

Chapter II

11

LUNG ICD-O: C34

Nimit Martin, M.D.

Incidence

Lung cancer is the most common malignant disease worldwide, with 900 000 new cases each year in males and 330 000 in females. It is the major cause of death among cancers. The five-year survival rate for lung cancer cases is less than 15 %. The highest incidence of lung cancer in the world was found in USA, Louisiana, New Orleans; Black (ASR = 107) in males and in Canada, Northwest Territories (ASR = 72) in females (from CIV vol. VIII).

In Thailand over the period 1998-2000, lung cancer was the second common cancer in males after liver cancer while it was the fourth common cancer after cervical cancer, breast cancer and liver cancer in females.

Over this period, the total number of lung cancer was 7 911 cases, 4 974 cases in males and 2 344 cases in females, accounting for 15.7% of all cancers in males and 7.0% in females. This cancer is more common in male than fe-

male with the ratio of 2:1.

The average age-standardized incidence rates were 20.6 per 100 000 among males and 9.3 per 100 000 among females. Lung cancer is rare before the age of 40 years. It is common at the age over 60 and declines after the age of 70 in both males and females.

The estimated number of new cancer cases and estimated age-standardized incidence rates were 2 682 new cases (ASR = 25.0) and 2 607 new cases (ASR = 12.1) among males and females respectively in 1990 (Vatanasapt *et al.*, 1993), 5 500 cases (ASR = 26.5) among males and 2 608 cases (ASR = 11.1) among females in 1993 (Deerasamee *et al.*, 1999), 5916 cases (ASR = 25.9) and 2 964 cases (ASR = 10.0) among males and females respectively in 1996 (Sriplung *et al.*, 2003) and 4 947 cases (ASR = 20.6) and 2 344 cases (ASR = 9.3) among males and females respectively in this study. The estimated age-standardized incidence rates of lung cancer in

