
Data Sources  National and local surveys, routine national and WHO statistics. Data on populations, mortality, patient groups and numbers, treatments and risk factor trends were critically appraised. Data were integrated and analysed using a previously validated CHD policy model.

Results  CHD mortality rates fell by 20% in Palestine and by 44% in Turkey, but increased by 17% in Tunisia and by 60% in Syria. Smoking prevalences were high in men, ranging from 24% to 59%. Male smoking persisted in Tunisia and Syria but decreased 10% in Palestine and 15% in Turkey. Population blood pressure levels decreased in Palestine and Turkey, but increased slightly in Tunisia and Syria. Conversely, cholesterol levels decreased in Palestine and Tunisia but increased in Turkey and Syria. BMI rose by 1–2 kg/m² and diabetes increased by 20%–50% in all four countries, especially among women. Modelling demonstrated that part of the mortality decreases were attributable to treatments, particularly for secondary prevention and heart failure. However, the contributions from statins, surgery, and angioplasty were consistently small.

Conclusions  Recent trends in CHD mortality were complex. They mainly reflect changes in major cardiovascular risk factors, modestly alleviated by treatments.

Explanations for increasing rates of oesophageal adenocarcinoma (OAC) remain unclear, though the concurrent increase in the prevalence of obesity may be a partial explanation. Although obesity has emerged as a leading candidate risk factor for OAC, few studies have examined body fat distribution. Therefore, we evaluated the relation between overall (BMI) and abdominal (waist-to-hip ratio (WHR)) obesity with OAC (n=253) and gastric cardia adenocarcinoma (n=191) in 218 850 men and women of the NIH-AARP Diet and Health Study cohort. We used Cox proportional hazards regression to estimate HR and 95% CIs, with control for many potential confounders. Comparing the highest to the referent category, we observed that BMI and WHR were both positively associated with OAC [HR (95% CI); 2.11 (1.08 to 4.09) and 1.76 (1.22 to 2.54), respectively]. A positive association was also found for BMI and gastric cardia adenocarcinoma [HR (95% CI); 3.67 (2.00 to 6.71)], but not for WHR [HR (95% CI); 1.34 (0.91 to 1.97)]. Mutually adjusting models for BMI and WHR attenuated, but did not eliminate the associations for both BMI and WHR with OAC [highest vs referent category; HR (95% CI); 1.77 (0.90 to 3.49) and 1.44 (0.98 to 2.10), respectively]. Mutual adjustment had only minor influence on the BMI risk estimates for gastric cardiac adenocarcinoma [HR (95% CI); 3.28 (1.76 to 6.11)], whereas WHR estimates were attenuated [HR (95% CI); 1.06 (0.71 to 1.58)]. Overall obesity and abdominal obesity were both related to a higher risk of OAC, but only overall obesity showed an association with gastric cardia adenocarcinoma.

Introduction  Smoking is a very important risk factor for health including that of pregnant women. It can cause low birth weight babies and various maternal and child health problems. Though the number of municipalities which provide smoking prevention programs has been increasing, not all of them do so. This study aims to clarify the effectiveness of smoking prevention programs for maternal and child health.

Methods  We collected two data sets in 2005. One is from a self-administered questionnaire survey for all of the mothers who participated in health checkups of babies in a certain period in randomly selected municipalities from all of Japan. Another is from a mail survey of various maternal and child health programs including smoking prevention programs for all of the municipalities in Japan. The two data sets were merged by municipality. Multilevel logistic regression analyses were applied to calculate the ORs concerning the data structure at the municipality and individual level.

Results  The response rate of the survey for mothers was 77.1%. Data on 17 482 mothers in 115 municipalities can be merged. Among them, 73 municipalities were providing smoking prevention program for teenagers and 42 were not. Smoking rates of mothers during pregnancy were 7.6% in the municipalities with the program and 9.5% in those without it. OR (95% CI) of smoking in the municipalities with the program was 0.753 (0.584 to 0.919), p=0.007.

Conclusion  Smoking prevention programs for teenagers seem to have a certain effectiveness in reducing the smoking rate of mothers during pregnancy.