REVIEW

Overview of Cancer Registration Research in the Asian Pacific from 2008-2013

Malcolm A Moore

Abstract

Cancer registration provides a firm basis for cancer control efforts and research into changing patterns of incidence, mortality, survival and prevalence is of obvious importance. Most of the countries of Asia have already published relevant data although the level of coverage and accuracy do vary a great deal both between and within countries. The present review concerns the relevant literature for the period 2008-2013, focusing on the types of research conducted and the conclusions that can be drawn with regard to what should be done in the future to translate the information available into effective intervention efforts to reduce the burden of disease. A major emphasis has been on determining variation in incidence and mortality/survival on the basis of ethnicity and socioeconomic as well as geographical background, as well as trends over time, either for cancer in general or specific organ sites. In addition a small number of papers focused on methodological, quality and cancer control issues, very pertinent to the future development of cancer registry based research.

Keywords: Cancer registration - epidemiology - incidence - mortality - survival - trends - cancer control

Asian Pacific J Cancer Prev, **14 (8)**, 4461-4484

Introduction

Population based cancer registration provides an essential base for cancer control, providing information not only on incidenc and survival but also facilitating confirmation of effective of interventions, including screening, and both analytical and clinical epidemiology. Hospital-based registries and even pathology-based registries also can make impottant contributions, even in high resource countries like Japan (Higashi et al., 2013). The major international resources for descriptive epdemiology of cancer are provided by the International Agency for Cancer Research (IARC)/WHO through Globocan (Ferlay et al., 2010) and Cancer Incidence in Five Continents (Curado et al., 2007). To provide concrete evidence of the necessity of cancer registries to national cancer control programs, timely publication of results in the international literature, especially when freely accessible, is also of paramount importance (Moore et al., 2013). The present review aims to provide an update of cancer registraion research in the Asian Pacific in the five year period from 2008-2013, concentrating on publications indexed through PubMed/Medline.

Incidence, Mortality and Survival

In a series of reviews, Moore and colleagues in each of the regions of the Asian Pacific provided updates as to cancer registration and epidemiology in North-West and Central Asia (Moore et al., 2010a), South-West Asia (Salim et al., 2010), South Asia (Moore et al., 2010b), mainland South-East Asia (Moore et al., 2010c), peninsular and island South-East Asia (Moore et al., 2010d), the Pacific Islands (Moore et al., 2010e) and North-East Asia (Long et al., 2010). These papers covered available data for the existence of cancer registies, population based data from CIV IX (Curado et al., 2007) and from papers published in the literature, with pictorial display of the most important cancers. Globocan 2002 data on mortality and incidence were employed for comparison with population-based findings and to generate mortality/incidence ratios (Moore and Sobue, 2010).

A similar overview was performed by the IARC for cancer survival, bringing together data for Mumbai (Yeole et al., 2011), Karunagappally (Jayalekshmi et al., 2011), Chennai (Swaminathan et al., 2011), Bhopal (Dikshit et al., 2011), Barshi (Jayant et al., 2010), Pakistan (Bhurgri, 2011), Songkhla (Sriplung and Prechavittayakul, 2011), Lampang (Martin et al., 2011), Khon Kaen (Suwanrungruang et al., 2011), Chiang Mai (Sumitsawan et al., 2011), Singapore (Chia, 2011), Rizal (Esteban et al., 2011), Manila (Laudico and Mapua, 2011), Seoul (Ahn and Shin, 2011), Incheon (Woo et al., 2011), Busan (Shin et al., 2011), Tianjin (Xishan et al., 2011), Shanghai (Xiang et al., 2011), Qidong (Chen et al., 2011) and Hong Kong (Law and Mang, 2011).

As a cooperative effort within Eastern Asia, general information and quality of data of cancer registration at

*APJCP Editorial Offices, Korea, China and Thailand *For correspondence: apocpcontrol@yahoo.com*

each participating registry and five-year relative survival rates were generated for cancer of the stomach, colo-rectum, liver, lung, breast and cervix by Tanaka et al. (2009).

In the remainder of this section the focus is on regions and individual countries regarding published data on general registry coverage. Other sections concern individual organ sites and pediatric cases.

Western and Central Asia

In addition to the review of Moore et al. (2010a) (see Figures 1 and 2) an earlier paper was published regarding the status of non-communicable disease research in Central Asia (Moore et al., 2009?). In males lung or stomach cancer were the most common in males in Globocan 2002, along with urinary bladder or oesophageal cancer. In females, breast was unequivocally number one,, with the exception of Tadjikistan, followed by cervical only in those countries of Central Asia with a history of membership of the USSR. Otherwise oesophageal or stomach appear of importance.

Turkey: A nationwide study showed rates/100,000 to be highest for lung (60.3), followed by prostate (22.8), bladder (19.6), stomach (16.3) and colo-rectal (15.4) cancers in males and breast (33.7) followed by colorectal (11.5), stomach (8.8), thyroid (8.8) and lung (7.7) in females (Eser et al., 2010). Most striking findings about cancer incidence in the provinces were the high incidence rates for stomach and esophageal cancers in Erzurum and high stomach cancer incidence rates in Trabzon for both sexes (Eser et al., 2010). In cases younger than 65 years were breast, larynx, digestive system, skin and hematopoietic-reticuloendothelial system whereas the skin, digestive system and the urogenital system were more common in cases older than 65 years (Kilciksiz et al., 2012). Between 2002 and 2005 the average rate of increase for men comes about 9.7%, which is higher than 8.6% for women leading to the widening of incidence gap between man and women (Yilmaz et al., 2011).

Five-year age-standardized relative survival rates of common cancers were breast (77%), urinary bladder (70%), larynx (69%), colon (53%), rectum (52%), non-Hodgkin Lymphoma (50%) and cervix (58%) (Eser, 2011).

Iran: Activities regarding cancer registry and cancer data in Iran since the early seventies were reviewed by Mohageghi and Mosavi-Jarrahi (2010). I The five leading primary sites in males were liver, stomach, lung, esophagus, and colon/rectum; whereas in females

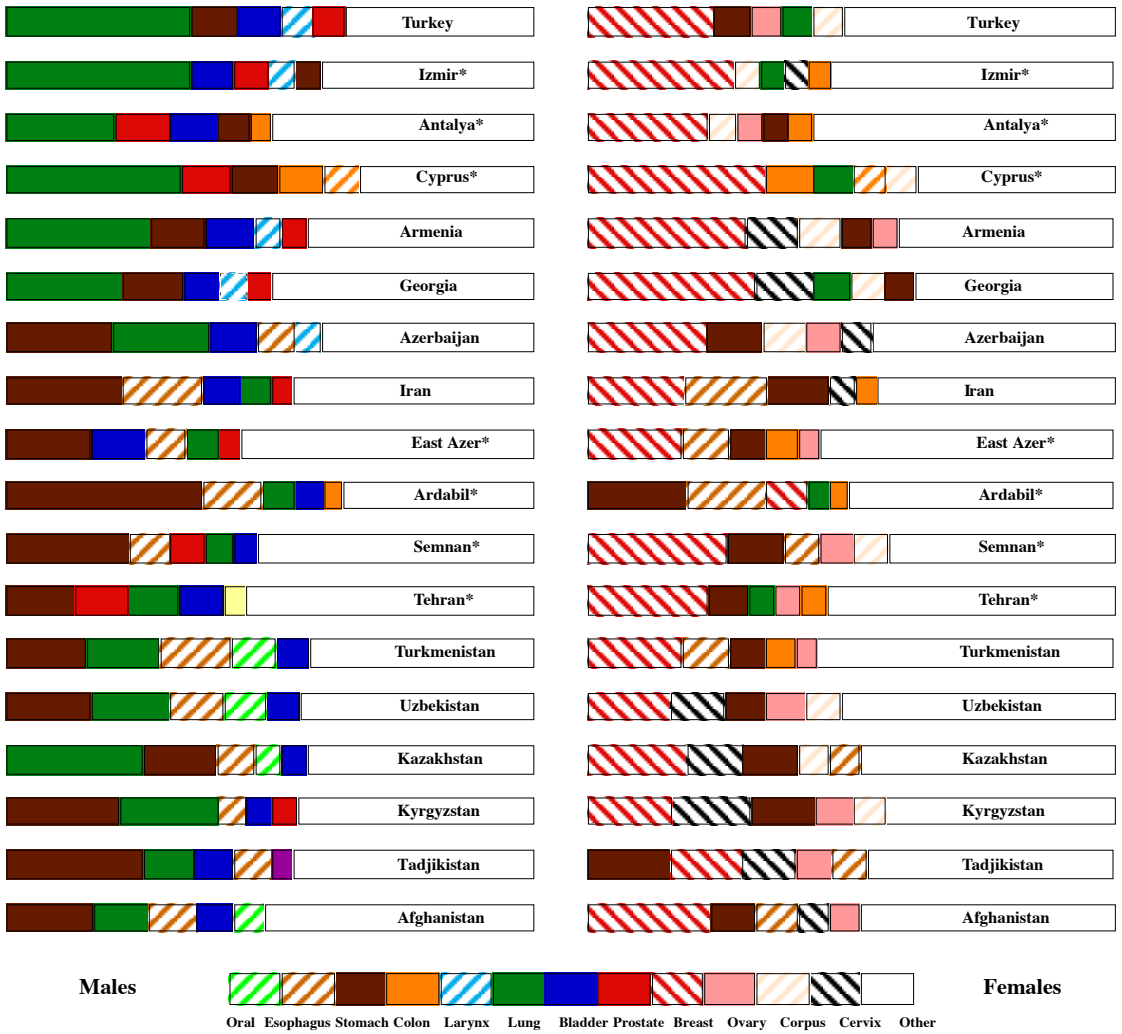

Figure 1. Percentage Data for the Five Most Prevalent Cancers in Countries and Registries of North-Western and Central Asia (after Moore et al., 2010a)

they were liver, cervix, stomach, esophagus and breast (Sandagdorj et al., 2010). In Isfahan, lung, stomach, breast and prostate all increased over the period 2001-2010 (Moradpour and Fatemi, 2013). This confirmed earlier findings for increase with most frequent cancers being gastrointestinal in men and breast in women (Mokarian et al., 2011). Similarly in Gholestan, stomach, colorectal, and breast cancers increasing while esophageal decreasing (Roshandel et al., 2012). Incidence of cancers in the elderly population increases with age (Akbari et al., 2011).

Regarding regional variation, counties in provinces Ardebil, Mazandaran and Kordestan have higher risk than other counties (Maracy et al., 2012). The incidence of cancer was higher in some regions of Tehran which appeared to be mainly determined by socio-economic position rather than dietary intake (Rasaf et al., 2012; Rohani-Rasaf et al., 2013). Breast, colorectal, prostate and bladder ASR ascended across socioeconomic position groups, while cervical and skin cancers in women indicate an aggregation in lower SEP groups (Rohani-Rasaf et al., 2012). n Fars the 5 most frequent cancers in women were breast (13 per 100,000), stomach (4.4 per 100,000), lung and bronchus (2.9 per 100,000), uterus (2.7 per 100,000), and colon and rectum (2.6 per 100,000); and in men, the 5 most frequent types were stomach (9.2 per 100,000), bladder (6.8 per 100,000), lung and bronchus (6.3 per 100,000), lymphocytic leukemia (4.1 per 100,000), and skin melanoma (3.8 per 100,000) (Masoopour et al., 2011)An association has been reported between spatial distribution of common malignancies and soil lead concentration in Isfahan, Iran (Rashidi et al., 2012)

Concerning quality of data, sensitivity rate of all cancer cases was 83.9% and that of Population-based Cancer Registry Center was 52%, 93.1% considering both resources, so that using two resources and the capture-recapture method rather than a single resource may be a more reliable method to estimate the number of cancer cases (Ghojazadeh et al., 2013). The cancer registry program in Fars province (southern Iran) was considered satisfactory in terms of completeness of coverage and information about age, but deficient in recording patient personal details and the error level for cancer encoding was unacceptably high, suggesting the need for enhancing hardware and software resources, education and motivation in all public and private sectors involved in the cancer registry program (Lankarani et al., 2013).

Kazakhstan: Trends in incidence of cancers in under study were different, the most marked reduction in cancer of esophagus is established (T=-6.1%) and revealed the high increase in breast cancer (T=+6.7%). In the dynamics the trend of malignant disease in general tended to decrease (T=-0.5%) (Igissinov et al., 2011a). Esophageal cancer and lung cancer had a tendency to increase with "aging", while in other cases "juvenation" was noted (Igissinov et al., 2011b).

Siberia: Lung cancer, breast cancer, colorectal cancer, non-melanoma skin cancer, and gastric cancer are the most prevalent cancer forms in Kemerovo Region, with no differences in cancer mortality between 2001-2005 and

Figure 2. Percentage Data for the Five Most Prevalent Cancers in Countries and Registries of South-West Asia (after Salim et al., 2010)

2006-2010 (Kutikhin et al., 2012).

Arab Countries

Comparison of many countries were made by Salim et al. (2009; 2010) and by Al-Hamdan et al. (2009), with lung or urinary bladder, and prostate common in males and breast in females (see Figure 2). The age-standardized incidence of all malignancies per 100,000 in both sexes was found to be highest in Qatar followed by Bahrain, Kuwait, Oman, UAE and Saudi Arabia. Paediatric cancer ranged from 9.5% of total cancers in Saudi Arabia and UAE to 4.0% in Bahrain. In males, the most prevalent cancers vary, with lung, urinary bladder or liver in first place, while for females throughout the region breast cancer is the greatest problem. In both sexes, non-Hodgkins lymphomas and leukemias are relatively frequent, along with thyroid cancer in certain female populations. Adenocarcinomas of the breast, prostate and colorectum appear to be increasing Salim et al., 2009) In all countries, the mean age at diagnosis was higher in males than females; cancer of the lung and prostate were commonest among males, and cancer of breast and thyroid among females. Cancer registries in North Africa (Morocco, Algeria, Tunisia, Libya, Egypt) have recently increased, currently serving 9.7% of the total regional population, with lung, breast, colon, and prostate as common (Zanetti et al., 2010).

Bahrain: Men had a higher ASR for most cancer types, and the most common type of cancer was lung for males (35.2), followed by bladder (14.5) and prostate (14.3), and breast for females (46.8), followed by lung (12.2) and ovary (7.7) (Alsayyad and Hamadeh, 2008).

Egypt: Incidence of all common cancers Gharbiah was higher among men than women and urban incidence was higher than rural incidence for all cancer sites, and especially for prostate and uterus (Dey et al., 2011).

Jordan: The 5 most frequently reported cancers among adult males were lung (10.6%), colorectal (9.8%), leukaemia (9.3%), urinary and bladder (8.6%) and prostate (7.4%) and for adult females were breast (32.0%), colorectal (9.0%), leukaemia (6.7%), thyroid (4.9%) and corpus uteri (4.6%), with little change since 1996 (Al-Tarawneh et al., 2010). Major cancer sites for males were bronchus and lung, colorectal, bladder, leukemia and prostate and for females were breast, colorectal, leukemia, thyroid and NHL. (Ismail et al., 2013)

Iraq: In Basrah, the five leading cancers during 2005-2008 were those of breast, urinary bladder, lymphomas, lung and bronchus and leukaemias (Habib et al., 2010). Major variation in incidence rates of different types of cancer was noted in the three governorates of Kurdistan, hematological malignancies being the most common s among males and second most common in females (18.8%, only exceeded by breast cancer (Othman et al., 2011).

Kuwait: ASR of colorectal cancer among Kuwaiti males increased by about 5 fold over the last 33 years and ranked the 1st most frequent site, 2003-2007, prostate cancer 3 fold and non Hodgkin's lymphoma (NHL) and leukemia 1.5 to 2 fold, while lung cancer incidence declined to similar rates as observed in the early 70s and 80s (Elbasmi et al., 2010). For Kuwaiti females breast cancer had the highest incidence increasing 3 fold and colorectal cancer 4 fold, and NHL and leukemia increased by 2-2.5 fold (Elbasmi et al., 2010).

Lebanon: In Baakline, 2000-2008, estimated crude cancer incidence rate was 164 cases/100,000 persons/year, significantly higher in men (194) than women (130), and much lower overall than the national figure (218) (Aib et al., 2013).

Oman: Incidence of cancer is lower than in some Gulf countries and many developed countries, stomach cancer, non-Hodgkin lymphoma and leukemia being the three commonest cancers in males and breast, thyroid and cervical cancers in females (Nooyi and Al-Lawati, 2011

Yemen: Among males, leukemia was the first followed by NH lymphoma, Hodgkin's disease, brain and liver. In females, breast was the first, then leukemia, NH lymphoma, thyroid and brain cancer, with age group dependence in both genders (Basaleem et al., 2010).

South Asia

Comparison of countries within South Asia were made by Moore et al. (2010c), oral and lung cancer generally being most common in males and breast followed by cervival in females, except in Pakistan where oral is again very prevalent (Figure 3).

