Association between marital status and functional outcome in middle-aged ischemic stroke patients

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Background : Recently in Japan, the diversification of family has led to an increase in the number of unmarried people, reaching 35% for male and 30% for female at the age of 50. As this generation has reached middle-age, stroke patients whose spouse is not the proxy have become more commonly seen in clinical settings, and this number is expected to increase in the future. However, studies show that spouse is a factor for healthier lifestyle and contribute to early detection at stroke onset. The objective of this study was to examine the association between marital status and functional outcome at discharge in middle-aged ischemic stroke patients.

Methods : The study subjects were first-time ischemic stroke patients aged 40-64 years who were hospitalized in Ota Memorial Hospital between 2017 and 2023. The main exposure was marital status, and the primary outcome was stroke disability at discharge with modified Rankin scale of 2-6. Logistic regression analysis was used to estimate odds ratio (OR) adjusted for age, gender, and stroke severity and 95% confidence intervals (CI). Stratified analysis by gender was also conducted.

Results : Of 703 patients (median age 57, male 71%), 432 (61%) were married and 271 (39%) were unmarried. Unmarried patients had higher prevalence of diabetes before onset (39% vs 27%, p=0.0007) and had less proportion of arriving within 3.5 hours from onset (18% vs 26%, p=0.022) than married patients. As compared with being married, the adjusted OR with 95% CI of being unmarried for stroke disability at discharge was 1.83 (1.26-2.65). Stratified analysis by gender showed that adjusted OR and 95% CI was 1.93 (1.24-3.01) for male and 1.71 (0.85-3.46) for female.

Conclusion : This study showed that for middle-aged ischemic stroke patients, unmarried patients had significantly increased risk of worsening functional outcome at discharge than married patients.

Chronological changes in health-related QoL before and after the COVID-19 pandemic in Japan

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Purpose : The purpose of this study is to describe the chronological changes in health-related quality of life (HRQoL) in Japan before, during, and after the COVID-19 pandemic.

Methods : This study utilized the results of nationwide questionnaire surveys conducted in FY 2017, 2020, and 2024. The survey targeted adults aged 20–85 years and employed a stratified two-stage random sampling method. The EQ-5D-3L questionnaire, one of the HRQoL measures, was used, and responses were obtained via self-administered method. The number of valid responses and response rates for each FY were 10,204 (34.0%) in FY2017, 8,810 (44.1%) in FY2020, and 4,428 (29.5%) in FY2024. In the analysis by prefecture, indirect standardization was performed to account for differences in the distribution of gender and age, and empirical Bayesian methods were applied to correct for the reliability of estimates in small samples.

Results : The crude average HRQoL nationwide was 0.9133 (FY2017), 0.8977 (FY2020), and 0.8834 (FY2024). When comparing the crude average HRQoL by sex and age group nationwide with that of FY2017, a large decline was observed in FY2020 and further in FY2024, particularly among men in their 40s to 60s and women in their 30s to 50s. While it was difficult to evaluate trends by prefecture of HRQoL using crude averages and indirect standardization, empirical Bayesian methods enabled us to show that HRQoL had declined over time except three prefectures.

Conclusion : While the decline in QoL among the elderly during pandemic has been concerned, insufficient consideration has been given to the working-age population. This study confirmed a decline in QoL among middle-aged and older adults, as well as a longitudinal decline in QoL across prefectures. Empirical Bayesian methods are an effective way to compensate for instability in small samples such as an analysis at local level and are considered a useful approach for future epidemiological research.

Single and Multiple Suicide Attempts and Associated Factors Among Adolescents in   Low- and Lower-Middle Income Countries

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Objectives : To examine the risk and protective factors associated with single and multiple suicide attempts among school-going adolescents in low- and lower-middle-income countries (LLMICs).

Study design : Cross-sectional study

Methods: We used the Global School-based Health Survey data in twelve LLMICs. The analysis included the most recent data since 2010, with 25,671 students without missing information. We classified adolescents as having never attempted suicide (never), attempted once (single suicide attempt), or attempted more than twice (multiple suicide attempts). A multinomial logistic regression analysis was conducted to identify factors differentially associated with single and multiple suicide attempts across a range of risk and protective factors.

Results : Among 25,671 adolescents in LLMICs, 7.3% reported a suicide attempt and 4.5% reported more than two attempts. After accounting for other variables, almost all variables, except for sex, were associated with both single and multiple suicide attempts compared to those who never attempted suicide, with stronger associations observed for multiple attempts. Particularly, compared with those who attempted suicide once, adolescents with multiple attempts were more likely to be worrying (odds ratio [OR]: 1.44, 95% confidence interval [CI]: 1.17, 1.78), have no close friends (OR: 1.38, 95% CI: 1.08, 1.17), use alcohol (OR: 1.30, 95% CI: 1.07, 1.59), use drugs (OR: 1.55, 95% CI: 1.21, 1.99), and smoke (OR: 1.37, 95% CI: 1.10, 1.71).

Conclusion : This highlights the need to consider worrying, behavioral risk factors, and social relationships of adolescents when developing suicide prevention strategies, particularly repeated suicide, among adolescents in LLMICs.

Cultural Epidemiology: Expanding health to include cultural well-being and determinants

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Introduction : Since the Industrial Revolution, social epidemiology has documented how social stratification and inequality shape health. By focusing on socioeconomic determinants, it has revealed material and structural pathways of disparities. Yet as societies adopt multi-capital frameworks and debate "new capitalism," its explanatory centrality may wane if confined to material and social inequalities. A neglected dimension is culture. We argue that culture, understood as strategies by which humans adapt and survive, represents a fundamental determinant of health.

Methods : Using theory adaptation methods, we synthesized perspectives from cultural capital (Bourdieu), ecosocial theory, and arts and health research. Building on our previous work (Habu & Kondo, 2025), we identified theoretical gaps and considered how cultural well-being could be integrated into epidemiological models.

Results : Our synthesis revealed three points. First, cultural capital remains rarely operationalized in epidemiology. Second, cultural well-being should be recognized as a constitutive dimension of health, alongside physical, mental, and social well-being. Third, many studies could be reinterpreted through a cultural lens. For example, research on physical activity rarely distinguishes traditional practices from modern fitness routines; nutritional epidemiology often overlooks the cultural meaning of diets. Such omissions risk underestimating cultural determinants.

Conclusions : Addressing these points is essential to establish "cultural epidemiology" as a systematic field. It is less a cultural turn within social epidemiology than a potential independent branch. Its development requires conceptual clarity, measurement of cultural capital and well-being, and reanalysis of evidence through cultural frameworks. By advancing cultural epidemiology, health can be reframed to encompass cultural well-being as a fundamental dimension, providing a universal foundation for understanding health.