Figure 2.11.1 Lung cancer in different regions, 1998-2000

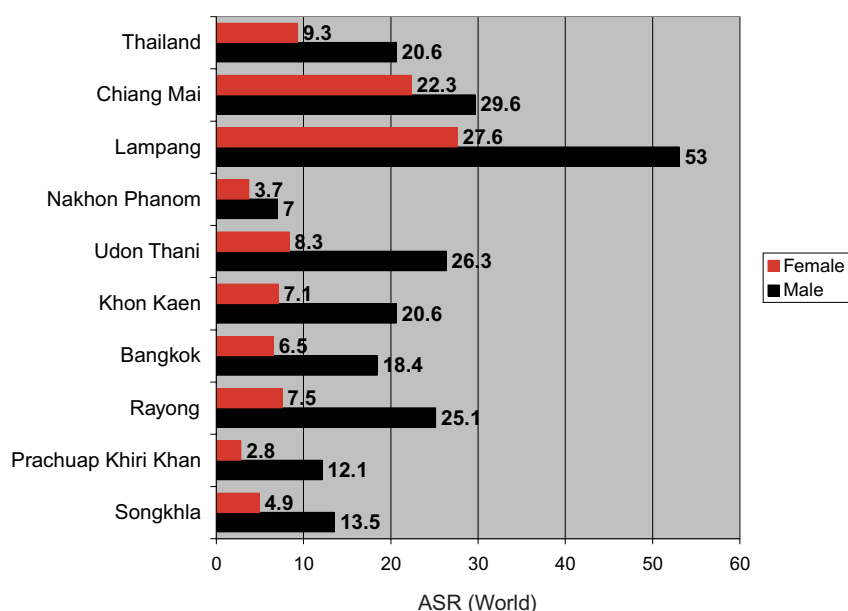
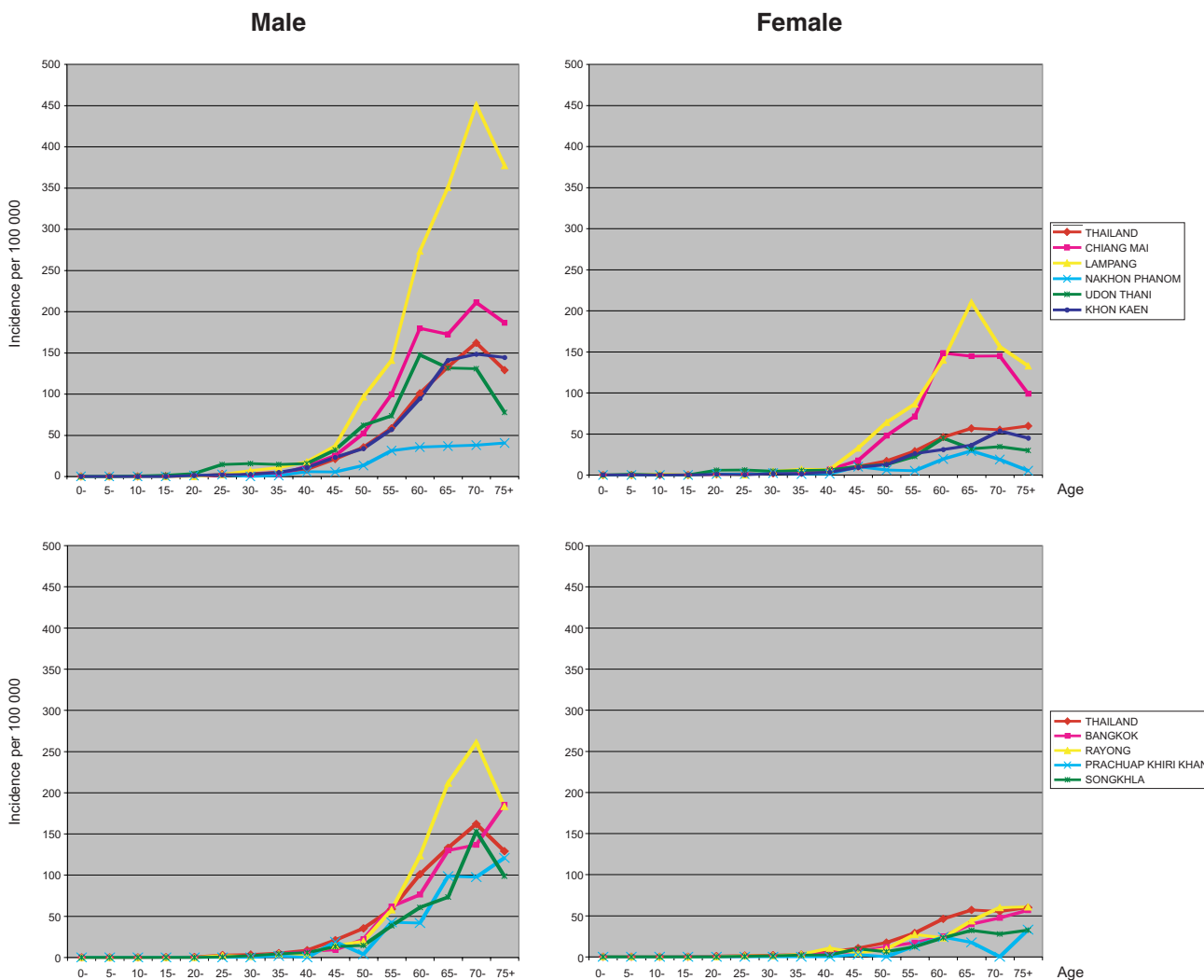


Figure 2.11.2 Age-specific incidence rates of lung cancer, 1998-2000



Thailand substantial declined in both males and females.

The highest incidence rate was found in Lampang in both males (ASR = 53.0) and females (ASR = 27.6) followed by Chiang Mai (ASR = 29.6 among males and 22.3 among females), Udon Thani (ASR = 26.3 among males and 8.3 among females), Rayong (ASR = 25.1 among males and 6.2 among females) and Khon Kaen (ASR = 20.6 among males and 7.1 among females). Nakhon Phanom had the lowest incidence rates of lung can-

cer in males (ASR = 7.0) while Prachuap Khiri Khan had the lowest incidence rates of lung cancer in females (ASR = 2.8).

In this study, the highest incidence rate of lung cancer was found in Northern region (ASR = 30.7) followed by Central region (ASR = 18.9), Northeastern region (ASR = 14.2) while the Southern part had the lowest incidence rate (ASR = 11.8) among males. For females, the highest rate was found in the North (ASR = 17.1) followed by Central (ASR = 8.1), Northeast and

the South (ASR = 4.1). The North had the highest incidence rates in both males (ASR = 30.7) and females (ASR = 17.1) while the South had the lowest incidence rates in both sexes (ASR = 11.8 and 4.1 among males and females respectively).

The data quality of lung was rather fair, the level of histological verification varied from 15% to 79% among males and 8.8% to 84.9% among females. The level of death certificate only varification from 0.0% to 43% in males and

0.0% to 53% in females.

Adenocarcinoma was the most common type of lung cancer especially in females followed by squamous cell carcinoma and small cell lung carcinoma. For males adenocarcinoma were the most common type of lung cancer except in Lampang and Songkhla, squamous cell carcinomas were found more common than adenocarcinoma.