India: During the year 2001, nearly 0.80 million new cancer cases were estimated in the country and since this can be expected to increase to 1.22 million by 2016 as a result of change in size and composition of population, existing treatment facilities for cancer control in-terms of radiotherapy and financial allocation are woefully inadequate (Murthy et al., 2008). Time trend analysis suggested a significant decreasing trend in the case of cervix in Bangalore and Delhi registries, while the registries of Bhopal, Chennai and Mumbai did not show any significant changes. However, in the case of breast cancer, a significant increasing trend was observed in Bhopal, Chennai and Delhi registries with Bangalore and Mumbai registries demonstrating no such significant changes (Takiar and Srivastav, 2008) Overall, the incidence the total number of new cases in males will increase from 0.589 million in 2011 to 0.934 million by the year 2026. The leading sites of cancers in males are lung, oesophagus, larynx, mouth, tongue and in females breast and cervix uteri (D'Souza et al., 2013a). The results revealed that an estimated 0.44 million died due to cancer during the year 2011, while 0.51 million and 0.60 million persons are likely to die from cancer in 2016 and 2021 Among women, cancer of the breast, cervical and ovary account for 34 percent of all cancer deaths. The leading sites of cancer mortality in males are lung, oesophagus, prostrate and stomach. (D'Souza et al., 2013b). There are numerous difficulties in the conduct of a population-based

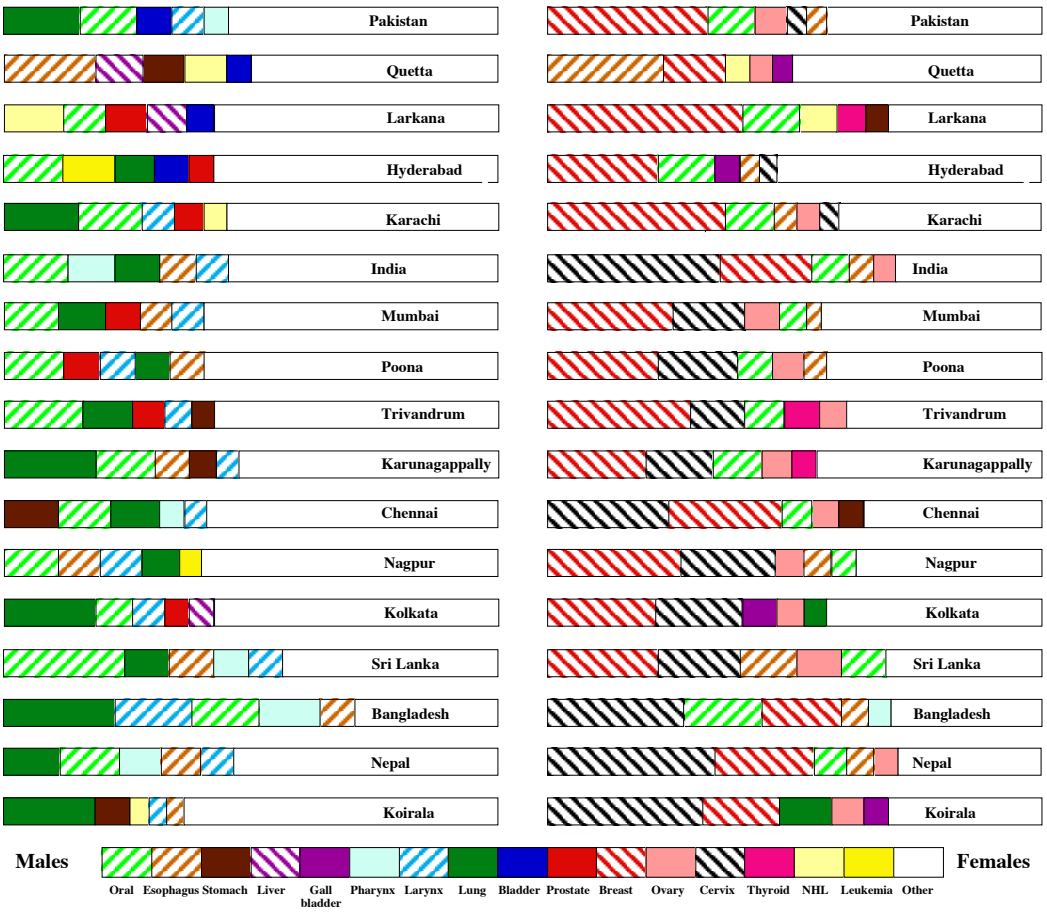

Figure 3. Percentage Data for the Five Most Prevalent Cancers in Countries of South Asia (after Moore et al., 2010b)

survival study in the context of developing countries, including India. Loss to follow-up is a typical problem encountered, causing biased estimates. In view of this difficulty with the classical approach, the objective of this study was to propose an indirect methodology for the study of survival. The proposed methodology is based on life table techniques and uses current data on incidence and mortality from the disease (Dhar et al., 2009). A prospective cohort study of cancer may be feasible in some centers in India with active follow-up to supplement registry data, with inclusion of cancers diagnosed at private institutions, unique identifiers for individuals, and computerized medical information to improve cancer registries (Mathew et al., 2011). Based on the pooled figures and the relative changes, the emerging new cancers are prostate (140%), liver (112%) and mouth (95%) (Takiar and Vijay, 2011), breast cancer contributed to the maximum % change (38%), followed by ovarian (8.0%), the emerging new cancers were corpus uteri (187%), gallbladder (162.1%) and lung cancer (136.1%) (Takiar and Vijay, 2010). Under the conditions that prevail in India, active follow-up of cancer patients yields the most reliable estimates of cancer survival rates, otherwise overestimate (Swaminathan et al., 2008).

In the Allahabad region of North India, oral and oropharyngeal malignancies are the commonest malignancies in men, while in females carcinoma of cervix and breast are the most frequent (Mehrotra et al., 2008) Barshi rural (Jayant et al., 2010). In Sikkim, the overall AARs were 89.4 and 99.4 per 100,000 person-years in males and females, respectively, with incidence rates highest amongst the Bhutia group (Verma et al., 2012). In urban Delhi lung (ASR: 13.8 per 100,000) followed by oral cavity (ASR: 11.4), prostate (ASR: 9.0) and larynx (ASR: 7.9). In females, breast (ASR: 30.2 per 100,000) was the most common site of cancer, followed by cervix uteri (ASR: 17.5), ovary (ASR: 8.5) and gallbladder Manoharan et al., 2009). In rural Delhi, oral cavity (ASR: 8.0 per 100000) followed by lung (ASR: 6.5), larynx (ASR: 4.0) and bladder (ASR: 4.1). In females cervix uteri (ASR: 10.3 per 100,000) was the most common site of cancer followed by breast (ASR: 7.8), gallbladder (ASR: 3.5) and ovary (ASR: 3.3) (Manoharan et al., 2010). About 26.6% increase is expected in the registered number of cancer cases in five cities and 52.7% increase is projected for Delhi which would mean highest number of cases (Marimuthu, 2008). In Chennai, the incidence of cervical cancer is projected to drop by 46% and oesophageal cancer by 21% decline in 2015, while a 100% increase in future thyroid cancer incidence 42% increase in prostate cancer is predicted (Swaminathan et al., 2011). Barshi Rural Cancer Registry prevalence of smoking compared to Mumbai was low (9.9% vs 23.6%) and the incidence of smoking dependent cancers viz., cancers of oropharynx, larynx and lung were significantly low ($P< 0.05$). However, although the proportion of tobacco chewers is higher in Barshi compared to Mumbai, the incidence rates for cancer of hypopharynx and oral cancer which are predominantly

chewing dependent did not show higher rate than in Mumbai (Thorat et al., 2009). Dindigul Ambilikkai Cancer Registry (DACR) covering rural population of 2 million, common cancers among men were stomach (5.6), mouth (4.2) and esophagus (3.7). Cervical cancer (22.1) was ranked at the top among women followed by breast (10.9) and ovary (3.3) lesser by at least two folds and 5-year survival were on par or lower than Chennai for most cancers (Swaminathan et al., 2009).

Nepal: Overall the most common site in males was the lung, followed by the oral cavity and stomach, while the first three in females were cervix uteri, breast and lung. Shifts in the the main cancers were noted with different ages, with leukemias and lymphomas in young individuals replaced by lung, oral and stomach in middle age and lung, stomach and larynx in the oldest category of males. In females the shift was to breast in young women, then cervix in middle age followed by lung in the very aged Pradhananga et al., 2009)

Pakistan: Karachi, in males the five most frequent malignancies were head and neck (32.6%), lung (15%), gastrointestinal tract (GIT) (6.9%), lymphoma (6.1%), and bone and soft tissue (4.9%). In females breast cancer was the most common cancer accounting for 38.2% followed by head and neck (15.1%), cervical (5.5%), ovarian (4.9%) and GIT cancer (4.9%) respectively (Hanif et al., 2009).In Multan, the common tumours in males, were leukaemia, prostate cancer, urinary bladder cancer, skin cancer and lymphomas and in females they were leukaemia, breast cancer, skin cancer, gallbladder cancer and lymphomas (Atique et al., 2008). In Dir (North West Frontier) the leading cancers were lymph/blood, and cancers of the digestive system, skin and breast (Zeb et al., 2008).

South-East Asia

In two overviews, Moore et al. (2010c; 2010d) evidence was summarized for cancer epidemiology, lung and liver being most common in males and cervical an breast, along with liver, in females of the mainland countries (Figure 4). In peninsular and island SE Asia, lung and stomach or coloorectal and prostate were the most common in males and breast with cervix, lung or colorectal in females (Figure 5).

Indonesia: Data from the population-based cancer registry in Jakarta Province showed the leading cancers among females in 2005-2007 to be breast cancer, cervical cancer, ovarian cancer, colorectal cancer and among males are bronchus and lung cancer, colorectal cancer, liver cancer, pharyngeal cancer, and prostate cancer. The leading childhood cancers are leukaemia and retinoblastoma (Wahidin et al., 2012).

Laos: The five most common cancers causing mortality per 100,000 were liver (52.2), followed by colorectal

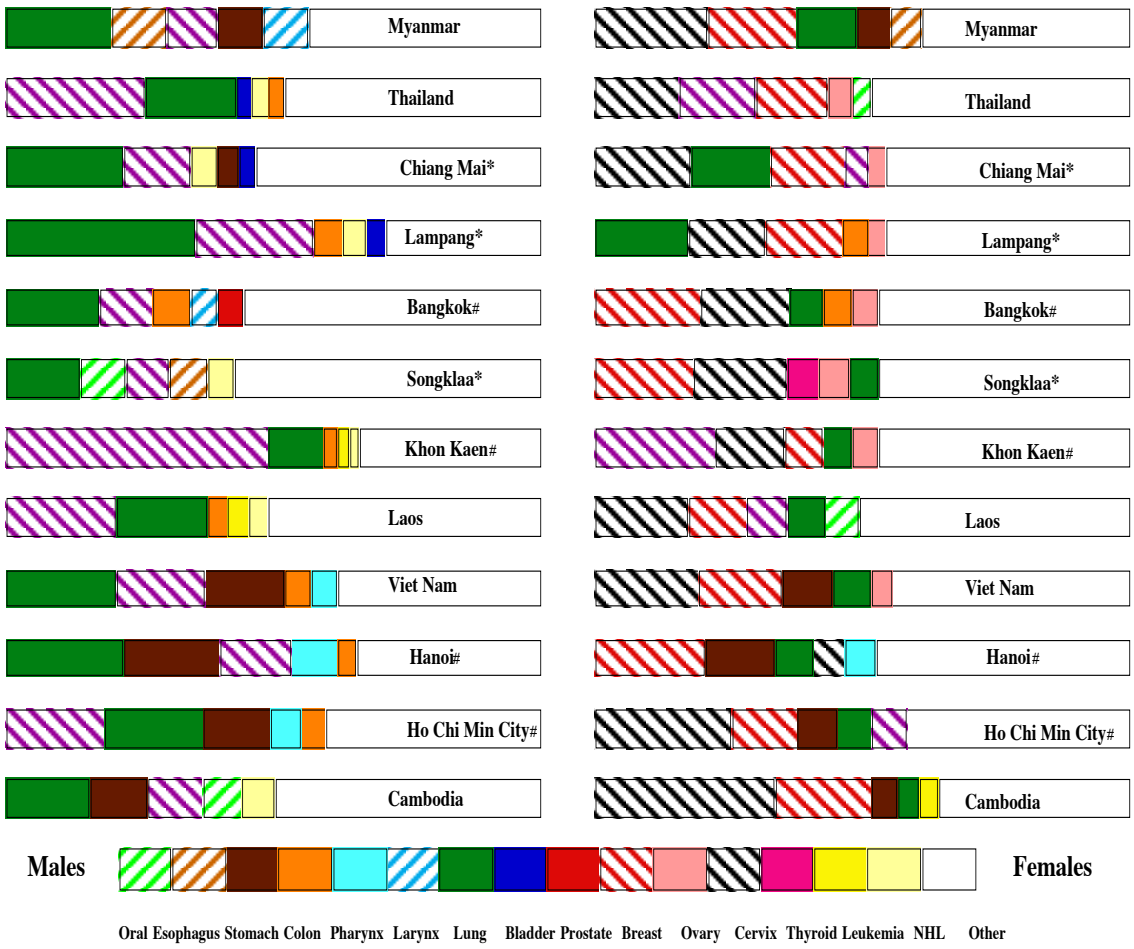

Figure 4. Percentage Data for the Five Most Prevalent Cancers in Countries of Mainland South-East Asia (after Moore et al., 2010c))

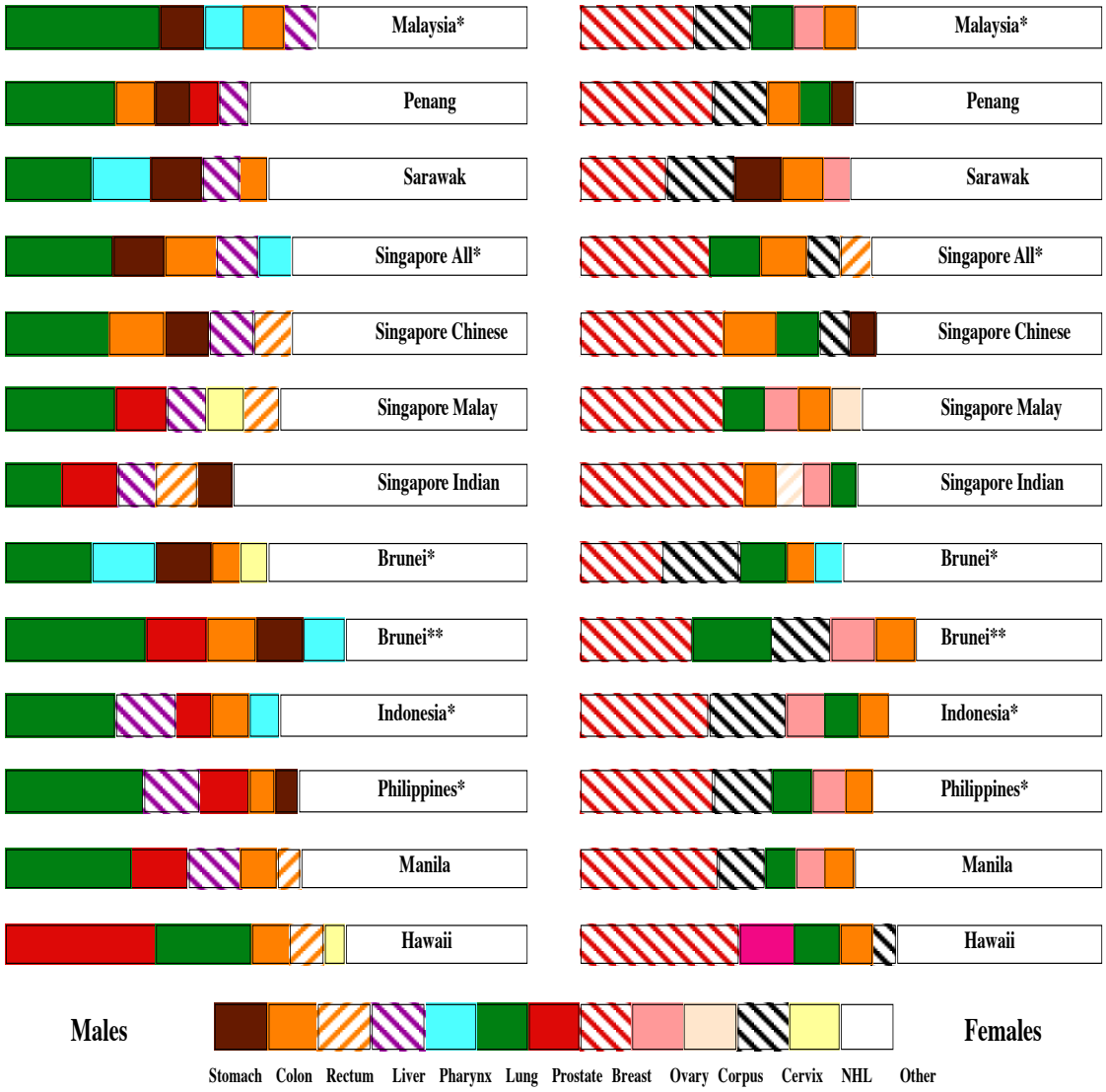

Figure 5. Percentage Data for the Five Most Prevalent Cancers in Countries of Peninsular and Island South-East Asia (after Moore et al., 2010d)

(19.0), lung (17.3), stomach (6.9), and leukemia-lymphoma (7.2) in males and liver (28.4); followed by colorectal (19.0), lung (14.0), cervical uteri (9.2) and stomach (7.1) in females (Nguyen et al, 2011).

Philippines: From 1980-2002 overall incidence increased in both sexes. Among males, lung cancer was the leading cancer and reached a peak in 1988-92. Colorectal and prostate cancers showed rising trends and became more common than liver cancer, with stable incidence over time. Stomach cancer incidence fell steeply. Among females, there was a steady increase in incidence of breast cancer (Laudico et al., 2010) increasing trends were found for breast, 5% annual change, lung (0.5%) and colorectal (1.5%) cancers. Decreasing trends were found for cancers of the liver (-1.2%) and cervix (-1.9%). Among males, increasing trends were found for lung cancer (0.5%), whereas liver cancer rates have been decreasing (-1.0%) Medina et al., 2010).

Singapore: Increased incidence is most marked in colorectal, breast and prostate cancers, mirroring the most common cancers seen in other developed countries. The eradication of infectious disease such as hepatitis B, through the implementation of the hepatitis B immunization programme in 1985, has led to the decline in liver cancer (Lim et al., 2012; Teo and Soo, 2013) Similar to western societies, the incidence of proximal gastric cancer is increasing (Deans et al., 2011). In the 10-year period, 52.9% of patients with cancer had died in the hospital, 30.3% died at home and 10.7% in in-patient hospice (Hong et al., 2011).

Thailand: In Chiang Mai, the most common cancers by relative frequency are cancers of the lung, cervix, liver, breast, and non-Hodgkin's lymphoma (Kamnerdsupaphon et al., 2008) The distribution of patients were (a) 32% from Chiang Mai, (b) 42% from nearby provinces of Lampoon, Phayao, and Chiang Rai, (c) 20.4% from other northern provinces, and (d) 1.2% from other parts of the country.

Australasia

Moore et al. (2010e) summarized data for the Pacific Islands, lung and prostate being most common in Hawaii, Guam, Micronesia and New Zealand Maori and new Caledonia males, but oesophageal and liver in Papua New Guinea and the Solomons (Figure 6). Because of the Indian

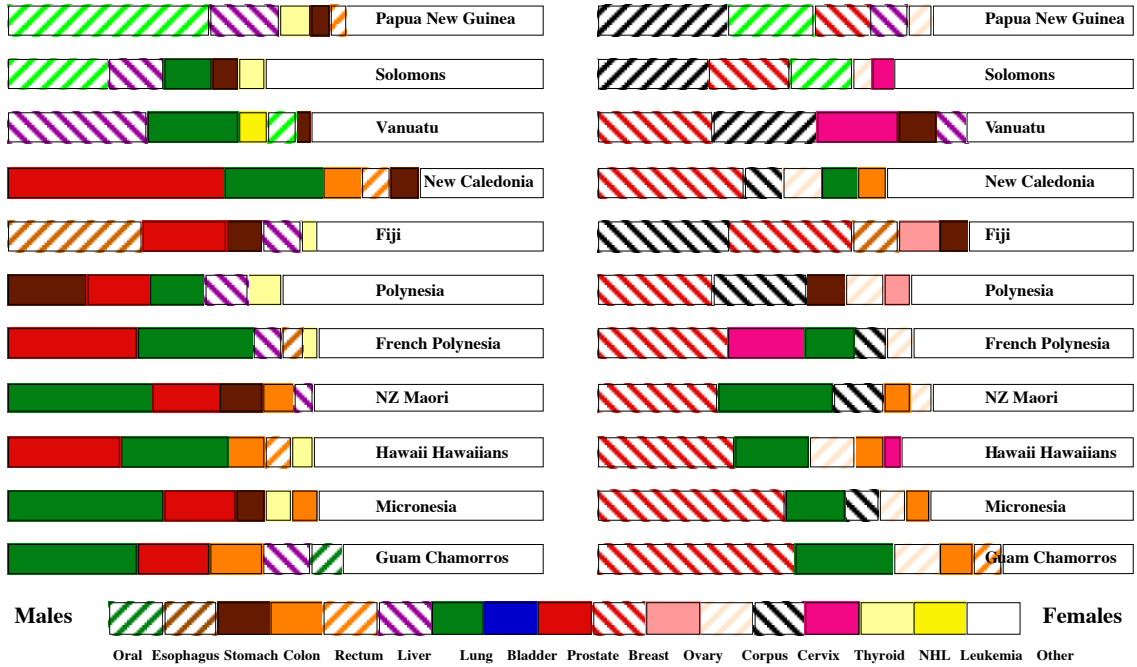

Figure 6. Percentage Data for the Five Most Prevalent Cancers in Countries or Islands of the Pacific (after Moore et al., 2010e)

population in Fiji, the data are atypical. In females, they were breast and lung and otherwise cervix.

