

Chapter II

21

LEUKEMIA
ICD-10 C91-C95

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Leukemia comprises acute lymphoblastic, acute non-lymphoblastic, chronic myeloid, chronic lymphoid leukemias and myelodysplastic syndrome. The incidence of leukemia in Thailand is relatively low by world standard. It is the eighth most common cancer in males and tenth in females. The estimated ASR for Thailand is 3.9 per 100 000 in males and 3.2 per 100 000 in females. (Figure 2.21.1) The current incidence rates are lower than those reported rates of Thailand during 1995-1997 (ASR 4.1, male; 3.5, female) (Jootar, 2003). The highest incidence is found in Udon Thani (ASR 5.4) and lowest in Nakhon Phanom (ASR 0.3). Considering by region, the incidence does not much differ. Interestingly, in Rayong the incidence is much different in male and female (ASR 5 vs 2.4) and in Songkhla, the incidence is higher in female (ASR 4.5 vs 3.6). (Figure 2.21.1) The incidence rises after the age of 40 (Figure 2.21.2). Generally, almost all of the diag-

noses were morphologically confirmed except the diagnoses of cases from Udon Thani (MV 80.6% and DCO 18.3%). Myeloid leukemia is more common than lymphoid leukemia (ratio 1.6:1, male; 1.4:1, female). In different registries, acute myeloid leukemia accounts for 17-43% in male and 18-56% in female while acute lymphoid leukemia accounts for 8-67% in male and 7-38% in female. Lymphoid leukemia is significantly more common in males than in females (ratio 1.6:1). Chronic lymphoid leukemia is rare. Chronic myeloid leukemia is mainly a disease of young adults and middle age, with few cases before 20. It accounts for 10-18% of all leukemias among the registries. (Figure 2.21.3)

Risk factors

Radiation exposure and chemical agents (benzenes) have been identified as causes of leukemia. In Thailand, there is no study of these effects. In the future, the incidence

