census, and data on mortality, incidence, and prevalence. Estimates of lifetime risks of disease occurrence, mortality, and disease-specific treatment outcomes are also lacking. Quality-control guidelines and procedures for diagnosis and treatment need to be implemented.

Lung cancer and bladder cancer are most common in men. Eighty-seven percent of lung cancer patients are smokers. Smoking remains an acceptable social habit in Lebanon. Cigarette advertising is ubiquitous, misleading, and targets men, women, teenagers, and children. Like most developing countries, Lebanon needs support from international organizations and the World Health Organization (WHO) in its anti-smoking campaigns. Bladder cancer in Lebanon is usually the transitional cell type that is related to smoking. One recent study showed prostate cancer to be more frequent because of a recent rise in PSA testing. Colorectal cancer is becoming more frequent because of the westernization of dietary habits—decreased reliance on fruits, vegetables, and fiber in diet.

In all studies, breast cancer was the most common cancer among women, with an increase in the proportion of younger women at presentation. In addition to screening mammography starting at 40 years of age, we recommend that a clinical breast exam should be started yearly as early as 30 years of age, and we suggest that husbands should be educated about the importance of

screening and play a role in encouraging their wives to enroll in screening programs.

Trends of cancer in Lebanon, especially lung, bladder, and breast cancers, deserve to be studied among Lebanese immigrants in the United States. Americans of Lebanese descent may still be influenced by smoking habits and heavy cigarette advertising in their country of origin. Effects of new environmental factors and lifestyles on American women of Lebanese and Arabic descent may show significant findings.

The first study reported on cancer was by Azar from the American University of Beirut (AUB).¹ The study included 2,845 cases from 1953 to 1960. Men represented 532 cases, and the most common sites were skin, lymphomas and leukemia, buccal cavity and nasopharynx, lung, larynx, and urinary bladder (excluding non-invasive bladder tumors). In women, 1,313 cases were reported, with breast cancer being most common (23% of cases in women), followed by uterine cervix, other genital, skin, lymphoma, colorectal, other digestive, bone and soft tissue, buccal and pharynx, and respiratory.

Abou-Daoud reported from AUB on cases seen between 1964 and 1965.² Total cases were 2,072, of which 1,043 cases were in males (calculated incidence: 102/100,000) and 1,029 in females (incidence: 104/100,000). At that time, the Lebanese population was estimated at 2 million. The most common cancers in males were skin, urinary bladder, lung, lymphoma, and larynx. Breast cancer was first in females (estimated 16.4/100,000), followed by uterine cervix, skin, ovary, and lymphomas.

In 1986, Geahchan³ reported a total of 2,355 cases collected from all hospitals in Lebanon, which then had an estimated population of 3.4 million. In

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males, 1,261 cases were reported, and bladder cancer ranked first at 16%. Following that was lung cancer (14%), leukemias and lymphomas (13%), and prostate (12%). In females, 1,094 cases were reported in females, with breast cancer being most common (27%), followed by leukemia and lymphomas (10%), uterine cervix (7%), colorectal (7%), endometrium (4%), ovary (4%), lung (3%), and bladder (2%).

In 1992, Ghosn⁴ from Hotel Dieu de France Hospital Registry presented 1989 data. They had 541 new cases of cancer. In men, lung cancer was the most common site (19%), followed by bladder cancer (16.7%) and prostate cancer (11.6%). In women, the most frequent cancer reported was breast cancer (36.1%), followed by uterine (body and cervix) cancer (15.2%) and digestive tract tumors (12.3%).

In 1998, we reported analysis of 9,364 cases seen at American University of Beirut Medical Center (AUBMC) between 1983 and 1994 at AUB Medical Center Registry in the *Annals of Epidemiology*⁵ and updated it with a report on 10,220 cases seen between 1983 and 1995 in the *Lebanese Medical Journal*.⁶ This series was the largest reported, and it was considered to be significant because AUBMC is one of the largest hospitals in Lebanon and is both a primary care and tertiary care facility functioning as a community hospital as well as an academic center. The AUBMC treats about one third of all cancers in Lebanon.^{3,7} Skin cancers, other than melanomas, were excluded. A total of 5,086 cases were in males, with the 10 most common cancers being lung (17.9%), bladder (9.8%), larynx (8.6%), lymphomas (7.7%), leukemia (6.6%), colorectal (5.8%), prostate (5.7%), brain (5.6%), unknown primary (3.7%), and stomach (2.8%). In women, 5,133 cases were reported, with breast cancer being the most common (35.4%), uterine cervix (10.4%), colorectal (4.9%), lympho-

ma (4.5%), brain (4.1%), leukemia (4.1%), uterine body (3.9%), ovary (3.2%), lung (3.2%), and stomach (2.5%).

A new Lebanese Cancer Epidemiology Group⁷ collected data from hospitals in Lebanon for 1993 and 1998. A total of 4,388 cases were reported in 1998. Because of difficulties in collecting cases from private laboratories, leukemias were not included. Most common cancers in males were bladder, prostate, lung, colorectal, and stomach. In women, breast was the most common, followed by colorectal, uterine body, ovary, and bladder. Although lung cancer is superseded in incidence by transitional cell cancer of the bladder in some studies, it remains the most important because of its lethality and because many bladder cases are limited to superficial bladder and treated endoscopically.

LUNG CANCER AND SMOKING

The Lebanese Ministry of Health (MOH) and WHO office in Lebanon reported partial data on cases seen at the MOH chemotherapy drug distribution center. The significant finding was that 87% of all lung cancer patients were smokers.

Cigarette advertising in Lebanon, similar to most developing countries, is most often uncontrolled, unregulated, and misleading, targeting children, teenagers, women, and of course men. Promotion of cigarettes is aggressive, and it portrays smoking as a social, sexy, desirable, and acceptable habit. Misleading texts and photos are used on highways. Cigarette packs are sold at cheap prices on countryside highways and inner city streets. Billboards are displayed on tops of buildings. Warning signs with small print are included on packs, but do not counteract the dangerous ads that appear in areas that children and teenagers

frequent. Ads are also allowed in grocery stores and at sporting club entrances. Sports championships and rallies are still sponsored by cigarette brands. Cigarette packs do not have disclosure statements for nicotine quantity or for amounts of tar, and the cigarettes may be more addictive than those sold in other countries. Little litigation has been brought against the cigarette industry in Lebanon. Local organizations and the WHO need help in campaigns and for international regulations to be imposed on advertising practices worldwide. We struggle and campaign to forbid smoking in public buildings and hospitals, schools, and universities and start special smoking sections in restaurants and public places. We urge people to stop the popular habit of offering cigarettes to guests in their homes. We also note that 40% of physicians in Lebanon still smoke, which remains an obstacle to provider intervention for smoking cessation.

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