Australian Aborigines: Estimates of cancer incidence, mortality and survival in aboriginal people from NSW, Australia, Mean annual cancer incidence in NSW Aboriginal people was estimated to be 660 per 100,000 and 462 per 100,000, 9% and 6% higher than all NSW males and females respectively, mortality being 68% and 73% higher (Morrell et al., 2012).

Easter Island: Most cases of cervical cancer occurred in women of Rapa Nui ethnicity, while most skin cancers were found in non-Rapa Nui people (Rius et al., 2013)

Guam: Chamorros (the indigenous people of the Mariana Islands) on Guam had a slightly lower total cancer incidence rate than the total U.S. population (406.8/100,000 vs. 478.6 U.S.) but high age-adjusted incidence rates for cancers of the mouth and pharynx (24.4 vs. U.S. 10.7), nasopharynx (13.9 vs. 0.6 U.S.), liver (13.2 vs. 5.2 U.S.), and cervix (Haddock et al., 2013)

New Zealand: Undercounting of Māori, Pacific and Asian events on cancer registration data, relative to census data, throughout 1981-2004 (Shaw et al., 2009). Stage completeness differs widely by cancer site, partly explained by patient, service and/or cancer related factors (Gurney et al., 2013). Colorectal and lung cancers were more likely to be fatal for people living in deprived areas, while breast and prostate cancers had adverse survival chances if they lived distant from a cancer centre (Haynes et al., 2008). Significant increases in past cancer risk associated with increasing soil arsenic in socioeconomically disadvantaged areas and demonstrate the robustness of the geospatial approach (Pearce et al., 2012).

North-East Asia

In one overview, Lone et al. (2010) summarized epidemiological data for China, Mongolia, Korea and Japan, lung and stomach cancers being most common in males overall, together with liver, while prostate and colorectal predominated in Chinese and Japanese in Hawaii. In females, breast and lung were one and two in China but breast and stomach elsewhere, except again in Hawaii where number two was colorectal (Figure 7).

China: Data from 104 registries covering 85,470,522 people (57,489,009 in urban areas and 27,981,513 in rural areas) showed lung, gastric, colorectal, liver, esophageal and pancreatic cancers, with encephalomas and lymphomas to be the order of frequency in males, and breast and cervical cancer in females (Chen et al., 2013). Main cancers in rural areas were cancers of the stomach, followed by esophageal cancer, lung cancer, liver cancer and colorectal cancer, whereas the main cancer in urban areas was lung cancer, followed by liver cancer, gastric cancer and colorectal cancer (Chen et al., 2011; 2012; 2013a; 2013b). China registration facing some problems and challenges, such as no stable groups of registrars, shortage of training opportunities, poor data quality, insufficient utilization and lack of multidisciplinary mechanisms, so that the cancer registration system still needs to be enhanced and improved (Wei et al., 2012). In the 20 year-period 1989-2008, incidence of gastric cancer, liver cancer and esophageal cancer still keep gradually increasing, while lung cancer, female breast cancer, colorectal cancer and cervical cancer are markedly going up (Chen et al., 2012). Cancer registration data are representative at the country level and for urban areas, they may not reflect real cancer burden in rural areas, particularly with some cancer types (Li and Chen, 2009). The 3-year relative survival rates for major cancer sites ranged from 21% to 90%, with lung cancer showing the

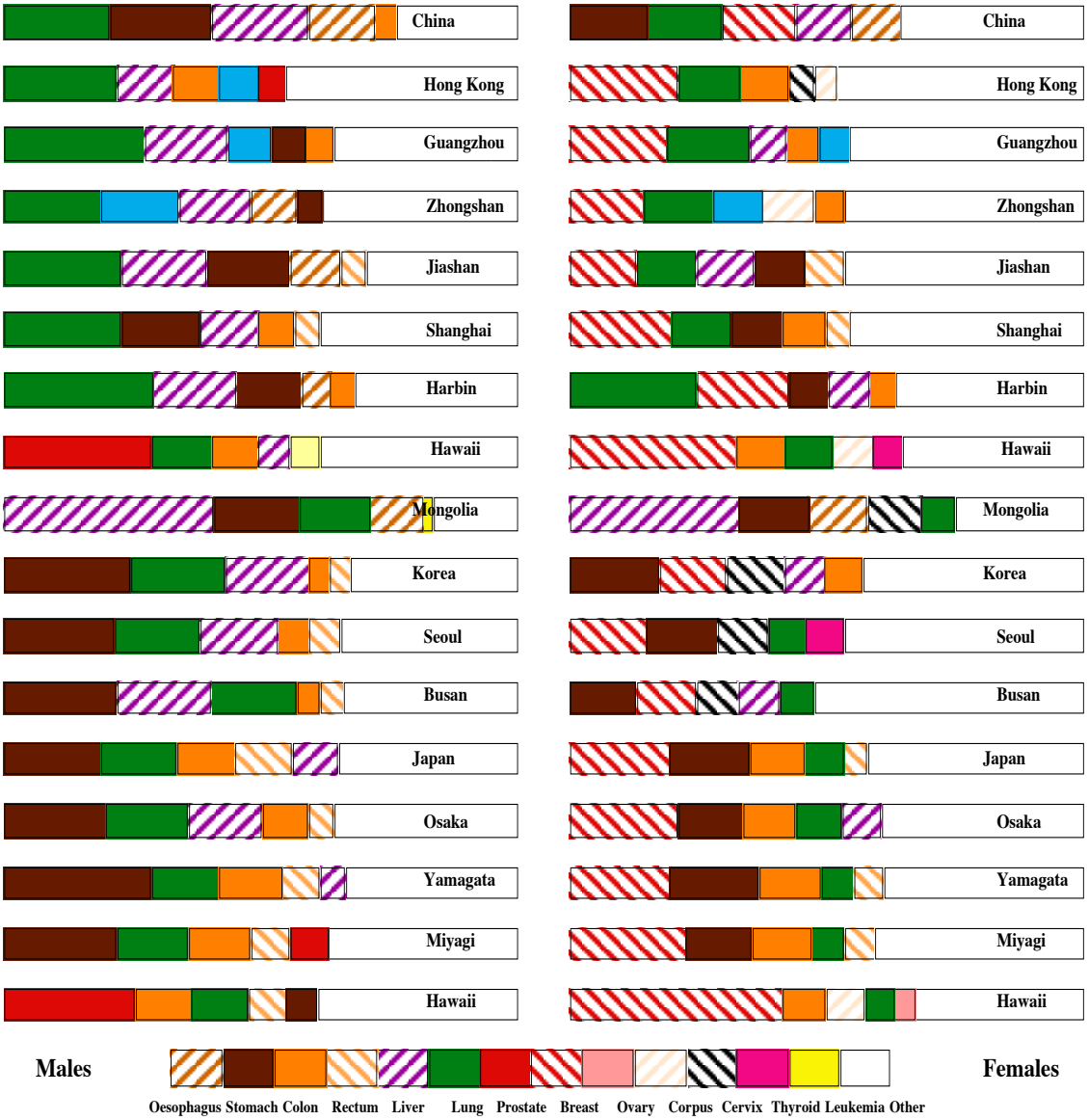

Figure 7. Percentage Data for the Five Most Prevalent Cancers in Countries of North-East Asia (after Long et al., 2010)

lowest and female breast cancer the highest. 5-year relative survival rates for major cancer sites ranged from 18% to 85%, with liver cancer showing the lowest and again female breast cancer the highest. Female cancer patients had higher relative survival than males across the 5-year follow up period, with a sex difference of nearly 15% (Lei et al., 2010). Cancer incidence among adolescents and young adults in urban Shanghai, 1973-2005, decreased in males whereas they increased in females (Wu et al., 2012).

Korea: The incidence rate of all cancers found using claims data was 363.1 per 100,000 people, which is very similar to the 361.9 per 100,000 rate of the national cancer registry (Seo et al., 2012). On a national level, linking registry data with clinical, drug safety, financial, or drug utilization databases allows analyses of associations between utilization and outcomes (Soon et al., 2013). Cancer case ascertainment were 88.2% vs 87.2% in cancer registry, 38.2% vs 41.1% in death certificate and 57.9% vs 62.0% in medical records data, 96.9% vs 97.1% for all combined sources and were not statistically different between the two radiation exposed non-exposed groups (Song et al., 2012). The 10-year RSRs for all cancers combined improved from 29.5% and 50.5% during 1993-1998 to 39.2% and 58.9% during 1999-2007 in Korean men and women, respectively (Lee et al., 2010) The incidence rate for all cancer combined showed an annual increase of 2.8% from 1999 to 2007 (Jung et al., 2010).

Database of Seoul regional cancer registry has a key role for the method to estimate the valid nationwide cancer statistics in Korea with using the population-based cancer registries' databases (Anonymous, 2009). Compared with the ASRs in 1993, the ASRs in 2002 increased for colorectum (58.4% for men, 27.1% for women), prostate (81.5%), breast (58.3% for women), thyroid (141% for women), and bronchus/lung (15.4% for women). The ASRs for stomach (-18.7% for men, -20.7% for women) and uterine cervix cancer (-39.7%) had decreased (Shin et al., 2008).

Mongolia: The most common cancers are those with

a primary site of liver, stomach and esophagus, for which cases fatality rates are high in all populations (Sandagdorj et al., 2010).

Japan: The Center for Cancer Control and Information Services at the National Cancer Center supports the management of the hospital-based cancer registry by providing training for tumor registrars and by developing and maintaining the standard software and continuing communication, which includes mailing lists, a customizable web site and site visits. Data from the cancer care hospitals are submitted annually to the Center, compiled, and distributed as the National Cancer Statistics Report (Higashi et al., 2013).

General, age-period cohort model data were published by Utada et al. (2010). Cohort effects influenced by long-term risk factors were prominently observed for every site, decrease in stomach and liver cancer cases being related to reduction in risk factor prevalence (Ito et al., 2011). Survival for uterine cancer, prostate cancer, testis cancer, lymphoma and leukemia was much lower in Japan than in other countries, but for cancers of the esophagus, stomach, colon, liver and gallbladder were better (Matsuda et al., 2011).

In Fukui, while incidence and mortality of stomach cancer significantly decreased in both sexes those for breast and prostate cancers were significantly increased, along with mortality for liver and lung cancers in both sexes (Hattori et al., 2010).

Female Predominant Cancers

Breast

In Egypt, incidence rate of breast cancer was three to four times higher in urban areas than in rural areas (60.9/10(5)-year for urban areas versus 17.8/10(5)-year for rural areas; IRR=3.73, 95% CI=3.30, 4.22) with highest rates seen in more developed districts of Tanta and El-Mehalla (Dey et al., 2010a). Urban ER+ incidence rate (per 100,000 women) was 2-4 times (IRR = 3.36, 95% CI = 4.84, 2.34) higher than rural incidence rate. (Dey et al., 2010b). In Saudi Arabia, the annual percentage incidence of malignant breast cancer steadily increased by 4.8%, from an annual rate of 23.5% in 2000 to 47.2% in 2007 (Al-Rikabi and Husain, 2012). Saudi Arabia national registry, relative survival rates at one, three and five years were 96%, 83% and 65%, respectively (Hamdan et al., 2011). In Aden, early breast cancer (stages I-II) occurred in 47%, and late breast cancer (stages III-IV) in 51.5%, with invasive ductal carcinoma was the commonest pathology (89.3%) Harhra and Basaleem, 2012) Between the years 2004 and 2010, breast cancer represented 22% of all cancers registered in women in Sanaa, with 71% aged 50 or younger at the time of diagnosis (El-Zaemey et al., 2012). Despite Omani breast cancer patients continuing to present with advanced breast cancer, survival rates have significantly improved (Kumar et al., 2011). In the Lebanon registry, the age-standardized incidence rate per 100,000 was estimated at 71.0. for 2004 (Lakkis et al., 2010). In Jordan, registry of 838 women included, half were diagnosed between the ages 40 and 59 years, the overall Kaplan-Meier 5-year survival rate being 59.3% (Arkoob et al., 2010).

In Kazakhstan, increasing trends over time in almost all areas, a direct strong correlation between the degree of contamination with high pollution emissions in the atmosphere from stationary sources and the incidence of breast cancer being found (Bilyalova et al., 2012).

In Iran, the standardized mortality ratios for breast cancer patients at 5, 10 and 15 year intervals after diagnosis were 6.74 (95% CI, 5.5- 8.2), 6.55 (95%CI, 5-8.1) and 1.26 (Haghighat et al., 2012). Totally, Iran 28.2%of the patients were younger than 40 years old and 36.8% had the included criteria for familial breast cancer (Sabokdar et al., 2012). Both the frailty and Cox proportional hazard model emphasize that early detection improves survival in Iran (Faradmal et al., 2013). survival rate of male breast cancer inn Iran is relatively lower than that in western countries (Salehi et al., 2011). Online registry of breast cancer is country's requirement because this system not only delivers services for laboratories, pharmacies and all physicians for their patients' follow up and monitoring, but also provides ability to access and analyze collected data for managers and experts Iran (Zare et al., 2012). Ardabil largest proportion being grade II (30.6%), but very many belonged to grades III and IV (40.5%) slight increase over the period studied (Fouladi et al., 2012). Using life table analysis, the overall relative 5-year survival rate was found to be 51% (Fouladi et al., 2011) In the 5-year period 1996-2000, here were 2421 cases recorded in the 5 registries, with an age-standardized incidence rate (ASR) of 16.2 per 100,000 person-years (Sadjadi et al., 2009). The ASR of breast cancer was significantly lower in females from Turkmen ethnicity and those from rural areas (Taheri et al., 2012)

In Pakistan, less than 1% were at Stage 0 and 10%, 32%, 35% and 23% were at Stage I, II, III and IV respectively (Khokher et al., 2002). Rawapindi, most frequent age group was 26-30 years (78.6%), the most common histological tumour type was invasive ductal carcinoma (88.7%), grade 2 (57.1%), followed by grade 3 (29.8%) being the most frequent (Mamoon et al., 2009)

With more and more women in rural India becoming educated, one could foresee breast cancer becoming more frequent even in rural areas of India in future (Swaminathan et al., 2009). In Chittaranjan total number of female breast cancer cases steadily increasing from 1997 to 2001 and only slightly lower from 2002 to 2004, the majority in the 40-49 year old age group, but percentage mortality gradually decreased from 25.7% in 1997 to 16.8% in 2004 (Datta et al., 2012). The incidence of breast cancer has increased in Mumbai during last two to three decades, especially among older women (Dikshit et al., 2012).

In South East Asia, Malay ethnicity is independently associated with poorer survival after breast cancer (Bhoo-Pathy et al., 2012). Malaysia and Singapore, 72% percent of the women were Chinese followed by Malays (16%), Indians (8%), and other races (4%) (Pathy et al., 2011) The overall 5-year survival was 59.1%, stage, nodal status and grade of tumour to be independent prognostic factors, whereas ethnicity, age and ER status were not (Mohd Taib

et al., 2008). The age-adjusted 5-year relative survival, using period analysis, of Metro Manila residents, Filipino-Americans and Caucasians were 58.6%, 89.6% and 88.3% respectively (Laudico et al., 2009). In Thailand, the disease incidence under age 40 years was relatively low (4.13/105) while the incidence in the age groups 40 and older was very high (39.2/105) (Kotepui and Chupeerach, 2013).

Breast cancer incidence in Mongolia (age standardized 8.0/100,000) is almost a third of rates in China (21.6/100,000), and over five times that of Japan (42.7/100,000) and Russia (43.2/100,000). Rates within Mongolia appear to have increased slightly over the last decade and are higher in urban than rural areas (annual percentage increase of age-standardized rates from 1998 to 2005 was 3.60 and 2.57 %, respectively). The increase in breast cancer incidence with age plateaus at menopause, as in other Asian populations (Troisi et al., 2012).

The breast cancer incidence has been increasing annually both in urban and rural areas in China from 36.17/100 000 (3920/10 838 355) and 10.39/100 000 (436/4 197 806) in 1998 to 51.24/100 000 (11 302/22 057 787) and 19.61/100 000 (1475/7 522 690) in 2007 (Li et al., 2012). First comprehensive population-based breast cancer epidemiology study in Southern China using the Hong Kong Cancer Registry database (Kwong et al., 2011). After 1990, breast cancer mortality tended to decrease slightly in Hong Kong and Singapore except for women aged 70+. In Taiwan and Japan, in contrast, breast cancer death rates increased throughout the entire study period. Before the 1990s, breast cancer death rates were almost the same in Taiwan and Japan; thereafter, up to 1996, they rose more steeply in Taiwan and then they began rising more rapidly in Japan than in Taiwan after 1996. The most rapid increases in breast cancer mortality, and for all age groups, were in Korea (Shin et al., 2010). National Summary of Hospital Cancer Registry 2007 Japan Japanese classification of breast cancer has spoiled the accuracy of pTNM (Teramoto and Tanimizu, 2011). Accurate outcome of an evaluation of breast cancer screening must include the use of a population-based cancer registry for detecting false-negative cases (Suzuki et al., 2008).

Ethnic disparities in breast cancer survival in New Zealand can be attributed to deprivation and differential access to health care rather than differences in breast cancer subtypes (McKenzie et al., 2011). Māori and Pacific women, and those from lower socioeconomic areas, are more likely to present with advanced uterine cancer (Firestone et al., 2012). No straightforward explanation for the relatively high incidence breast amongst Māori is apparent (Cunningham et al., 2010).

Ovarian

Age-standardized ovarian cancer rate in Iran was much lower in comparison with high incidence areas in the world (Arab et al., 2010a). Epithelial tumors displayed the highest age specific incidence rate, followed by germ cell tumors. Serous epithelial tumors were the most common in the epithelial group (Arab et al., 2010b) In Niigata Gynecological Cancer Registry, the ASRs of clear cell, mucinous, and endometrioid adenocarcinomas in the 50+ age group were significantly increased, especially the clear cell adenocarcinoma, approximately threefold from 1.2 (1983-1989) to 3.5 (2000-2007) per 100,000 females (Yahata et al., 2012). In Australia, the relative risk (95% confidence limit) of ovarian-cancer death reduced to 0.51 (0.46, 0.57) for 1999-2003 compared with 1980-1983 (Tracey et al., 2009).

