REVIEW OF DEATH CERTIFICATE DIAGNOSIS OF CORONARY HEART DISEASE AND HEART FAILURE IN JAPAN

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Vital statistics for coronary heart disease (CHD) were dramatically influenced by the tenth revision of the International Classification of Diseases (ICD–10) in 1995. To better understand the accuracy of death certificate diagnosis of CHD and heart failure, validation studies in Japan were reviewed. Positive predictive values and sensitivity, calculated as validation measures, varied widely between studies, differing with regard to autopsy rates, amount of information on medical records, and period investigated. However, heart failure, which has been frequently assigned on death certificates in Japan, was validated in some studies. Half of these were evaluated to be sudden deaths, including coronary deaths. Because autopsy-based studies on sudden deaths indicated that 30–50% of these were accounted for by CHD deaths, deaths assigned to heart failure should be taken into consideration in order to determine the actual number of CHD deaths in Japan. Focusing on changes in vital statistics after the 1995 ICD revision, the Oita Cardiac Death Surveys (OCDS) allowed interpretation of its effects on CHD and heart failure. Much of the increase in CHD deaths on vital statistics reflects more false positive cases, particularly for out-of-hospital deaths. Considering the Japanese features of vital statistics for CHD, further epidemiological validation studies are needed in order to confirm the accuracy of CHD death certificate diagnoses and to monitor actual CHD trends in Japan.

Key words：coronary disease; vital statistics; sudden death; validation; review

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