Prevalence, incidence, and mortality of PD
A door-to-door survey in Ilan County, Taiwan
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Article abstract— Background: The reported prevalence and incidence rates of PD were significantly lower in China than those in Western countries. People in China and Taiwan have a similar ethnic background. Objective: To investigate the prevalence, incidence, and mortality rate of PD in Taiwan. Methods: The authors conducted a population-based survey using a two-stage door-to-door approach for patients aged 40 years or older in Ilan, Taiwan. Patients were diagnosed with PD by having at least two of the four cardinal signs of parkinsonism and exclusion of secondary parkinsonism. To identify new cases of PD after the survey, patients with negative results of parkinsonism in the first stage were matched to the information on clinical diagnosis of PD from the Bureau of National Health Insurance toward the end of December 31, 1997. All cases of PD were linked to the Taiwan mortality registration to ascertain causes of deaths until December 31, 1999. Results: The participation rate was 88.1% among the 11,411 contacted individuals. Thirty-seven cases of PD were identified. The age-adjusted prevalence rate of PD for all age groups was 130.1 per 100,000 population after being adjusted to the 1970 US census, assuming no cases of PD would be found among those younger than 40 years of age. Of 9972 non-PD subjects in the first screen, 15 new cases of PD were ascertained. The age-adjusted incidence rate was 10.4 per 100,000 population for all age groups. The case fatality rate of PD after a 7-year follow-up was 40.4% (21 deaths in 52 patients with PD). The relative risk of death for PD cases versus non-PD cases was 3.38 (95% CI: 2.05–4.34). The 5-year cumulative survival rate in PD cases (78.85%) was statistically lower than that in non-PD cases (92.84%). Conclusion: The prevalence and incidence rates of PD in Taiwan were much higher than those reported in China, but closer to those in Western countries. These results suggest that environmental factors may be more important than racial factors in the pathogenesis of PD.

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