Uterine Corpus

Uterine cancer showed the highest urban-rural incidence rate ratio (IRR = 6.07, 95% CI = 4.17, 8.85) (Dey et al., 2010). Increase over time in the number of patients with endometrioid uterine adenocarcinomas was noted in Taiwan (Huang et al., 2012) with increasing trends for corpus uterus cancer incidence rates during 2003 - 2007 in 32 selected cancer registry areas of China (Wei et al., 2012). After breast cancer multivariate analysis revealed that the incidence rate ratio of corpus uteri cancer associated with hormone therapy was 2.53 (Kamigaki and Kawakami 2011).

Thyroid

In Saudi Arabia, thyroid cancer incidence rates have increased exponentially between 2000 and 2010 with significant geographical variation, now the second most common cancer among young Saudi women with a male to female ratio at 0.3:1 (Hussain et al., 2013). Size of young population and social determinants may be important effective elements for differences in survival, which should be taken more into consideration in managing chronic disease such as thyroid cancer (Khayamzadeh et al., 2011) In China both incidence and mortality of thyroid cancer are higher in females than in males, 3.38 and 1.75 times higher in urban than rural areas, the incidence showing annually increase of 14.5% while the mortality increased by 1.42% (Liu et al., 2012). Thyroid cancer has been the leading cancer in women in South Korea since 2003 and is now the fifth most common cancer in men in Gwangju and Jeonnam, (Kweon et al., 2013).

Cervical

Basically high incidence rates were identified in the eastern, central and northern parts of the country and in Almaty (Igissinov et al., 2012). In Pakistan, Karachi a cause of concern is the steadily increasing incidence especially in the younger birth cohorts, the advanced disease at presentation (Bhurgri et al., 2008a). The total ASR in uterine cervical cancer decreased from 25.7 in 1997 to 13.4 in 2008, but the incidence of CIS increased from 7.6 to 15.8 in same period (Boo et al., 2011). In Japan, ther is a significant trend in increasing incidence of invasive cervical cancer for those < 40 years of age (from 4.7 to 13.1), whereas a significant trend of decreasing incidence for the 50+ year age group (Banzai et al., 2011).. Advanced stage at diagnosis was the main determinant of poor survival among the aged cervical cancer patients in Osaka (Ioka et al., 2009). Second cancers was significantly greater than the general population in cervical cancer patients in Taiwan esophagus, stomach, small intestine, rectum, lung, bone, non-melanoma skin, uterine corpus,

vagina/vulva, bladder, kidney, and leukemia (Chen et al., 2012).

Hepatopancreastic Axis

Hepatocellular Carcinoma

The burden of hepatocellular carcinoma (HCC) has been increasing in Egypt with a doubling in the incidence rate in the past 10 years, attributable to several biological (e.g. hepatitis B and **C** virus infection) and environmental factors (e.g. aflatoxin, AF) (Anwar et al., 2008) The analysis revealed a higher incidence in males than in females, significant geographic variations among districts, and a higher incidence in Gharbiah than that reported by SEER (Lehman et al., 2008). The iincidence of HCC is not very high in Iran; however, the higher incidence in Kerman and also the lower age of onset mandates further research (Moghaddam et al., 2010).

In Thailand, during 1990-2009, the trends in HCC incidences have been decreasing significantly with the annual percent change of 6.2% per year in males and by 6.5% per year in females (Wiangnon et al., 2012). According to data from the 184 cancer registries through GLOBOCAN 2008, liver cancer incidence in China was ranked the 5th in males, and 6th in females while mortality was ranked 2nd and 5th (Chen et al., 2012). During the past 18 years, the overall incidence rate decreased gradually in 11 covered areas in China (Gao et al., 2013). The age-specific incidence and mortality were relatively low among age groups under 30 years but dramatically higher in those aged 80-84 years (Chen et al., 2013). The liver cancer mortality in young people in Qidong demonstrates a continuously falling trend (Chen et al., 2012). The incidence of HCC in Osaka started to decrease by 2000, mainly because of decreased HCV-related HCC (Tanaka et al., 2008).

Despite declines in the age-adjusted incidence rates of HCC over time, the absolute number of cases increased likely due to the ageing cohort and an increasing prevalence of both hepatitis B and C in Australia (Thein et al., 2011). Hepatitis C was the form of viral hepatitis most common among liver cancer cases on Guam (Haddock et al., 2013).

Cholangiocellular Carcinoma

Age-adjusted incidence rates of intrahepatic cholangiocarcinoma varied by more than 60-fold by region. The highest rates were found in Khon Kaen, Thailand, where 90% of liver tumors were cholangiocarcinomas. The next highest rates were found in the People's Republic of China, followed by the Republic of Korea (Shin et al., 2010). The most common type is HCC and the annual incidence of PLC is increasing in Brunei Darussalam, rates being higher in males and Chinese (Chong et al., 2013). For cholangiocellular carcinomas 10 to 12 years there is a rather stable rate in Khon Kaen, Thailand, but the recent decline in incidence may represent a real fall in risk (Kamsa-ard et al., 2011).

Pancreatic Cancer

Over the past decade, incidence of pancreas malignancies has risen steadily in Yazd, Iran (Zahir et al., 2013). In China, there is an increasing trend of pancreatic cancer incidence which was more significant in the rural areas than the slowly increasing trend in the urban areas (Ma et al., 2013).

Upper Aero-Alimentary Tract

Oral Cancer

There is a need for future analytical studies investigating specific risk factors of heads and neck in Egypt (Attar et al., 2010). Comparing the two time intervals (1991-2000) and (2001-2010) showed that the ratio of carcinomas and salivary gland tumors had decreased while there was an increase in incidence of sarcomas and lymphomas in Isfahan (Razavi et al., 2012). In Sri Lanka, reversal of betel quid use and smoking must be considered in accounting for declining trends for oral cancer, while increasing rates for oropharyngeal cancer point to other risk factors (Ariyawardana and Warnakulasuriya, 2011). Oral and pharyngeal cancers in Khon Kaen, Thailand, 62.6% were female and 37.4% were male, Eighty five percent of all cases were diagnosed in advanced stage (stage III and IV) Vatanasapt et al., 2011). The incidence and mortality of oral and pharyngeal cancer were low in China from 2003 to 2007 (Hu et al., 2013). In Korea, HPV-related sites (oropharynx) had increased significantly over the period 1999 to 2009 (APC=2.35%, P=0.017), particularly in young men (30-59 years, APC=2.65%, P=0.031), whereas HPV-unrelated sites such as larynx and hypopharynx decreased markedly in both sexes. Interestingly, tongue cancer was found to have increased gradually (APC=2.35%, P=0.003) in both sexes (Shin et al., 2013)

Nasopharyngeal Cancer

Our results indicate that the survival of NPC patients in Sihui has significantly increased in recent years and this increase is not influenced by patient's sex, age, histologic type, and clinical stage (Liu et al., 2013) squamous cell carcinoma (SCC) and adenocarcinoma (AD) incident proportions during 1990-2007 remained relatively stable. Moreover, SCC was the major pathological type, accounting for 70.6 percent of all new cases, while AD were relatively few and accounted for only 2.66 percent throughout the period (Wei and Liang, 2012). markedly decreasing trends of NPC ASIR and ASMR in Hong Kong over the past three decades, results do not support the notion that changes in salted fish consumption had played an important role (Lau et al., 2013). Incidence rates of NPC remained stable during 1993-2007 in Wuhan, a low-risk region in China (Xie et al., 2012). population (ASMW) were 1.04/100,000 and 1.35/100,000, respectively. The incidence and mortality of NPC were higher in males than in females and higher in urban areas than in rural areas. Both age-specific incidence and mortality were relatively low in persons younger than 30 years old, but these rates dramatically increased. Incidence peaked in the 60-64 age group and mortality peaked in the over 85 age group (Xu et al., 2013). Average annual incidence of NPC among Bruneian Chinese males (4.1 per 100,000 persons)

was significantly lower than that for Chinese males from Singapore (15.9) and Peninsular Malaysia (19.6) (Hsien et al., 2009)

Oesophageal

The results demonstrate that the counties in provinces Ardebil, Mazandaran and Kordestan have higher risk than other counties (Asmarian et al., 2013). There is evidence of systematic clustering for esophageal and gastric cancer, lower rates being observed in urban areas, and also in areas of high income (Mohebbi et al., 2011). The prevalence of adenocarcinoma showed an increase to 18.4%. Guilan province may be considered a relatively low incidence region for EC (Mansour-Ghanaei et al., 2012). A significant increasing trend in the incidence rate of adenocarcinoma in Gholestan (Ghasemi-Kebria et al., 2013). EC median survival time reached about 9 months and estimated survival rates in 1, 3, and 5 years following diagnosis were 23%, 15% and 13% (Rasouli et al., 2011). Environmental factors probably are influential in determining the incidence of esophageal cancer in Ardabil (Ahari et al., 2013). In India, whereas oesophageal adenocarcinomas increased sharply in both sex, among men, oesophageal squamous cell cancer rates increased steadily from the mid-1982s onwards a bit decline was observed from 1997, the same trend observed in females (Gopala Krishnappa et al., 2013). Apparent general decrease in the number of EC patients in Kazakhstan (Igissinov et al., 2012a) with regional variation, tendency for increase in Karaganda (Igissinov et al., 2012b). Burden of esophageal cancer remains high in China, especially for males in rural areas (Chen et al., 2013b). However, over 20 years from 1989 to 2008, esophageal cancer age standardized incidence rate in cancer registration areas decreased with time (Zhao et al., 2012). Mortality decreased over the six years in both genders, although it remained high in the Yanting area (Song et al., 2012). In Japan, estimated average annual percentage change for adenocarcinomas was 4.7% (95% confidence interval: 0.7, 8.9) in men and 6.0% (2.4, 9.8) in women Japan SCC slight increase (Shibata et al., 2008). Oesophageal adenocarcinoma is increasing in NSW, possible contributing factors include increasing obesity (Stavrou et al., 2009).

Gastric Cancer

The age-adjusted incidence varied by region within Oman, the incidence rates being higher than in most other gulf countries between 1998 and 2004 (Al-Mahrouqi et al., 2011). Incidence rates of gastric cancer in Iran and its six geographical areas during 2000-2005 were increasing from 2.8 in 2000 to 9.1 per 100,000 persons per year in 2005, rising from 4.1 to 13.2 in men (Haldari et al., 2012. Ardabil has the highest rate in Iran and one the highest rates of gastric cardia cancer in the world, with no evidence of decline in incidence since 2000 (Babaei et al., 2010). There is wide geographical variation and high mortality rate of stomach cancer in Iran, 6 fold between north and south (Zendehdel et al., 2012). Survival rate in 15 years following diagnosis was nearly 6% (Fathollahi et al., 2011). Patients with survival of 0.5, 1.5, 2.5, 3.5 and 4.5 years from the time of diagnosis were 46%, 26%, 19%, 15% and 13% respectively (Mehrabian et al., 2010). In Iranians with a high rate of *H. pylori* infection, age over 50 years, smoking, family history, intestinal metaplasia significant independent risk factors for mortality (Boreiri et al., 2013).

Gastric cancers in Karachi fall into the prototype of a low risk developing country pattern, incidence increasing most marked in males above 40 years of age (Bhurgri et al., 2009b). Sikkim stomach cancers with AARs being 12.6 and 4.7 times higher in the Bhutia group compared with other ethnic groups in males and females, respectively (Verma et al., 2012) The Malaysian National Cancer Registry (NCR) report for the period 2003-2005 showed an incidence of stomach cancer of 2.2 for Malay, 11.3 for Chinese and 11.9 for Indian males per 100,000 population, Malay (1.3), Chinese (7.2) and Indian (7.2) women having rates lower than men (Lim, 2009). Stomach cancer mortality in males in the region of North East in the North Viet Nam (2005-06) was higher than that in Japan (2002) (31.3 versus 28.7 per 100,000) (Ngoan et al., 2008.)

'Cure' fraction from stomach cancer dramatically increased in Osaka, Japan since 1975, partly because of earlier stage at diagnosis, but mostly due to improvement in treatment (Ito et al., 2012). Five-year relative survival for stomach cancer was 60%. Conditional five-year relative survival was 77% one year after diagnosis and 97% five years after diagnosis (Ito et al., 2013).

Colorectal Cancer

Age-specific incidence ratios of colorectal cancer in older people are increasing (Tas and Keskin, 2012a). An increased trend in the incidence of CRC in Jeddah between 2000 and 2006 mirrors the recent trend in Saudi Arabia, 25% presenting with distant metastasis and adenocarcinomas accounting for 72% of cases (Mosli and Al-Ahwal, 2012). The five-year OS for 1994-2004 was 44.6% for patients with CRC, rates by stage being generally lower than the typically reported survival rates (Al-Ahwal et al., 2013). Yemen has seen an increased incidence of colorectal carcinoma, with >70 % of cases in stages III and IV (Hamid et al., 2012). In the Gharbia Registry, colorectal cancer more common in urban (55%) than rural (45%) areas, with a slightly higher incidence than the United States in subjects under age 40 years (Veruttipong et al., 2912).

Colorectal cancer has an increasing trend in the west of Iran (Abdifard et al., 2013). Iran overall ASR in the four years period was 38.0 per 100,000 and was higher for men compared women (Safaee et al., 2012). Colorectal cancer occurs at a younger age among people living in Golestan province, with a high proportion of patients presenting with late stage (Aryaie et al., 2013). In Kerman, the trend in females is increase by 15% and in males by 7% by year 2016 (Roya and Abbas, 2013). A shift to advanced cancer has also been reported in Iran (Ghabeljoo et al., 2011)

Among Nepalese young adult cases account for a high incidence (28%) and although right sided colonic cancer has been increasing, the rectum is the commonest site (Kansakar and Singh, 2012). In Pakistan the current low

but increasing incidence (especially in men), the younger age and advanced stage of CRC at diagnosis reflects a low risk, unscreened population, but the low CRC incidence may be partly an artifact (Bhurgri et al., 2011). In Kelantan, Malaysia, a high proportion of metabolic diseases; hypertension and diabetes type 2 are linked with colorectal carcinomas (Othman and Zin, 2008).

In China, the incidence and mortality of colorectal cancer during 1988-2002 increased by 38.6% and 15.3%, respectively, rates in urban areas being higher than in rural areas, and in males than in females (Lei et al., 2009). the incidence of total CRCs is male dominant, the actual gender difference in CRC incidence in Taiwan is limited to the left side of the colon. (Chen et al., 2012). Metachronous colorectal cancer in Taiwan: analyzing 20 years of data from Taiwan Cancer Registry (Chen et al., 2013)Taiwan co overall and cancer-specific survivals were significantly higher in women than in men (Chou et al., 2013). In Korea the rapid increase in colorectal cancer incidence is mainly attributed to the increase in colon cancer, especially distal, and may be explained by a transition of risk factors for subsites or by the effect of colorectal cancer screening (Shin et al., 2012). In Japan, right colon cancer among men and women recently levelled off, while the rates of left colon and rectal cancers showed a declining trend (Toyoda et al., 2009).

The database will initially recruit all colorectal cancer cases from eight hospitals. The data will be stored on a customized web-based case report form. (Wendy and Radzi, 2008). In New Zealand a left- to right-sided shift in colon cancer limited to women over the age of 65has been noted, with a rapid increase in Māori incidence rates (Shah et al., 2012). Data on colon could be improved by improving the quality of information on stage and subsite provided to the registry (Cunningham et al., 2008). Disease extent was absent for 42% with a systematic bias towards being unknown for cases with locally advanced disease (Stevens et al., 2008) Second primary colorectal cancer was increased during the first 5 years after first diagnosis but remained increased for up to 10 years in females, in patients with right-sided cancers and in patients <60 years at first diagnosis (Ringland et al., 2010). Colon Cancer Family Registries Proximal colon cancer survival differs from survival for distal colon and rectal cancer in a manner apparently dependent on microsatellite instability status. These findings support the premise that proximal colon, distal colon, and rectal cancers are clinicopathologically distinct (Phipps et al., 2013). South Australian Clinical Registry for Metastatic Colorectal Cancer Patients aged ≥80 years with metastatic colorectal cancer are less likely to receive intervention for their disease and have poorer survival (Kumar et al., 2013).

Urology System

Urinary Bladder

In Turkey, Izmir bladder cancer incidences were quite high, especially for men, and appear to be increasing (Eser et al., 2009). The male age-adjusted incidence rate in Gharbiah Province was 13.65/100,000 person years, with Kotour had the highest age-adjusted IR 28.96/100,000 among males (Fedewa et al., 2009). The incidence of associated bilharziasis decreased from 80% to 50%, with a significant increase in transitional cell carcinoma from 20% to 66%, with a significant decrease in squamous cell carcinoma from 73% to 25% (Salem and Mahfouz, 2012). Bladder cancer tends to appear slightly more often in the elderly and that the tumors tend to have a higher grade of malignancy in the Shiraz region (Salehi et al., 2011).It tends to be found in the elderly and the male to female ratio is high in Mazandaran (Ahmadi et al., 2012). Smoking is likely to be the main risk factor in Sri Lanka, under-reporting in rural areas possibly accounting for the low rates (Ranasinghe et al., 2012).

Prostate

In Turkey, prostate cancer has lower incidence rates as compared to western countries but the trend is for rise (Eser et al., 2009). Karachi falls into a low risk region with a rapidly increasing incidence and a marginal down staging (Bhurgri et al., 2009a). Sri Lankan cancer registry data showed a low rate, similar to other South Asian countries, but the actual incidence is probably higher than reported, as seen in densely populated districts and in pathological specimens (Ranasinghe et al., 2011). Singapore, 1998 to 2002, the age-standardised incidence and mortality rates (per 100,000) for prostate cancer among the Chinese were 30.9 (95% CI, 29.1 to 32.8) and 9.6 (95% CI, 8.6 to 10.7), respectively (Chia et al., 2010).

Testicular

Increasing rates of testicular cancer for all ethnic and income groups since 1990s. Maori had higher rates, and Pacific and Asian groups lower rates than European/other men with rate ratios pooled over time (Sarfati et al., 2011)

Respiratory System

Larynx

In Kazakhstan, incidence rates of laryngeal cancer demonstrated a tendency to decrease in women (T=-6.7%) this being more pronounced than in men (T=-3.3%) (Igissinov et al., 2012). In China incidence and mortality of larynx cancer were stable from 2003 to 2007 (Du et al., 2012).

Lung

Age-specific incidence ratios of lung cancer in Turkey in older people is increasing (Tas and Keskin, 2012b). In Erzurum the most common histopathological subtype is squamous cell carcinoma, 46.1%, followed by small cell lung carcinoma, 15.7%, Smoking status was found to have a strong correlation with primary lung cancer ($p < 0.05$), and there were significant differences between males and females ($p<0.001$) (Demirci et al., 2013). In Egypt there was a steady increase in the incidence of mesothelioma from 1998 to 2005 followed by a decline during 2006-2007, possibly attributable to recent strict industrial preventive measures (Aki et al., 2010).