Risk factors

Tobacco smoking and exposure to radon gas are considered among risks for lung cancer. Cancer of the lung, though rarely curable, has symptoms that could be well managed to enhance quality of life. There is no screening test in population level for this disease. Screening has not been effective in reducing mortality. Mass screening with chest x-ray and sputum cytology is not recommended to control lung cancer. Investment in early diagnosis and treatment is unlikely to reduce the high mortality. Most of the patients with lung cancer already have locally advanced disease or distant metastasis at diagnosis.

Early stage tumours are treated by surgical resection. If the patients refuse or who are deemed medically unfit for surgery, being treated with radiotherapy. More advanced stage disease may be treated with combination of surgery and radiotherapy. The mainstay of treatment for small cell lung cancer is chemotherapy, with concomitant radiotherapy. Prognosis of lung cancer was very poor.

Primary prevention should be very useful by getting rid of carcinogen, especially smoking and air pollution.

Figure 2.11.3 Histological types of lung cancer, 1998-2000

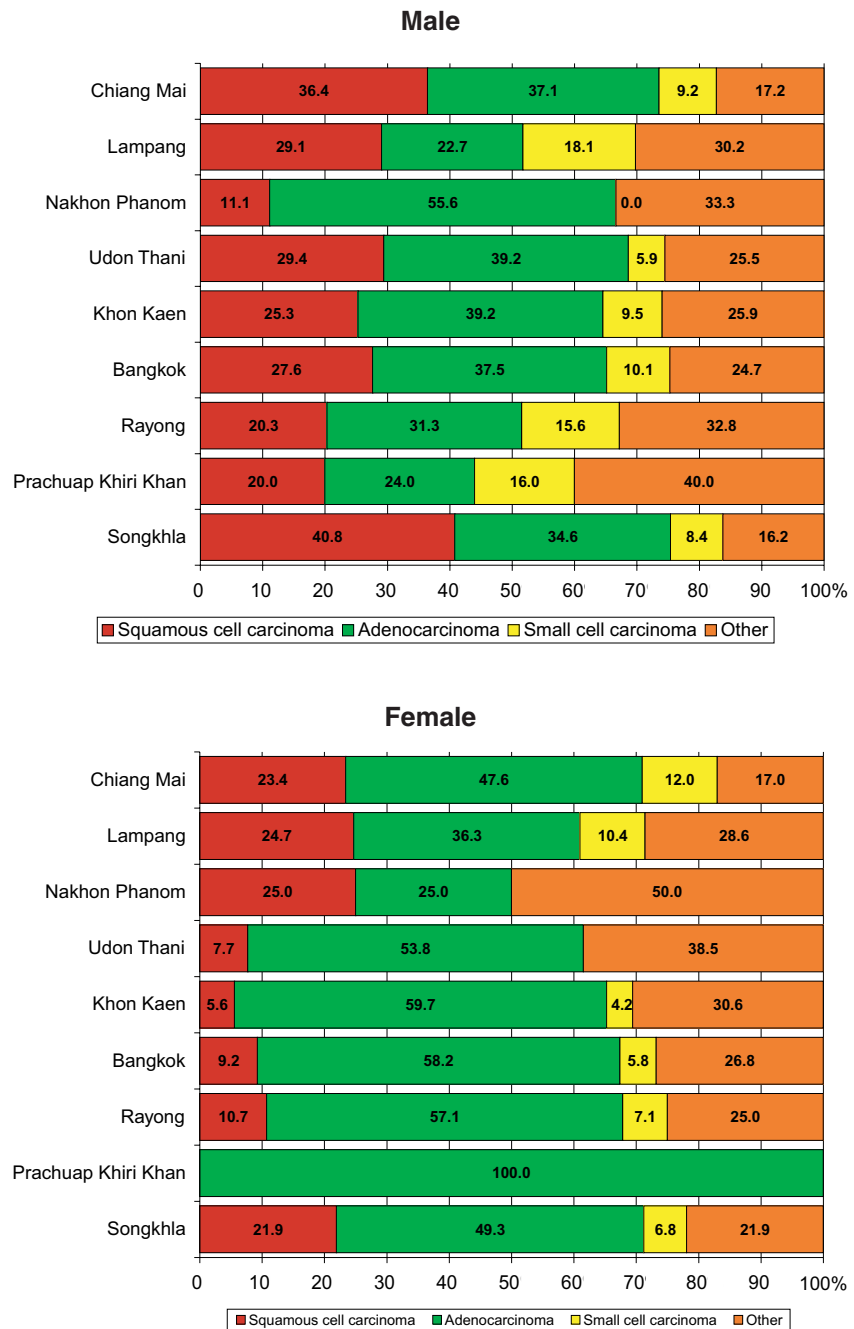


Figure 2.11.4 Stage distribution of lung cancer, 1998-2000