Figure 2.21.1 Leukemia in different regions, 1998-2000

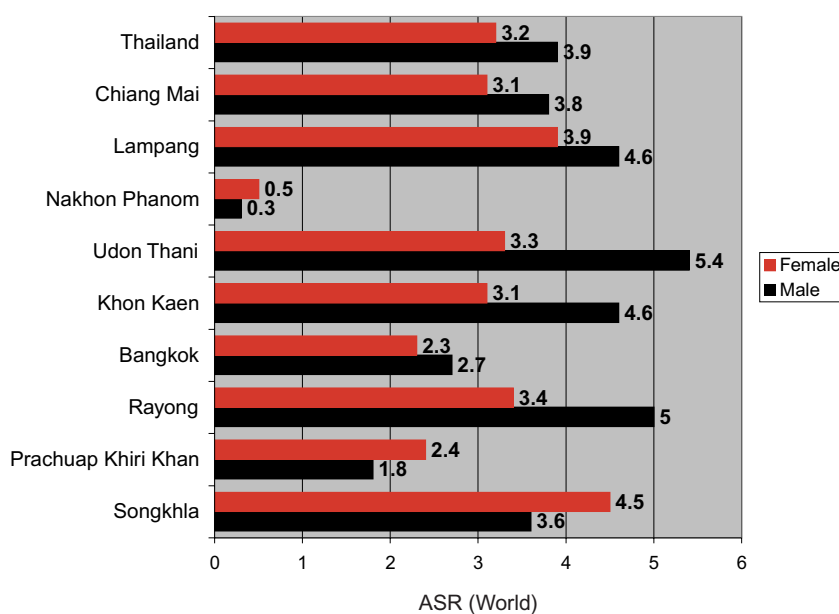
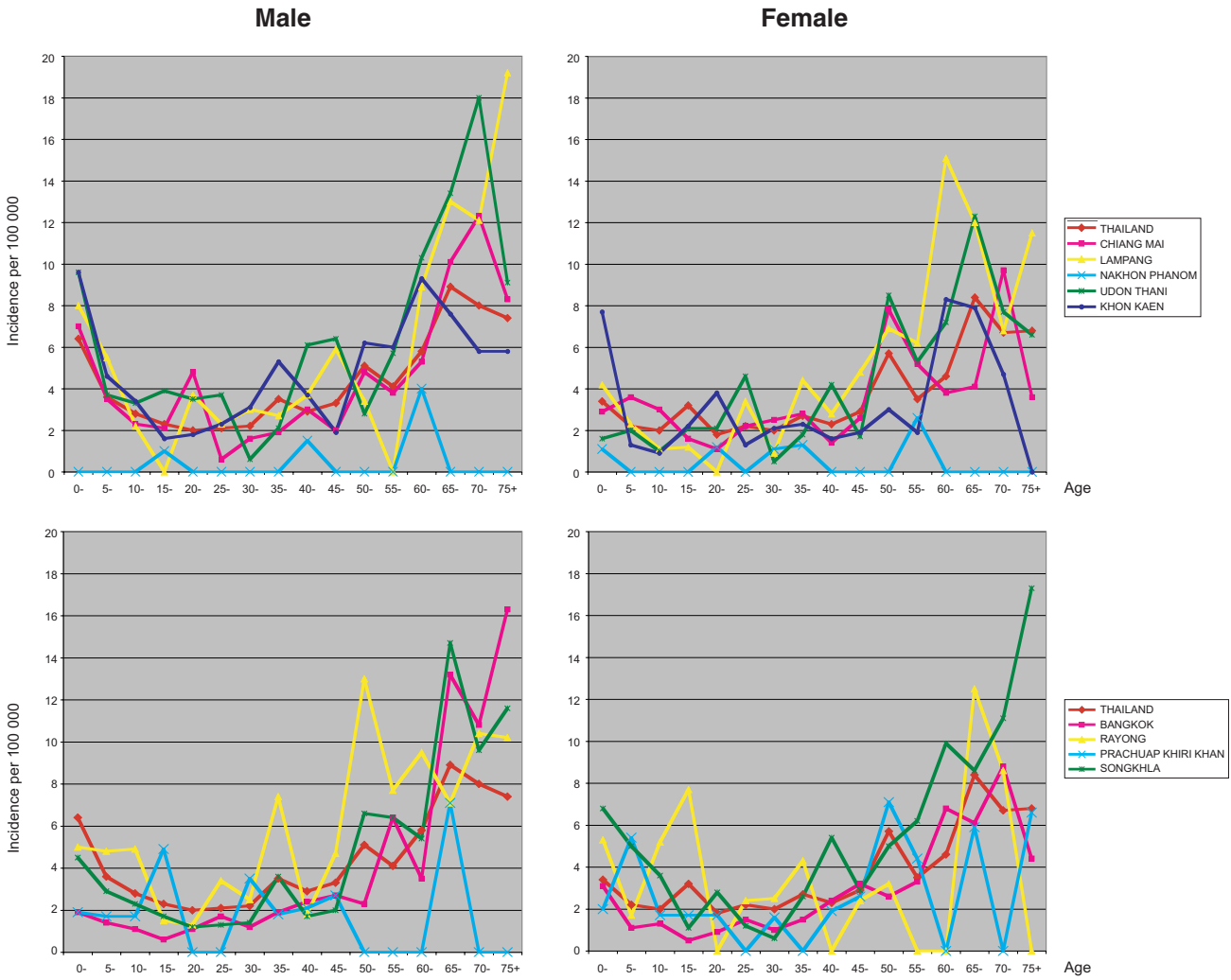


Figure 2.21.2 Age-specific incidence rates of leukemia, 1999 (1998-2000)



of leukemia should be investigated in some specific or industrialized areas with polluted environment.

Figure 2.21.3 Histological types of leukemia, 1998-2000