In the Arab world, the estimated numbers of new lung cancer cases in 2008 were 9,537 in ages below 65 for both sexes, and 7,059 cases for ages above 65 and in 2020 there

is expected to be 14,788 new lung cancer cases in ages below 65, and 14,788 cases for ages above 65 in both males and females (Salim et al., 2011). The age adjusted rate for males in district Srinagar was 19.3 per 100 000 (Koul et al., 2010).

Mortality rate of lung cancer among residents during the last four decades in Qidong has been increasing remarkably (Zhu et al., 2012). In Taiwan the 5-year survival rate was 15.9%, with a median survival of 13.2 months stage III (30.0%), and stage IV (54.1%) (Wang et al., 2013). The available data indicate that the prognosis of lung cancer remains very poor and that a high proportion of patients are still diagnosed with advanced disease (Jiwa et al., 2010). In Japan percentages of female patients, cases with adenocarcinoma, stage I or II disease, and tumors sized less than 2 cm have increased (Sawabata et al., 2011). Increased lung cancer risks in New Zealand, including wood workers, metal workers, meat workers, textile workers and drivers (Corbin et al., 2011).

Skin

Increasing incidence of skin cancer in the Islamic Republic of Iran is similar to that reported in other countries (Heidari and Nalafi, 2013). In Malaysia, skin cancer rates among the fairer-skinned Chinese were approximately 3 times higher than in Malays and Indians (Sng et al., 2009).

In Australia, significant decreases in rates of invasive melanoma in the younger age groups on less frequently exposed body sites, providing evidence of the impact of long-running primary prevention campaigns (Youl et al., 2013). In Western Australia the majority of non-melanoma skin cancer deaths were due to squamous cell carcinomas in primary sites associated with significant sun exposure and in older men (Girshik et al., 2008). Outlook for patients with thin invasive melanoma is positive, although continued clinical vigilance is warranted for patients with nodular melanoma and those with the thickest tumors (Green et al., 2012). Cutaneous melanoma is much less common among Maori than among New Zealand Europeans, but Maori have a greater Breslow depth and therefore have a worse prognosis (Hore et al., 2010) Minority ethnicities in New Zealand have a higher than expected risk of thick and more advanced melanoma, with poorer prognosis (Sneyd and Cox, 2009).

Hematological, Nervous and Soft Tissue

Hematological

In the Antalya registry, an increase in the NHL incidence over the years was identified, with a 2.42-fold increment found from 1995 to 2005 and a 2.77 fold elevation from 1995 to 2010, use of pesticides increasing1.89 fold over the same period (Yildirim et al., 2013). In Gharbia Registry, we observed NHL incidence pattern similar to that observed for hepatocellular carcinoma because of the possible link to hepatitis C virus for both cancers. Comparison to the published HCs data from Algeria, Cyprus, and Jordan showed the highest NHL rate in Egypt than the other countries (Herzog et al., 2012). Compared to the Western world, Kuwait had a lower prevalence of follicular lymphoma, a higher prevalence of diffuse large B-cell lymphoma and extranodal presentation, and a high frequency of mycosis fungoides (Ameen et al., 2010). In Gholestan 237 (4.67 %) of cancers were lymphomas (Roshandel et al., 2011). Significant reduction in incidence of chronic myeloid leukemia in India in recent periods might be because of reduced misclassification (Dikshit et al., 2011).The incidence of leukemia was significantly higher in males and residents of rural areas (Rajabli et al., 2013).

The incidence of chronic lymphocytic leukemia in Taiwan, 1986-2005: a distinct increasing trend with birth-cohort effect (Wu et al., 2010). In Korea, from 1999 to 2008, the age-standardized incidence rates for hematologic malignancies increased from 10.2 to 13.7, and the annual percentage change was 3.9%, whereas 5-year survival increased from 38.2% during 1993-1995 to 55.2% during 2004-2008 (Park et al., 2012).

Non-Hodgkin lymphoma is an increasingly common cancer in Australia but since the year 2000, mortality has decreased every year by an average of 5.1% per year, whereas incidence has continued to increase at 0.9% (Coory and Gill, 2008). Increased leukaemia risks are associated with certain agricultural, manufacturing, construction and service occupations in New Zealand (McLean et al., 2009)

Nervous

Iran, male predominance of primary malignant brain tumors with an overall incidence of 2.74 per 100,000 person-years, the most common histopathologies being meningioma, astrocytoma, glioblastoma and ependymoma (Jayazeri et al., 2013).

Soft Tissue

Karachi falls into a high risk region for soft tissue sarcomas, observed in a relatively younger population, with a male predominance, high frequency of rhabdomyosarcoma and advanced stage at diagnosis (Bhurgri et al., 2008). Taiwan patients with multiple myeloma, especially younger cases, are at a high risk of hematologic malignancies (Tzeng et al., 2013).

Pediatric Cancer

In Turkey, males were more likely to develop CNS tumors (1.65 per 100,000) compared to females (1.21 per 100,000, $p<0.01$), astrocytic tumors being the most frequent followed by embryonal and ependymal tumors (Beygi et al., 2013). In the West Bank spatial analysis showed a concentration of cancer in metropolitan districts where referral hospitals are based, under registration occurring elsewhere (Bailony et al., 2011). Annual rates of childhood leukaemia in Basrah were similar to those in other countries with a trend towards younger children (Alrudainy et al., 2011). Incidence rates of childhood cancers are relatively high in Golestan province of Iran (Moradi et al., 2010).

In Pakistan, amongst boys, leukemias 1.3, lymphomas and reticuloendothelial neoplasms 1.3, CNS and

miscellaneous intracranial/intraspinal tumors 0.7, malignant bone tumors 0.4, and soft tissue sarcomas 0.4; amongst girls, leukemias 0.7, lymphomas and reticuloendothelial neoplasms 0.5, malignant bone tumors 0.3, CNS and miscellaneous intracranial/intraspinal tumors 0.3, and renal tumors 0.3 (Badar et al., 2009). In India, considerable inter-regional variation exists (Arora et al., 2009), rates being higher among boys than girls, with leukemia as the commonest (36.8%) followed by lymphomas (14.8%) and soft tissue tumors (8.0%) (Datta et al., 2010). In West Bengal, retinoblastoma, renal tumours, neuroblastoma and hepatic tumours were higher in children less than five years but lymphoma, leukaemia, bone tumours and central nervous system tumours above that age (Roy et al., 2012). In an earlier study in an Indian registry, the top 5 childhood cancers were the same among boys and girls: leukemias, lymphomas, central nervous system neoplasms, retinoblastomas and renal tumors (Swaminathan et al., 2008). Childhood lymphoma in Khon Kaen province of Thailand lower than in western countries, with trend for increase in boys but decrease in girls (Srina et al., 2010). Childhood osteosarcoma was slightly less than reported for Western countries (Wiromrat et al., 2012). There are a higher proportion of children with retinoblastoma and negligible numbers of pediatric brain tumors in the Yogyakarta Registry (Ali et al., 2010).

Survival rate for children aged 0-14 diagnosed with cancer in Shanghai during 2002-2005 was at a medium level, lower than in West (Bao et al., 2012). For Taiwan, leukemia, lymphomas, central nervous system neoplasms and other epithelial neoplasms for males and females accounted for nearly 55% of all types (Chiang et al., 2010) In Osaka the constant decline in mortality in childhood cancer was primarily due to improved survival between the 1970s and 1980s and reduced incidence after the 1990s (Baba et al., 2010) Age-standardized incidence rates (per million) were 144.3 for boys and 93.9 for girls, leukemia being the most frequent (29%) among the 12 diagnostic groups (Sugiyama et al., 2009).

Australian Paediatric Cancer Registry improvements in childhood cancer mortality in Australia are generally encouraging, of concern is the lack of a corresponding decrease in mortality among children with certain types of tumours of the central nervous system during the past decade (Youlden et al., 2012a). Some variation in prognosis by place of residence was present, particularly among leukemia patients (Youlden et al., 2011). Children living in remote or very remote areas were 21% less likely to be diagnosed with cancer compared to children in major cities, mainly due to differences in the incidence of leukemias and lymphomas (Youlden et al., 2012b). There is some evidence of a recent plateau in cancer incidence rates in Australia for boys and older children (Baade et al., 2010)

Future Perspectives

Judging by the more than 300 papers from 2008-2013 cited in the present report, cancer registration research in the Asian Pacific is receiving a reasonable priority. Thus there are basic data for incidence, mortality and survival for the majority of countries, with a large body of information on geographical ethnic and socioeconomic factors. Trends have also been a major focus. It is to be hoped that this will continue, with expansion into new areas like novel applications for development and assessment of cancer control programs, as argued in a recent commentary (Moore, 2013). Opportunities for cancer registries to coordinate with clinicians to promote clinical epidemiology is one other obvious area deserving of future emphasis.

References

Abdifard E, Ghaderi S, Hosseini S, Heidari M (2013). Incidence trends of colorectal cancer in the West of Iran during 2000-2005. *Asian Pac J Cancer Prev*, **14**, 1807-11.

Adib SM, Tabbal N, Hamadeh R, Ammar W (2013). Geographic epidemiology in a small area: cancer incidence in Baakline, Lebanon, 2000-2008. *East Mediterr Health J*, **19**, 320-6.

Ahari SS, Agdam FB, Amani F, Yazdanbod A, Akhghari L (2013). Analysis of the relationships between esophageal cancer cases and climatic factors using a Geographic Information System (GIS): a case study of Ardabil province in Iran. *Asian Pac J Cancer Prev*, **14**, 2071-7.

Ahmadi M, Ranjbaran H, Amiri MM, (2013). Epidemiologic and socioeconomic status of bladder cancer in Mazandaran Province, northern Iran. *Asian Pac J Cancer Prev*, **13**, 5053-6.

Ahn YO, Shin MH (2011). Cancer survival in Seoul, Republic of Korea, 1993-1997. *IARC Sci Publ*, **162**, 171-8.

Akbari ME, Rafiee M, Khoei MA, Eshrati B, Hatami H (2011). Incidence and survival of cancers in the elderly population in Iran: 2001-2005. *Asian Pac J Cancer Prev*, **12**, 3035-9.

Akl Y, Kaddah S, Abdelhafeez A, Salah R, Lotayef M (2010). Epidemiology of mesothelioma in Egypt. A ten-year (1998-2007) multicentre study. *Arch Med Sci*, **6**, 926-31.

Al-Ahwal MS, Shafik YH, Al-Ahwal HM (2013). First national survival data for colorectal cancer among Saudis between 1994 and 2004: what's next? *BMC Public Health*, **13**, 73.

Al-Hamdan N, Ravichandran K, Al-Sayyad J, et al (2009). Incidence of cancer in Gulf Cooperation Council countries, 1998-2001. *East Mediterr Health J*, **15**, 600-11.

Al-Mahrouqi H, Parkin L, Sharples K (2011). Incidence of stomach cancer in Oman and the other gulf cooperation council countries. *Oman Med J*, **26**, 258-62.

Al-Rikabi A, Husain S (2012). Increasing prevalence of breast cancer among Saudi patients attending a tertiary referral hospital: a retrospective epidemiologic study. *Croat Med J*, **53**, 239-43.

Al-Tarawneh M, Khatib S, Arqub K (2010). Cancer incidence in Jordan, 1996-2005. *East Mediterr Health J*, **16**, 837-45.

Ali K, Sutaryo S, Purwanto I, et al (2010). Yogyakarta Pediatric Cancer Registry: an international collaborative project of University Gadjah Mada, University of Saskatchewan, and the Saskatchewan Cancer Agency. *Asian Pac J Cancer Prev*, **11**, 131-6.

Ali Mohagheghi M, Mosavi-Jarrahi A (2010). Review of cancer registration and cancer data in Iran, a historical prospect. *Asian Pac J Cancer Prev*, **11**, 1155-7.

Alrudainy LA, Hassan JG, Salih HM, Abbas MK, Majeed AA (2011). Time trends and geographical distribution of childhood leukaemia in Basrah, Iraq, from 2004 to 2009. *Sultan Qaboos Univ Med J*, **11**, 215-20.

Alsayyad J, Hamadehb R (2008). Cancer incidence among the Bahraini population: a five-year (1998-2002) experience. *Hematol Oncol Stem Cell Ther*, **1**, 175-82.

Ameen R, Sajnani KP, Albassami A, Refaat S (2010). Frequencies of non-Hodgkin's lymphoma subtypes in Kuwait: comparisons between different ethnic groups. *Ann Hematol*, **89**, 179-84.

Anwar WA, Khaled HM, Amra HA, El-Nezami H, Loffredo CA (2008). Changing pattern of hepatocellular carcinoma (HCC) and its risk factors in Egypt: possibilities for prevention. *Mutat Res*, **659**, 176-84.

Arab M, Khayamzadeh M, Hashemi M, et al (2010). Crude and age-specific incidence rate patterns for histopathologic subtypes of ovarian cancer in Iran. *Arch Iran Med*, **13**, 203-8.

Arab M, Khayamzadeh M, Tehranian A, et al (2010). Incidence rate of ovarian cancer in Iran in comparison with developed countries. *Indian J Cancer*, **47**, 322-7.

Ariyawardana A, Warnakulasuriya S (2011). Declining oral cancer rates in Sri Lanka: are we winning the war after being at the top of the cancer league table? *Oral Dis*, **17**, 636-41.

Arkoob K, Al-Nsour M, Al-Nemry O, Al-Hajawi B (2010). Epidemiology of breast cancer in women in Jordan: patient characteristics and survival analysis. *East Mediterr Health J*, **16**, 1032-8.

Arora RS, Eden TO, Kapoor G (2009). Epidemiology of childhood cancer in India. *Indian J Cancer*, **46**, 264-73.

Aryaie M, Roshandel G, Semnani S, et al (2013). Predictors of colorectal cancer survival in Golestan, Iran: A population-based Study. *Epidemiol Health*, **35**, 2013004.

Asmarian NS, Ruzitalab A, Amir K, Masoud S, Mahaki B (2013). Area-to-Area Poisson Kriging analysis of mapping of county-level esophageal cancer incidence rates in Iran. *Asian Pac J Cancer Prev*, **14**, 11-3.

Atique M, Leghari MJ, Amin MS, et al (2008). Cancer data analysis in the pathology department, combined military hospital, Multan, Pakistan 2002-2007. *Asian Pac J Cancer Prev*, **9**, 679-81.

Attar E, Dey S, Hablas A, et al (2010). Head and neck cancer in a developing country: a population-based perspective across 8 years. *Oral Oncol*, **46**, 591-6.

BaSaleem HO, Bawazir AA, Moore M, Al-Sakkaf KA (2010). Five years cancer incidence in Aden Cancer Registry, Yemen (2002-2006). *Asian Pac J Cancer Prev*, **11**, 507-11.

Baade PD, Youlden DR, Valery PC, et al (2010). Trends in incidence of childhood cancer in Australia, 1983-2006. *Br J Cancer*, **102**, 620-6.

Baba S, Ioka A, Tsukuma H, et al (2010). Incidence and survival trends for childhood cancer in Osaka, Japan, 1973-2001. *Cancer Sci*, **101**, 787-92.

Babaei M, Pourfarzi F, Yazdanbod A, et al (2010). Gastric cancer in Ardabil, Iran--a review and update on cancer registry data. *Asian Pac J Cancer Prev*, **11**, 595-9.

Badar F, Mahmood S, Zaidi A, Bhurgri Y (2009). Age-standardized incidence rates for childhood cancers at a cancer hospital in a developing country. *Asian Pac J Cancer Prev*, **10**, 753-8.

Bailony MR, Hararah MK, Salhab AR, et al (2011).Cancer registration and healthcare access in West Bank, Palestine: a GIS analysis of childhood cancer, 1998-2007. *Int J Cancer*, **129**, 1180-9.

Banzai C, Yahata T, Tanaka K (2011). Trends in the incidence of uterine cancer in Niigata, Japan: a population-based study from 1982 to 2007. *Eur J Gynaecol Oncol*, **32**, 521-4.

Bao PP, Zheng Y, Wu CX, et al (2012). Population-based survival for childhood cancer patients diagnosed during 2002-2005 in Shanghai, China. *Pediatr Blood Cancer*, **59**, 657-61.

Beygi S, Saadat S, Jazayeri SB, Rahimi-Movaghar V (2013). Epidemiology of pediatric primary malignant central nervous system tumors in Iran: a 10 year report of National Cancer Registry. *Cancer Epidemiol*, **37**, 396-401.

Bhoo-Pathy N, Hartman M, Yip CH, et al (2012). Ethnic differences in survival after breast cancer in South East Asia. *PLoS One*, **7**, 30995.

Bhurgri Y (2011). Cancer survival in South Karachi, Pakistan, 1995-1999. *IARC Sci Publ*, **162**, 143-6.

Bhurgri Y, Bhurgri H, Pervez S, et al (2008). Epidemiology of soft tissue sarcomas in Karachi South, Pakistan (1995-7). *Asian Pac J Cancer Prev*, **9**, 709-14.

Bhurgri Y, Kayani N, Pervez S, et al (2009). Incidence and trends of prostate cancer in Karachi South, 1995-2002. *Asian Pac J Cancer Prev*, **10**, 45-8.

Bhurgri Y, Khan T, Kayani N, et al (2011). Incidence and current trends of colorectal malignancies in an unscreened, low risk Pakistan population. *Asian Pac J Cancer Prev*, **12**, 703-8.

Bhurgri Y, Pervez S, Kayani N, et al (2008). Time trends in the incidence of cancer cervix in Karachi South, 1995-2002. *Asian Pac J Cancer Prev*, **9**, 533-6.

Bhurgri Y, Pervez S, Kayani N, et al (2009). Rising incidence of gastric malignancies in Karachi, 1995-2002. *Asian Pac J Cancer Prev*, **10**, 41-4.

Bilyalova Z, Igissinov N, Moore M, et al (2012). Epidemiological evaluation of breast cancer in ecological areas of Kazakhstan--association with pollution emissions. *Asian Pac J Cancer Prev*, **13**, 2341-4.

Boo YK, Kim WC, Lee HY, et al (2011). Incidence trends in invasive uterine cervix cancer and carcinoma in situ in Incheon, South Korea. *Asian Pac J Cancer Prev*, **12**, 1985-8.

Boreiri M, Samadi F, Etemadi A, et al (2013). Gastric cancer mortality in a high incidence area: long-term follow-up of *Helicobacter pylori*-related precancerous lesions in the general population. *Arch Iran Med*, **16**, 343-7.

Chang KM, Ong TC (2008). National Cancer Patient Registry--Haematology Malignancy (NCPR-HM). *Med J Malaysia*, **63**, 66-7.

Chen CY, Lai CH, Lee KD, et al (2012). Risk of second primary malignancies in women with cervical cancer: a population-based study in Taiwan over a 30-year period. *Gynecol Oncol*, **127**, 625-30.

Chen JG, Chen WQ, Zhang SW, et al (2012). Incidence and mortality of liver cancer in China: an analysis on data from the National Registration System between 2003 and 2007. *Zhonghua Liu Xing Bing Xue Za Zhi*, **33**, 547 (in Chinese).

Chen JG, Zhu J, Zhang YH (2012). Trends in the mortality of liver cancer in Qidong, China: an analysis of fifty years. *Zhonghua Zhong Liu Za Zhi*, **34**, 532-7 (in Chinese).

Chen JG, Zhu J, Zhang YH, Lu JH (2011). Cancer survival in Qidong, China, 1992-2000, *IARC Sci Publ*, **162**, 43-53.

Chen TA, Horng JT, Lin WC (2013). Metachronous colorectal cancer in Taiwan: analyzing 20 years of data from Taiwan Cancer Registry. *Int J Clin Oncol*, **18**, 267-72.

Chen TA, Kang HY, Chang HC, et al (2012). Gender differences in colorectal cancer during the past 20 years in Taiwan. *Int J Colorectal Dis*, **27**, 345-53.

Chen W, He Y, Zheng R, et al (2013). Esophageal cancer incidence and mortality in China, 2009. *J Thorac Dis*, **5**, 19-26.

Chen W, Zheng R, Zhang S et al (2013). Report of incidence and mortality in China cancer registries, 2009. *Chin J Cancer Res*, **25**, 10-21.

Chen W, Zheng R, Zhang S, et al (2013). The incidences and mortalities of major cancers in China, 2009. *Chin J Cancer*, **32**, 106-12.

Chen WQ, Zeng HM, Zheng RS, Zhang SW, He J (2012). Cancer incidence and mortality in china, 2007. *Chin J Cancer Res*, **24**, 1-8 (in Chinese).

Chen WQ, Zhang SW, Zou XN, Zhao P (2011). Cancer incidence and mortality in China, 2006. *Chin J Cancer Res*, **23**, 3-9

(in Chinese).
Chen WQ, Zheng RS, Zeng HM,et al (2012). Trend analysis and projection of cancer incidence in China between 1989 and 2008. *Zhonghua Zhong Liu Za Zhi*, **34**, 517-24 (in Chinese).
Chen WQ, Zheng RS, Zhang SW (2013). Liver cancer incidence and mortality in China, 2009. *Chin J Cancer*, **32**, 162-9.
Chia KS (2011). Cancer survival in Singapore, 1993-1997. *IARC Sci Publ*, **162**, 183-98.
Chia SE, Tan CS, Lim GH, et al (2010). Incidence, mortality and five-year relative survival ratio of prostate cancer among Chinese residents in Singapore from 1968 to 2002 by metastatic staging. *Ann Acad Med Singapore*, **39**, 466-71.
Chiang CJ, Chen YC, Chen CJ, et al (2010). Cancer trends in Taiwan. *Jpn J Clin Oncol*, **40**, 897-904.
Chong RJ, Abdullah MS, Hossain MM, Telisinghe PU, Chong VH (2013). Rising incidence of primary liver cancer in Brunei Darussalam. *Asian Pac J Cancer Prev*, **14**, 3473-7.
Chou CL, Weng SF, Lin JK, Chang SC, (2013). Role for gender in colorectal cancer risk: a Taiwan population-based study. *Int J Colorectal Dis*, **28**, 1001-8.
Community of Population-based Regional Cancer Registries in Korea (2011). A validation of estimating the national cancer incidence in Korea using the databases of 7 population-based regional cancer registries except Seoul. *J Prev Med Public Health*, **42**, 130-4 (in Korean).
Coory M, Gill D (2008). Decreasing mortality from non-Hodgkin lymphoma in Australia. *Int Med J*, **38**, 921-4.
Corbin M, McLean D, Mannetje A, et al (2011). Lung cancer and occupation: A New Zealand cancer registry-based case-control study. *Am J Ind Med*, **54**, 89-101.
Cunningham R, Sarfati D, Hill S, Kenwright D (2008). An audit of colon cancer data on the New Zealand Cancer Registry. *N Z Med J*, **121**, 46-56.
Cunningham R, Shaw C, Blakely T, Atkinson J, Sarfati D (2010). Ethnic and socioeconomic trends in breast cancer incidence in New Zealand. *BMC Cancer*, **10**, 674.
D'Souza ND, Murthy NS, Aras RY (2013). Projection of burden of cancer mortality for India, 2011-2026. *Asian Pac J Cancer Prev*, **14**, 4387-92.
D'Souza ND, Murthy NS, Aras RY (2013). Projection of cancer incident cases for India-till 2026. *Asian Pac J Cancer Prev*, **14**, 4379-86.
Datta K, Choudhuri M, Guha S, Biswas J (2010). Childhood cancer burden in part of eastern India--Population Based Cancer Registry data for Kolkata (1997-2004). *Asian Pac J Cancer Prev*, **11**, 1283-8.
Datta K, Choudhuri M, Guha S, Biswas J (2012). Breast cancer scenario in a regional cancer centre in Eastern India over eight years--still a major public health problem. *Asian Pac J Cancer Prev*, **13**, 809-13.
Deans C, Yeo MS, Soe MY, et al (2011). Cancer of the gastric cardia is rising in incidence in an Asian population and is associated with adverse outcome. *World J Surg*, **35**, 617-24.
Demirci E, Daloglu F, Gundogdu C, et al (2013). Incidence and clinicopathologic features of primary lung cancer: a North-Eastern Anatolia region study in Turkey (2006-2012). *Asian Pac J Cancer Prev*, **14**, 1989-93.
Dey S, Hablas A, Seifeldin IA, et al (2010). Urban-rural differences of gynaecological malignancies in Egypt (1999-2002). *BJOG*, **117**, 348-55.
Dey S, Soliman AS, Hablas A, et al (2010). Urban-rural differences in breast cancer incidence in Egypt (1999-2006). *Breast*, **19**, 417-23.
Dey S, Soliman AS, Hablas A, et al (2010). Urban-rural differences in breast cancer incidence by hormone receptor status across 6 years in Egypt. *Breast Cancer Res Treat*, **120**, 149-60.
Dey S, Zhang Z, Hablas A, et al (2011). Geographic patterns of cancer in the population-based registry of Egypt: Possible links to environmental exposures. *Cancer Epidemiol*, **35**, 254-64.
Dhar M, Lahiri S, Takiar R, Ashok NC, Murthy NS (2008). An indirect study of cancer survival in the context of developing countries. *Asian Pac J Cancer Prev*, **9**, 479-86.
Dikshit R, Kanhere S, Surange S (2011). Cancer survival in Bhopal, India, 1991-1995. *IARC Sci Publ*, **162**, 107-13.
Dikshit RP, Nagrani R, Yeole B, Koyande S, Banawali S (2011). Changing trends of chronic myeloid leukemia in greater Mumbai, India over a period of 30 years. *Indian J Med Paediatr Oncol*, **32**, 96-100.
Dikshit RP, Yeole BB, Nagrani R, et al (2012). Increase in breast cancer incidence among older women in Mumbai: 30-year trends and predictions to 2025. *Cancer Epidemiol*, **36**, 215-20.
Du LB, Mao WM, Chen WQ, et al (2012). Incidence and mortality of larynx cancer in China during 2003-2007]. *Zhonghua Liu Xing Bing Xue Za Zhi*, **33**, 395-8 (in Chinese).
El-Basmy A, Al-Mohannadi S, Al-Awadi A (2012). Some epidemiological measures of cancer in Kuwait: national cancer registry data from 2000-2009. *Asian Pac J Cancer Prev*, **13**, 3113-8.
El-Zaemey S, Nagi N, Fritschi L, Heyworth J (2012). Breast cancer among Yemeni women using the National Oncology Centre Registry 2004-2010. *Cancer Epidemiol*, **36**, 249-53.
Elbasmi A, Al-Asfour A, Al-Nesf Y, Al-Awadi A (2010). Cancer in Kuwait: magnitude of the problem. *Gulf J Oncolog*, **8**, 7-14.
Eser S (2011). Cancer survival in Izmir, Turkey, 1995-1997. *IARC Sci Publ*, **162**, 237-42.
Eser S, Yakut C, Özdemir R, et al (2010). Cancer incidence rates in Turkey in 2006: a detailed registry based estimation. *Asian Pac J Cancer Prev*, **11**, 1731-9.
Eser S, Zorlu F, Divtik RT, et al (2009). Incidence and epidemiological features of cancers of the genitourinary tract in Izmir between 1993-2002. *Asian Pac J Cancer Prev*, **10**, 491-6.
Esteban DB, Lumague RM, Laudico A (2011). Breast cancer survival in Rizal, Philippines, 1996-1997. *IARC Sci Publ*, **162**, 151-4.
Faradmal J, Talebi A, Rezaianzadeh A, Mahjub H (2012). Survival analysis of breast cancer patients using Cox and Frailty models. *J Res Health Sci*, **12**, 127-30.
Fathollahi MS, Mahmoodi M, Mohammad K, Zeraati H (2011). Expected survival using models of life table compared with survival of gastrointestinal tract cancer patients in north of iran. *Iran J Public Health*, **40**, 74-82.
Fedewa SA, Soliman AS, Ismail K, et al (2009). Incidence analyses of bladder cancer in the Nile delta region of Egypt. *Cancer Epidemiol*, **33**, 176-81.
Firestone RT, Ellison-Loschmann L, Shelling AN, et al (2012). Ethnic differences in disease presentation of uterine cancer in New Zealand women. *J Fam Plann Reprod Health Care*, **38**, 239-45.
Fouladi N, Amani F, Harghi AS, Nayebyazdi N (2011). Five year survival of women with breast cancer in Ardabil, north-west of Iran. *Asian Pac J Cancer Prev*, **12**, 1799-801
Fouladi N, Pourfarzi F, Amani F, et al (2012). Breast cancer in Ardabil province in the north-west of Iran: an epidemiological study. *Asian Pac J Cancer Prev*, **13**, 1543-5.
Gao J, Xie L, Chen WQ, et al (2013). Rural-urban, sex variations, and time trend of primary liver cancer incidence in China, 1988-2005. *Eur J Cancer Prev*, **22**, 448-54.
Ghabeljoo M, Jafarabadi MA, Mohammadi SM, et al (2011). Patterns of survival for anatomical sites of colorectal cancer

with shift to advanced lesions in Iran. *Asian Pac J Cancer Prev*, **12**, 1225-31.
Ghasemi-Kebria F, Roshandel G, Semnani S, et al (2013). Marked increase in the incidence rate of esophageal adenocarcinoma in a high-risk area for esophageal cancer. *Arch Iran Med*, **16**, 320-3.
Ghojazadeh M, Mohammadi M, Azami-Aghdash S, et al 2013. Estimation of cancer cases using capture-recapture method in northwest iran. *Asian Pac J Cancer Prev*, **14**, 3237-41.
Girschik J, Fritschi L, Threlfall T, Slevin T (2008). Deaths from non-melanoma skin cancer in Western Australia. *Cancer Causes Control*, **19**, 879-85.
Gopala Krishnappa BR, Vijay CR, Ramesh C, et al (2013). Trends in oesophagus and stomach cancer incidence in Bangalore, India. *Gulf J Oncolog*, **1**, 42-50.
Green AC, Baade P, Coory M, Aitken JF, Smithers M (2012). Population-based 20-year survival among people diagnosed with thin melanomas in Queensland, Australia. *J Clin Oncol*, **30**, 1462-7.
Gurney J, Sarfati D, Stanley J, et al (2013). Unstaged cancer in a population-based registry: prevalence, predictors and patient prognosis. *Cancer Epidemiol*, **37**, 498-504.
Habib OS, Al-Diab JM, Mohsin AA, et al (2010). Experience and outcome of population-based cancer registration in Basrah-Southern Iraq in 2005-2008. *Asian Pac J Cancer Prev*, **11**, 1151-4.
Haddock R, Paulino Y, Bordallo R (2013). Viral hepatitis and liver cancer on the island of guam. *Asian Pac J Cancer Prev*, **14**, 3175-6.
Haddock RL, Whippy HJ, Talon RJ, Montano MV (2009). Ethnic disparities in cancer incidence among residents of Guam. *Asian Pac J Cancer Prev*, **10**, 57-62.
Haghighat S, Akbari ME, Ghaffari S, Yavari P (2012). Standardized breast cancer mortality rate compared to the general female population of Iran. *Asian Pac J Cancer Prev*, **13**, 5525-8
Haidari M, Nikbakht MR, Pasdar Y, Najaf F (2012). Trend analysis of gastric cancer incidence in Iran and its six geographical areas during 2000-2005. *Asian Pac J Cancer Prev*, **13**, 3335-41.
Hamdan NA, Ravichandran K, Dyab AR (2011). Breast cancer survival in Riyadh, Saudi Arabia, 1994-1996. *IARC Sci Publ*, **162**, 179-81.
Hamid GA, Saeed NM, Ba-Ashen Y, Ba-Kubirah R (2012). Colorectal carcinoma at Al-Gamhouria Teaching Hospital, Aden, Yemen. *Gulf J Oncolog*, **11**, 16-9.
Hanif M, Zaidi P, Kamal S, Hameed A (2009). Institution-based cancer incidence in a local population in Pakistan: nine year data analysis. *Asian Pac J Cancer Prev*, **10**, 227-30.
Harhra NA, Basaleem HO (2012). Trends of breast cancer and its management in the last twenty years in Aden and adjacent governorates, Yemen. *Asian Pac J Cancer Prev,* **13**, 4347-51.
Hattori M, Fujita M, Ito Y, et al (2010). Use of a population-based cancer registry to calculate twenty-year trends in cancer incidence and mortality in Fukui Prefecture. *J Epidemiol*, **20**, 244-52.
Haynes R, Pearce J, Barnett R (2008). Cancer survival in New Zealand: ethnic, social and geographical inequalities. *Soc Sci Med*, **67**, 928-37.
Heidari M, Najafi F (2013). Trends of skin cancer incidence in 6 geographical regions of the Islamic Republic of Iran, 2000-2005. *East Mediterr Health J*, **19**, 59-65.
Herzog CM, Dey S, Hablas A, et al (2012). Geographic distribution of hematopoietic cancers in the Nile delta of Egypt. *Ann Oncol*, **23**, 2748-55.
Higashi T, Nakamura F, Shibata A, Emori Y, Nishimoto H (2013). The National Database of Hospital-based Cancer Registries: A Nationwide Infrastructure to Support Evidence-based Cancer Care and Cancer Control Policy in Japan. *Jpn J Clin Oncol* [Epub ahead of print].
Hong CY, Chow KY, Poulose J, et al (2011). Place of death and its determinants for patients with cancer in Singapore: an analysis of data from the Singapore Cancer Registry, 2000-2009. *J Palliat Med*, **14**, 1128-34.
Hore T, Robinson E, Martin RC (2010). Malignant melanoma amongst Maori and New Zealand Europeans, 2000-2004. *World J Surg*, **34**, 1788-92.
Hsien YC, Abdullah MS, Telesinghe PU, Ramasamy R (2009). Nasopharyngeal carcinoma in Brunei Darussalam: low incidence among the Chinese and an evaluation of antibodies to Epstein-Barr virus antigens as biomarkers. *Singapore Med J*, **50**, 371-7.
Hu SY, Chen WQ, Zhao FH, et al (2013). Incidence and mortality of oral and pharyngeal cancers in China, 2003 to 2007. *Zhonghua Liu Xing Bing Xue Za Zhi*, **34**, 164-7 (in Chinese).
Huang CY, Chen CA, Chen YL, et al (2012). Nationwide surveillance in uterine cancer: survival analysis and the importance of birth cohort: 30-year population-based registry in Taiwan. *PLoS One*, **7**, 51372.
Hussain F, Iqbal S, Mehmood A, et al (2013). Incidence of thyroid cancer in the Kingdom of Saudi Arabia, 2000-2010. *Hematol Oncol Stem Cell Ther*, **6**, 58-64.
Igissinov N, Igissinov S, Moore MA, et al (2011). Trends of prevalent cancer incidences in the Aral-Syr Darya ecological area of Kazakhstan. *Asian Pac J Cancer Prev*, **12**, 2299-303.
Igissinov N, Nuralina I, Igissinova G, et al (2012). Epidemiological aspects of morbidity and mortality from cervical cancer in Kazakhstan. *Asian Pac J Cancer Prev*, **13**, 2345-8.
Igissinov N, Tereshkevich D, Moore MA, et al (2011). Age characteristics of incidences of prevalent cancers in the Aral Sea area of Kazakhstan. *Asian Pac J Cancer Prev*, **12**, 2295-7.
Igissinov N, Zatoskikh V, Moore MA, et al (2013). Epidemiological evaluation of laryngeal cancer incidence in Kazakhstan for the years 1999-2009. *Asian Pac J Cancer Prev*, **14**, 3969-74.
Igissinov S, Igissinov N, Moore MA, et al (2013). Component analysis of esophageal cancer incidence in Kazakhstan. *Asian Pac J Cancer Prev*, **14**, 1945-9.
Igissinov S, Igissinov N, Moore MA, Kalieva Z, Kozhakhmetov S (2012). Epidemiology of esophageal cancer in Kazakhstan. *Asian Pac J Cancer Prev*, **13**, 833-6.
Ioka A, Ito Y, Tsukuma H (2009). Factors relating to poor survival rates of aged cervical cancer patients: a population-based study with the relative survival model in Osaka, Japan. *Asian Pac J Cancer Prev*, **10**, 457-62.
Ismail SI, Soubani M, Nimri JM, Al-Zeer AH (2013). Cancer incidence in Jordan from 1996 to 2009-a comprehensive study. *Asian Pac J Cancer Prev*, **14**, 3527-34.
Ito Y, Ioka A, Nakayama T, Tsukuma H, Nakamura T (2011). Comparison of trends in cancer incidence and mortality in Osaka, Japan, using an age-period-cohort model. *Asian Pac J Cancer Prev*, **12**, 879-88.
Ito Y, Nakayama T, Miyashiro I, Ioka A, Tsukuma H (2013). Conditional survival for longer-term survivors from 2000-2004 using population-based cancer registry data in Osaka, Japan. *BMC Cancer*, **13**, 304.
Ito Y, Nakayama T, Tsukuma H, et al (2012). Role of age and tumour stage in the temporal pattern of 'cure' from stomach cancer: a population-based study in Osaka, Japan. *Cancer Epidemiol*, **36**, 128-32.
Jayalekshmi P, Gangadharan P, Sebastian P (2011). Cancer survival in Karunagappally, India, 1991-1997. *IARC Sci Publ*, **162**, 125-32.

Jayant K, Nene BM, Badwe RA, et al (2010). Rural cancer registry at Barshi, Maharashtra and its impact on cancer control. *Natl Med J India*, **23**, 274-7.

Jazayeri SB, Rahimi-Movaghar V, Shokraneh F, Saadat S, Ramezani R (2013). Epidemiology of primary CNS tumors in Iran: a systematic review. *Asian Pac J Cancer Prev*, **14**, 3979-85

Jiwa M, Maujean E, Spilsbury K, Threlfal T (2010). The trajectory of lung cancer patients in Western Australia--a data linkage study: still a grim tale. *Lung Cancer*, **70**, 22-7.

Jung KW, Park S, Kong HJ, et al (2010). Cancer statistics in Korea: incidence, mortality and survival in 2006-2007. *J Korean Med Sci*, **25**, 1113-21.

Kamigaki Y, Kawakami K (2011). Risk of second cancer after initial treatment of breast cancer: An Osaka Cancer Registry Database study. *Oncol Lett*, **2**, 963-73.

Kamnerdsupaphon P, Srisukho S, Sumitsawan Y, Lorvidhaya V, Sukthomya V (2008). Cancers in northern Thailand. *Biomed Imaging Interv J*, **4**, 46.

Kamsa-ard S, Wiangnon S, Suwanrungruang K, et al (2011). Trends in liver cancer incidence between 1985 and 2009, Khon Kaen, Thailand: cholangiocarcinoma. *Asian Pac J Cancer Prev*, **12**, 2209-13.

Kansakar P, Singh Y (2012). Changing trends of colorectal carcinoma in Nepalese young adults. *Asian Pac J Cancer Prev*, **13**, 3209-12.

Khayamzadeh M, Khayamzadeh M, Tadayon N, et al (2011). Survival of thyroid cancer and social determinants in Iran, 2001-2005. *Asian Pac J Cancer Prev*, **12**, 95-8.

Khokher S, Qureshi MU, Riaz M, Akhtar N, Saleem A (2012). Clinicopathologic profile of breast cancer patients in Pakistan: ten years data of a local cancer hospital. *Asian Pac J Cancer Prev*, **13**, 693-8.

Kilciksiz S, Yilmaz E, Yigit S, Baloglu A (2012). Cancer in elderly: A study of hospital-based cancer registry in the Western Turkey. *Hippokratia*, **16**, 57-60.

Kotepui M, Chupeerach C (2013). Age distribution of breast cancer from a Thailand population-based cancer registry. *Asian Pac J Cancer Prev*, **14**, 3815-7.

Koul PA, Kaul SK, Sheikh MM, Tasleem RA, Shah A (2010). Lung cancer in the Kashmir valley. *Lung India*, **27**, 131-7.

Kumar R, Jain K, Beeke C, et al (2013). A population-based study of metastatic colorectal cancer in individuals aged ≥ 80 years: findings from the South Australian Clinical Registry for Metastatic Colorectal Cancer. *Cancer*, **119**, 722-8.

Kumar S, Burney IA, Al-Ajmi A, Al-Moundhri MS (2011). Changing trends of breast cancer survival in sultanate of oman. *J Oncol*, **2011**, 316243.

Kutikhin AG, Yuzhalin AE, Brailovskiy VV, et al (2012). Analysis of cancer incidence and mortality in the industrial region of South-East Siberia from 1991 through 2010. *Asian Pac J Cancer Prev*, **13**, 5189-93.

Kweon SS, Shin MH, Chung IJ, Kim YJ, Choi JS (2013). Thyroid cancer is the most common cancer in women, based on the data from Population-based Cancer Registries, South Korea. *Jpn J Clin Oncol,* [Epub ahead of print].

Kwong A, Mang OW, Wong CH, et al (2011). Breast cancer in Hong Kong, Southern China: the first population-based analysis of epidemiological characteristics, stage-specific, cancer-specific, and disease-free survival in breast cancer patients: 1997-2001. *Ann Surg Oncol*, **18**, 3072-8.

Lakkis NA, Adib SM, Osman MH, Musharafieh UM, Hamadeh GN (2010). Breast cancer in Lebanon: incidence and comparison to regional and Western countries. *Cancer Epidemiol*, **34**, 221-5.

Lankarani KB, Khosravizadegan Z, Rezaianzadeh A, et al (2013). Data coverage of a cancer registry in southern Iran before and after implementation of a population-based reporting system: a 10-year trend study. *BMC Health Serv Res*, **13**, 169.

Lau HY, Leung CM, Chan YH, et al (2013). Secular trends of salted fish consumption and nasopharyngeal carcinoma: a multi-jurisdiction ecological study in 8 regions from 3 continents. *BMC Cancer*, **13**, 298.

Laudico A, Mapua C (2011). Cancer survival in Manila, Philippines, 1994-1995. *IARC Sci Publ*, **162**, 147-50.

Laudico A, Redaniel MT, Mirasol-Lumague MR, et al (2009). Epidemiology and clinicopathology of breast cancer in metro Manila and Rizal Province, Philippines. *Asian Pac J Cancer Prev*, **10**, 167-72.

Laudico AV, Mirasol-Lumague MR, Mapua CA, et al (2010). Cancer incidence and survival in Metro Manila and Rizal province, Philippines. *Jpn J Clin Oncol*, **40**, 603-12.

Law SC, Mang OW (2011). Cancer survival in Hong Kong SAR, China, 1996-2001. *IARC Sci Publ*, **162**, 33-41.

Lee JY, Jung KW, Park S, et al (2010). Long-term survival of cancer patients in Korea, 1993-2007: National Cancer Registry Study. *Asian Pac J Cancer Prev*, **11**, 1459-64.

Lehman EM, Soliman AS, Ismail K, et al (2008). Patterns of hepatocellular carcinoma incidence in Egypt from a population-based cancer registry. *Hepatol Res*, **38**, 465-73.

Lei T, Chen WQ, Zhang SW, et al (2009). Prevalence trend of colorectal cancer in 10 cities and counties in China from 1988 to 2002. *Zhonghua Zhong Liu Za Zhi*, **31**, 428-33 (in Chinese).

Lei WK, Yu XQ, Lam C, Leong WK (2010). Survival analysis of 2003-2005 data from the population-based cancer registry in Macao. *Asian Pac J Cancer Prev*, **11**, 1561-7.

Li GL, Chen WQ (2009). Representativeness of population-based cancer registration in China--comparison of urban and rural areas. *Asian Pac J Cancer Prev*, **10**, 559-64.

Li N, Zheng RS, Zhang SW, et al (2012). Analysis and prediction of breast cancer incidence trend in China. *Zhonghua Yu Fang Yi Xue Za Zhi*, **46**, 703-7 (in Chinese).

Lim GC, Azura D (2008). National Cancer Patient Registry--a patient registry/clinical database to evaluate the health outcomes of patients undergoing treatment for cancers in Malaysia. *Med J Malaysia*, **63**, 55-6.

Lim GH, Chow KY, Lee HP (2012). Singapore cancer trends in the last decade. *Singapore Med J*, **53**, 3-9.

Lim KG (2009). Malays in peninsular Malaysia may have the lowest incidence of stomach cancer in the world. *Med J Malaysia*, **64**, 91-2.

Liu Q, Chen JO, Huang QH, Li YH (2013). Trends in the survival of patients with nasopharyngeal carcinoma between 1976 and 2005 in Sihui, China: a population-based study. *Chin J Cancer*, **32**, 325-33.

Liu YQ, Zhang SQ, Chen WQ, et al (2012). Trend of incidence and mortality on thyroid cancer in China during 2003-2007. *Zhonghua Liu Xing Bing Xue Za Zhi*, **33**, 1044-8 (in Chinese).

Long N, Moore MA, Chen W, et al (2010). Cancer epidemiology and control in north-East Asia-past, present and future. *Asian Pac J Cancer Prev*, **11**, 107-48.

Ma C, Jiang YX, Liu SZ et al (2013). Trend and prediction on the incidence of pancreatic cancer in China. *Zhonghua Liu Xing Bing Xue Za Zhi*, **34**, 160-3 (in Chinese).

Mamoon N, Hassan U, Mushtaq S (2009). Breast carcinoma in young women aged 30 or less in Northern Pakistan-the Armed Forces Institute of Pathology experience. *Asian Pac J Cancer Prev*, **10**, 1079-82.

Manoharan N, Tyagi BB, Raina V (2009). Cancer incidences in urban Delhi-2001-05. *Asian Pac J Cancer Prev*, **10**, 799-806.

Manoharan N, Tyagi BB, Raina V (2010). Cancer incidences in

rural Delhi--2004-05. *Asian Pac J Cancer Prev*, **11**, 73-7.
Mansour-Ghanaei F, Heidarzadeh A, Naghipour MR, et al (2012). A 10-year study of esophageal cancer in Guilan Province, Iran: The Guilan Cancer Registry Study (GCRS). *Asian Pac J Cancer Prev*, **13**, 6277-83.
Maracy MR, Moradpour F, Hosseini SM, Tirani M (2012). Cancer incidence and prevalence in isfahan: application of mortality data to estimates and projects for the period 2001-2015. *Int J Prev Med*, **3**, 867-74.
Marimuthu P (2008). Projection of cancer incidence in five cities and cancer mortality in India. *Indian J Cancer*, **45**, 4-7.
Martin N, Pongnikorn S, Patel N, Daoprasert K (2011). Cancer survival in Lampang, Thailand, 1990-2000. *IARC Sci Publ*, **162**, 217-26.
Masoompour SM, Yarmohammadi H, Rezaianzadeh A, Lankarani KB (2011). Cancer incidence in southern Iran, 1998-2002: results of population-based cancer registry. *Cancer Epidemiol*, **35**, 42-7.
Mathew A, Daniel CR, Ferrucci LM, et al (2011). Assessment of follow-up, and the completeness and accuracy of cancer case ascertainment in three areas of India. *Cancer Epidemiol*, **35**, 334-41.
Matsuda T, Ajiki W, Marugame T, et al (2011). Population-based survival of cancer patients diagnosed between 1993 and 1999 in Japan: a chronological and international comparative study. *Jpn J Clin Oncol*, **41**, 40-51.
McKenzie F, Ellison-Loschmann L, Jeffreys M (2011). Investigating reasons for ethnic inequalities in breast cancer survival in New Zealand. *Ethn Health*, **16**, 535-49.
McLean D, Mannetje A', Dryson E, et al (2009). Leukaemia and occupation: a New Zealand Cancer Registry-based case-control Study. *Int J Epidemiol*, **38**, 594-606
Medina VM, Laudico A, Mirasol-Lumague MR, Brenner H, Redaniel MT (2010). Cumulative incidence trends of selected cancer sites in a Philippine population from 1983 to 2002: a joinpoint analysis. *Br J Cancer*, **102**, 1411-4.
Mehrabian A, Esna-Ashari F, Zham H, et al (2010). Gastric cancer prevalence, according to survival data in iran (national study-2007). *Iran J Public Health*, **39**, 27-31.
Mehrotra R, Pandya S, Singhla M, Srivastava D, Singh M (2008). Spectrum of malignancies in Allahabad, North India: a hospital-based study. *Asian Pac J Cancer Prev*, **9**, 525-8.
Moghaddam SD, Haghdoost AA, Hoseini SH, Ramazani R, Rezazadehkermani M (2010). Incidence of hepatocellular carcinoma in southeast iran. *Hepat Mon*, **10**, 270-4.
Mohd Taib NA, Yip CH, Mohamed I (2008). Survival analysis of Malaysian women with breast cancer: results from the University of Malaya Medical Centre. *Asian Pac J Cancer Prev*, **9**, 197-202.
Mohebbi M, Wolfe R, Jolley D, et al (2011). The spatial distribution of esophageal and gastric cancer in Caspian region of Iran: an ecological analysis of diet and socio-economic influences. *Int J Health Geogr*, **10**, 13.
Mokarian F, Ramezani MA, Heydari K, Tabatabaeian M, Tavazohi H (2011). Epidemiology and trend of cancer in Isfahan 2005-2010. *J Res Med Sci*, **16**, 1228-33
Moore MA (2013). What and where for publications by cancer registries in the Asian Pacific? - Roles for the APJCP in the future. *Asian Pac J Cancer Prev*, **14**, 4939-42.
Moore MA, Ariyaratne Y, Badar F, et al (2010b). Cancer epidemiology in South Asia-past, present and future. *Asian Pac J Cancer Prev*, **11**, 49-66.
Moore MA, Attasara P, Khuhaprema T, et al (2010c). Cancer epidemiology in mainland South-East Asia-past, present and future. *Asian Pac J Cancer Prev*, **11**, 67-80.
Moore MA, Baumann F, Foliaki S, et al (2010e). Cancer epidemiology in the Pacific Islands-past, present and future. *Asian Pac J Cancer Prev*, **1**, 99-106.
Moore MA, Eser S, Igisinov N, et al (2010a). Cancer epidemiology and control in North-Western and Central Asia-past, present and future. *Asian Pac J Cancer Prev*, **11**, 17-32.
Moore MA, Manan AA, Chow KY, et al (2010d). Cancer epidemiology and control in peninsular and island South-East Asia-past, present and future. *Asian Pac J Cancer Prev*, **11**, 81-98.
Moradi A, Semnani S, Roshandel G, et al (2010). Incidence of childhood cancers in golestan province of iran. *Iran J Pediatr*, **20**, 335-42.
Moradpour F, Fatemi Z (2013). Estimation of the projections of the incidence rates, mortality and prevalence due to common cancer site in isfahan, iran. *Asian Pac J Cancer Prev*, **14**, 3581-5.
Morrell S, You H, Baker D (2012). Estimates of cancer incidence, mortality and survival in aboriginal people from NSW, Australia. *BMC Cancer*, **12**, 168.
Mosli MH, Al-Ahwal MS (2012). Does the increasing trend of colorectal cancer incidence in jeddah reflect a rise in the Kingdom of Saudi Arabia? *Asian Pac J Cancer Prev*, **13**, 6285-8.
Murthy NS, Chaudhry K, Rath GK (2008). Burden of cancer and projections for 2016, Indian scenario: gaps in the availability of radiotherapy treatment facilities. *Asian Pac J Cancer Prev*, **9**, 671-7.
Ngoan le T, Anh NT, Huong NT, et al (2008). Gastric and colo-rectal cancer mortality in Viet Nam in the years 2005-2006. *Asian Pac J Cancer Prev*, **9**, 299-302.
Nguyen TL, Nguyen DC, Nguyen TH, et al (2011). Survey-based cancer mortality in the Lao PDR, 2007-08. *Asian Pac J Cancer Prev*, **12**, 2495-8.
Nooyi SC, Al-Lawati JA (2011). Cancer incidence in Oman, 1998-2006. *Asian Pac J Cancer Prev*, **12**, 1735-8.
Nor Aina E (2008). National Cancer Patient Registry--Breast Cancer (NCPR-Breast Cancer). *Med J Malaysia*, **63**, 72-3.
Othman NH, Zin AA (2008). Association of colorectal carcinoma with metabolic diseases; experience with 138 cases from Kelantan, Malaysia. *Asian Pac J Cancer Prev*, **9**, 747-51.
Othman RT, Abdulljabar R, Saeed A, et al (2011). Cancer incidence rates in the Kurdistan region/Iraq from 2007-2009. *Asian Pac J Cancer Prev*, **12**, 1261-4.
Park HJ, Park EH, Jung KW, et al (2012). Statistics of hematologic malignancies in Korea: incidence, prevalence and survival rates from 1999 to 2008. *Korean J Hematol*, **47**, 28-38.
Pathy NB, Yip CH, Taib NA, et al (2011). Breast cancer in a multi-ethnic Asian setting: results from the Singapore-Malaysia hospital-based breast cancer registry. *Breast*, **20**, 75-80.
Pearce DC, Dowling K, Sim MR (2012). Cancer incidence and soil arsenic exposure in a historical gold mining area in Victoria, Australia: a geospatial analysis. *J Expo Sci Environ Epidemiol*, **22**, 248-57.
Phipps AI, Lindor NM, Jenkins MA, et al (2013). Colon and rectal cancer survival by tumor location and microsatellite instability: the Colon Cancer Family Registry. *Dis Colon Rectum*, **56**, 937-44.
Pradhananga KK, Baral M, Shrestha BM (2009). Multi-institution hospital-based cancer incidence data for Nepal: an initial report. *Asian Pac J Cancer Prev*, **10**, 259-62.
Rajabli N, Naeimi-Tabeie M, Jahangirrad A, et al (2013). Epidemiology of leukemia and multiple myeloma in Golestan, Iran. *Asian Pac J Cancer Prev*, **14**, 2333-6.
Ranasinghe WK, De Silva D, De Silva MV, et al (2012). Incidence of bladder cancer in Sri Lanka: analysis of the

cancer registry data and review of the incidence of bladder cancer in the South asian population. *Korean J Urol*, **53**, 304-9.

Ranasinghe WK, Sibanda T, de Silva MV, Ranasinghe TI, Persad R (2011). Incidence of prostate cancer in Sri Lanka using cancer registry data and comparisons with the incidence in South Asian men in England. *BJU Int*, **108**, 184-9.

Rasaf MR, Ramezani R, Mehrazma M, Rasaf MR, Asadi-Lari M (2012). Inequalities in cancer distribution in tehran; a disaggregated estimation of 2007 incidence by 22 districts. *Int J Prev Med*, **3**, 483-92.

Rashidi M, Rameshat MH, Gharib H, et al (2012). The association between spatial distribution of common malignancies and soil lead concentration in Isfahan, Iran. *J Res Med Sci*, **17**, 348-54.

Rasouli M, Ghadimi MR, Mahmoodi M, et al (2011). Survival analysis of patients with esophageal cancer using parametric cure model. *Asian Pac J Cancer Prev*, **12**, 2359-63.

Razavi SM, Siadat S, Rahbar P, Hosseini SM, Shirani AM (2012). Trends in oral cancer rates in Isfahan, Iran during 1991-2010. *Dent Res J*, **9**, 88-93.

Ringland CL, Arkenau HT, O'Connell DL, Ward RL (2010). Second primary colorectal cancers (SPCRCs): experiences from a large Australian Cancer Registry. *Ann Oncol*, **21**, 92-7.

Rius EB, Armaroli PY, Contreras GS (2010). Cancer prevalence in easter island population-2006-2010. *Asian Pac J Cancer Prev*, **14**, 3101-3.

Rohani-Rasaf M, Abdollahi M, Jazayeri S, Kalantari N, Asadi-Lari M (2013). Correlation of cancer incidence with diet, smoking and socio-economic position across 22 districts of Tehran in 2008. *Asian Pac J Cancer Prev*, **14**, 1669-76.

Rohani-Rasaf M, Moradi-Lakeh M, Ramezani R, Asadi-Lari M. Measuring socioeconomic disparities in cancer incidence in Tehran, 2008. *Asian Pac J Cancer Prev*, **13**, 2955-60

Roshandel G, Sadjadi A, Aarabi M, et al (2012). Cancer incidence in Golestan Province: report of an ongoing population-based cancer registry in Iran between 2004 and 2008. *Arch Iran Med*, **15**, 196-200.

Roshandel G, Semnani S, Aarabi M, et al (2011). Lymphomas in Golestan province of Iran: results of a population-based cancer registry. *Asian Pac J Cancer Prev*, **12**, 219-22.

Roy BN, Purkait R, Ganguly S, et al (2012). Profile of childhood cancers: a multicentric study. *J Indian Med Assoc*, **110**, 872-5.

Roya N, Abbas B (2013). Colorectal Cancer Trends in Kerman Province, the Largest Province in Iran, with Forecasting until 2016. *Asian Pac J Cancer Prev*, **14**, 791-3.

Sabokbar T, Khajeh E, Taghdiri F, Peyghambari V, Shirkoohi R (2012). Familial breast cancer registry program in patients referred to the cancer institute of Iran. *Asian Pac J Cancer Prev*, **13**, 2675-9.

Sadjadi A, Nouraie M, Ghorbani A, Alimohammadian M, Malekzadeh R (2009). Epidemiology of breast cancer in the Islamic Republic of Iran: first results from a population-based cancer registry. *East Mediterr Health J*, **15**, 1426-31.

Safaee A, Fatemi SR, Ashtari S, et al (2012). Four years incidence rate of colorectal cancer in Iran: a survey of national cancer registry data-implications for screening. *Asian Pac J Cancer Prev*, **13**, 2695-8.

Salehi A, Khezri AA, Malekmakan L, Aminsharifi A (2011). Epidemiologic status of bladder cancer in Shiraz, southern Iran. *Asian Pac J Cancer Prev*, **12**, 1323-7

Salehi A, Zeraati H, Mohammad K, et al (2011). Survival of male breast cancer in fars, South of iran. *Iran Red Crescent Med J*, **13**, 99-105.

Salem HK, Mahfouz S (2012). Changing patterns (age, incidence, and pathologic types) of schistosoma-associated bladder cancer in Egypt in the past decade. *Urology*, **79**, 379-83.

Salim EI, Jazieh AR, Moore MA (2011). Lung cancer incidence in the Arab League countries: risk factors and control. *Asian Pac J Cancer Prev*, **11 Suppl 2**, 33-48.

Salim EI, Moore MA, Bener A, et al (2010). Cancer epidemiology in South-West Asia - past, present and future. *Asian Pac J Cancer Prev*, **12**, 17-34.

Salim EI, Moore MA, Al-Lawati JA, et al (2009). Cancer epidemiology and control in the Arab world-past, present and future. *Asian Pac J Cancer Prev*, **10**, 3-16.

Sandagdorj T, Sanjaajamts E, Tudev U, et al (2010). Cancer incidence and mortality in Mongolia-National Registry Data. *Asian Pac J Cancer Prev*, **11**, 1509-14

Sandagdorj T, Sanjaajamts E, Tudev U, et al (2010). Cancer incidence and mortality in Mongolia-National Registry Data. *Asian Pac J Cancer Prev*, **11**, 1509-14.

Sarfati D, Shaw C, Blakely T, Atkinson J, Stanley J (2011). Ethnic and socioeconomic trends in testicular cancer incidence in New Zealand. *Int J Cancer*, **128**, 1683-91.

Sawabata N, Miyaoka E, Asamura H, et al (2011). Japanese lung cancer registry study of 11,663 surgical cases in 2004: demographic and prognosis changes over decade. *J Thorac Oncol*, **6**, 1229-35.

Seedhom AE, Kamal NN (2011). Factors affecting survival of women diagnosed with breast cancer in El-Minia Governorate, Egypt. *Int J Prev Med*, **2**, 131-8.

Seo HJ, Oh IH, Yoon SJ (2012). A comparison of the cancer incidence rates between the National Cancer Registry and Insurance Claims Data in Korea. *Asian Pac J Cancer Prev*, **13**, 6163-8.

Shah AB, Sarfati D, Blakely T, Atkinson J, Dennett ER (2012). Trends in colorectal cancer incidence rates in New Zealand, 1981-2004. *ANZ J Surg*, **82**, 258-64.

Shaw C, Atkinson J, Blakely T (2009). (Mis)classification of ethnicity on the New Zealand Cancer Registry: 1981-2004. *N Z Med J*, **122**, 10-22.

Shibata A, Matsuda T, Ajiki W, Sobue T (2008). Trend in incidence of adenocarcinoma of the esophagus in Japan, 1993-2001. *Jpn J Clin Oncol*, **38**, 464-8.

Shin A, Jung YS, Jung KW, et al (2013). Trends of human papillomavirus-related head and neck cancers in Korea: National cancer registry data. *Laryngoscope*. [Epub ahead of print]

Shin A, Kim KZ, Jung KW, et al (2012). Increasing trend of colorectal cancer incidence in Korea, 1999-2009. *Cancer Res Treat*, **44**, 219-26.

Shin HR, Boniol M, Joubert C, et al (2010). Secular trends in breast cancer mortality in five East Asian populations: Hong Kong, Japan, Korea, Singapore and Taiwan. *Cancer Sci*, **101**, 1241-6.

Shin HR, Lee DH, Lee SY, et al (2011). Cancer survival in Busan, Republic of Korea, 1996-2001. *IARC Sci Publ*, **162**, 155-62.

Shin HR, Oh JK, Masuyer E, et al (2010). Comparison of incidence of intrahepatic and extrahepatic cholangiocarcinoma--focus on East and South-Eastern Asia. *Asian Pac J Cancer Prev*, **11**, 1159-66.

Shin MH, Oh HK, Ahn YO, et al (2008). Ten year trend of cancer incidence in Seoul, Korea: 1993--2002. *J Prev Med Public Health*, **41**, 92-9 (in Korean).

Sneyd MJ, Cox B (2009). Melanoma in Maori, Asian, and Pacific peoples in New Zealand. *Cancer Epidemiol Biomarkers Prev*, **18**, 1706-13.

Sng J, Koh D, Siong WC, Choo TB (2009). Skin cancer trends among Asians living in Singapore from 1968 to 2006. *J Am Acad Dermatol*, **61**, 426-32.

Song M, Cho IS, Li ZM, Ahn YO. Completeness of cancer case ascertainment in Korea radiation effect and epidemiology cohort study. *J Korean Med Sci*, **27**, 489-94.

Song QK, Li J, Jiang HD et al (2012). Esophageal cancer mortality during 2004-2009 in Yanting County, China. *Asian Pac J Cancer Prev*, **13**, 5003-6. (in Chinese)

Soon SS, Lim HY, Lopes G (2013). Roles of cancer registries in enhancing oncology drug access in the Asia-Pacific region. *Asian Pac J Cancer Prev*, **14**, 2159-65.

Srina A, Jetsrisuparb A, Komvilaisak P, Kamsaard S, Wiangnon S (2010). Trends in incidence of childhood lymphoma in Khon Kaen, Thailand, 1985-2008. *Asian Pac J Cancer Prev*, **11**, 1683-6.

Sriplung H, Prechavittayakul P (2011). Cancer survival in Songkhla, Thailand, 1990-1999. *IARC Sci Publ*, **162**, 227-35.

Stavrou EP, McElroy HJ, Baker DF, Smith G, Bishop JF (2009). Adenocarcinoma of the oesophagus: incidence and survival rates in New South Wales, 1972-2005. *Med J Aust*, **191**, 310-4.

Stevens W, Stevens G, Kolbe J, Cox B (2008). Comparison of New Zealand Cancer Registry data with an independent lung cancer audit. *N Z Med J*, **121**, 29-41.

Sugiyama H, Nishi N, Kuwabara M, et al (2009). Incidence and survival of childhood cancer cases diagnosed between 1998 and 2000 in Hiroshima City, Japan. *Asian Pac J Cancer Prev*, **10**, 675-80.

Sumitsawan Y, Srisukho S, Sastraruji A, et al (2011). Cancer survival in Chiang Mai, Thailand, 1993-1997. *IARC Sci Publ*, **162**, 199-209.

Suwanrungruang K, Sriplung H, Temiyasathit S, et al (2011). Appropriateness of the standard mortality/incidence ratio in evaluation of completeness of population-based cancer registry data. *Asian Pac J Cancer Prev*, **12**, 3283-8.

Suwanrungruang K, Vatanasapt P, Kamsa-Ard S, Sriamporn S, Wiangnon S (2011). Cancer survival in Khon Kaen, Thailand, 1993-1997. *IARC Sci Publ*, **162,** 211-6

Suzuki A, Kuriyama S, Kawai M, et al (2008). Age-specific interval breast cancers in Japan: estimation of the proper sensitivity of screening using a population-based cancer registry. *Cancer Sci*, **99**, 2264-7.

Swaminathan R, Rama R, Nalini S, Shanta V (2011). Cancer survival in Chennai (Madras), India, 1990-1999. *IARC Sci Publ*, **162**, 115-24.

Swaminathan R, Rama R, Shanta V (2008). Childhood cancers in Chennai, India, 1990-2001: incidence and survival. *Int J Cancer*

Swaminathan R, Rama R, Shanta V (2008). Lack of active follow-up of cancer patients in Chennai, India: implications for population-based survival estimates. *Bull World Health Organ*, **86**, 509-15.

Swaminathan R, Selvakumaran R, Esmy PO, et al (2009). Cancer pattern and survival in a rural district in South India. *Cancer Epidemiol*, **33**, 325-31.

Swaminathan R, Selvakumaran R, Vinodha J, et al (2009). Education and cancer incidence in a rural population in south India. *Cancer Epidemiol*, **33**, 89-93.

Swaminathan R, Shanta V, Ferlay J, et al (2011). Trends in cancer incidence in Chennai city (1982-2006) and statewide predictions of future burden in Tamil Nadu (2007-16). *Natl Med J India*, **24**, 72-7.

Taheri NS, Bakhshandehnosrat S, Tabiei MN et al (2012). Epidemiological pattern of breast cancer in Iranian women: is there an ethnic disparity? *Asian Pac J Cancer Prev*, **13**, 4517-20.

Takiar R, Srivastav A (2008). Time trend in breast and cervix cancer of women in India-(1990-2003). *Asian Pac J Cancer Prev*, **9**, 777-80.

Takiar R, Vijay CR (2010). An alternative approach to study the changes in the cancer pattern of women in India (1988-2005). *Asian Pac J Cancer Prev*, **11**, 1253-6.

Takiar R, Vijay CR (2011). An alternative approach to study the changes in the cancer pattern of men in India (1988-2005). *Asian Pac J Cancer Prev*, **12**, 875-8.

Tanaka H, Imai Y, Hiramatsu N, et al (2008). Declining incidence of hepatocellular carcinoma in Osaka, Japan, from 1990 to 2003. *Ann Intern Med*, **148**, 820-6.

Tanaka H, Tanaka M, Chen W, et al (2009). Proposal for a cooperative study on population-based cancer survival in selected registries in East Asia. *Asian Pac J Cancer Prev*, **10**, 1191-8.

Tas F, Keskin S (2012). Age-specific incidence ratios of colorectal cancer (CRC) in Turkey: CRC in older people is increasing. *Arch Gerontol Geriatr*, **55**, 279-82.

Tas F, Keskin S (2012). Age-specific incidence ratios of lung cancer (LC) in Turkey: LC in older people is increasing. *Arch Gerontol Geriatr*, **55**, 276-8.

Teo MC, Soo KC (2013). Cancer trends and incidences in Singapore. *Jpn J Clin Oncol*, **43**, 219-24.

Teramoto N, Tanimizu M (2011). Validation analysis of Japanese histological classification of breast cancer using the National Summary of Hospital Cancer Registry 2007, Japan. *Cancer Sci*, **102**, 1597-601.

Thein HH, Walter SR, Gidding HF, et al (2011). Trends in incidence of hepatocellular carcinoma after diagnosis of hepatitis B or C infection: a population-based cohort study, 1992-2007. *J Viral Hepat*, **18**, 232-41.

Thorat RV, Panse NS, Budukh AM, et al (2009). Prevalence of tobacco use and tobacco-dependent cancers in males in the Rural Cancer Registry population at Barshi, India. *Asian Pac J Cancer Prev*, **10**, 1167-70.

Toyoda Y, Nakayama T, Ito Y, Ioka A, Tsukuma H (2009). Trends in colorectal cancer incidence by subsite in Osaka, Japan. *Jpn J Clin Oncol*, **39**, 189-91.

Tracey EA, Roder DM, Francis J, et al (2009). Reasons for improved survival from ovarian cancer in New South Wales, Australia, between 1980 and 2003: implications for cancer control. *Int J Gynecol Cancer*, **19**, 591-9

Troisi R, Altantsetseg D, Davaasambuu G, et al (2012). Breast cancer incidence in Mongolia. *Cancer Causes Control*, **23**, 1047-53.

Troisi R, Altantsetseg D, Davaasambuu G, et al (2012). Breast cancer incidence in Mongolia. *Cancer Causes Control*, **23**, 1047-53.

Tzeng HE, Lin CL, Tsai CH, et al (2013). Time trend of multiple myeloma and associated secondary primary malignancies in Asian patients: a Taiwan population-based study. *PLoS One*, **8**, 68041.

Utada M, Ohno Y, Soda M, Kamo K (2010). Estimation of cancer incidence in Japan with an age-period-cohort model. *Asian Pac J Cancer Prev*, **11**, 1235-40.

Vatanasapt P, Suwanrungruang K, Kamsa-Ard S, Promthet S, Parkin MD (2011). Epidemiology of oral and pharyngeal cancers in Khon Kaen, Thailand: a high incidence in females. *Asian Pac J Cancer Prev*, **12**, 2505-8.

Verma Y, Pradhan PK, Gurung N, et al (2012). Population-based cancer incidence in Sikkim, India: report on ethnic variation. *Br J Cancer*, **106**, 962-5.

Veruttipong D, Soliman AS, Gilbert SF, et al (2012). Age distribution, polyps and rectal cancer in the Egyptian population-based cancer registry. *World J Gastroenterol*, **18**, 3997-4003.

Wahidin M, Noviani R, Hermawan S, et al (2012). Population-based cancer registration in Indonesia. *Asian Pac J Cancer Prev*, **13**, 1709-10.

Wang BY, Huang JY, Cheng CY, et al (2013). Lung cancer and prognosis in taiwan: a population-based cancer registry. *J Thorac Oncol*, **8**, 1128-35.

Wei KG, Liang ZH (2012). Obviously increasing incidence trend for males but stable pathological proportions for both genders: esophageal cancer in Zhongshan of China from 1970-2007. *Asian Pac J Cancer Prev*, **13**, 1783-6.

Wei KR, Chen WQ, Zhang SW (2012). Epidemiology of uterine corpus cancer in some cancer registering areas of China from 2003-2007, *Zhonghua Fu Chan Ke Za Zhi*, **47**, 445-51 (in Chinese).

Wei KR, Chen WQ, Zhang SW (2012). Analysis and prediction of breast cancer incidence trend in China. *Asian Pac J Cancer Prev*, **13**, 4209-14.

Wendy L, Radzi M (2008). New registry: National Cancer Patient Registry - Colorectal Cancer. *Med J Malaysia*, **63**, 57-8.

Wiangnon S, Kamsa-ard S, Suwanrungruang K, et al (2012). Trends in incidence of hepatocellular carcinoma, 1990-2009, Khon Kaen, Thailand. *Asian Pac J Cancer Prev*, **13**, 1065-8.

Wiromrat P, Jetsrisuparb A, Komvilaisak P, et al (2012). Incidence and survival rates among pediatric osteogenic sarcoma cases in Khon Kaen, Thailand, 1985-2010. *Asian Pac J Cancer Prev*, **13**, 4281-4.

Woo ZH, Hong YC, Kim WC, Pu YK (2011). Cancer survival in Incheon, Republic of Korea, 1997-2001. *IARC Sci Publ*, **162,** 163-9.

Wu QJ, Vogtmann E, Zhang W, et al (2012). Cancer incidence among adolescents and young adults in urban Shanghai, 1973-2005. *PLoS One*, **7**, 42607.

Wu SJ, Huang SY, Lin CT, et al (2010). The incidence of chronic lymphocytic leukemia in Taiwan, 1986-2005: a distinct increasing trend with birth-cohort effect. *Blood*, **116**, 4430-5.

Xiang YB, Jin F, Gao YT (2011). Cancer survival in Shanghai, China, 1992-1995. *IARC Sci Publ*, **162**, 55-68.

Xie SH, Gong J, Yang NN, et al (2012). Time trends and age-period-cohort analyses on incidence rates of nasopharyngeal carcinoma during 1993-2007 in Wuhan, China. *Cancer Epidemiol*, **36**, 8-10.

Xishan H, Chen K, Min H, Shufen D, Jifang W (2011) Cancer survival in Tianjin, China, 1991-1999. *IARC Sci Publ*, **162**, 69-84.

Xu ZJ, Zheng RS, Zhang SW, Zou XN, Chen WQ (2013). Nasopharyngeal carcinoma incidence and mortality in China in 2009. *Chin J Cancer*, **32**, 453-60 (in Chinese).

Yahata T, Banzai C, Tanaka K (2012). Histology-specific long-term trends in the incidence of ovarian cancer and borderline tumor in Japanese females: a population-based study from 1983 to 2007 in Niigata. *J Obstet Gynaecol Res*, **38**, 645-50.

Yeole BB, Kurkure AP, Sunny L (2011). Cancer survival in Mumbai (Bombay), India, 1992-1999. *IARC Sci Publ*, **162**, 133-42

Yildirim M, Karakilinc H, Yildiz M, et al (2013). Non-Hodgkin lymphoma and pesticide exposure in Turkey. *Asian Pac J Cancer Prev*, **14**, 3461-3.

Yılmaz HH, Yazıhan N, Tunca D, et al (2011). Cancer trends and incidence and mortality patterns in Turkey. *Jpn J Clin Oncol*, **41**, 10-6.

Youl PH, Youlden DR, Baade PD (2013). Changes in the site distribution of common melanoma subtypes in Queensland, Australia over time: implications for public health campaigns. *Br J Dermatol*, **168**, 136-44.

Youlden DR, Baade PD, Valery PC, et al (2011). Differentials in survival for childhood cancer in Australia by remoteness of residence and area disadvantage. *Cancer Epidemiol Biomarkers Prev*, **20**, 1649-56.

Youlden DR, Baade PD, Valery PC, et al (2012a). Area-based differentials in childhood cancer incidence in Australia, 1996-2006. *Pediatr Blood Cancer*, **58**, 390-4.

Youlden DR, Baade PD, Valery PC, et al (2012b). Childhood cancer mortality in Australia. *Cancer Epidemiol*, **36**, 476-80.

Zahir ST, Arjmand A, Kargar S, Neishaboury M (2013). Incidence and trends of malignant and benign pancreatic lesions in Yazd, Iran between 2001 and 2011. *Asian Pac J Cancer Prev*, **14**, 2631-5.

Zanetti R, Tazi MA, Rosso S (2010). New data tells us more about cancer incidence in North Africa. *Eur J Cancer*, **46**, 462-6.

Zare M, Rezaee A, Zakiani S, Zare A (2012). Study of Iranian breast cancer registration via established online system during 2011. *Stud Health Technol Inform*, **180**, 1197-9.

Zeb A, Rasool A, Nasreen S (2008). Cancer incidence in the districts of Dir (North West Frontier Province), Pakistan: a preliminary study. *J Chin Med Assoc*, **71**, 62-5.

Zendehdel K, Marzban M, Nahvijou A, Jafari N (2012). Six-fold difference in the stomach cancer mortality rate between northern and southern Iran. *Arch Iran Med*, **15**, 741-6.

Zhao J, He YT, Zheng RS, Zhang SW, Chen WQ (2012). Analysis of esophageal cancer time trends in China, 1989-2008. *Asian Pac J Cancer Prev*, **13**, 4613-7.

Zhu J, Chen JG, Zhang YH, Chen YS, Ding LL (2012). Trend on mortality changes for lung cancer during 1972-2011 in Qidong, Jiangsu. *Zhonghua Liu Xing Bing Xue Za Zhi*, **33**, 933-6 (in Chinese).