Photographic Survey of Rural Cambodian Infants: Dietary Diversity at 7–22 Months

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Background and Objectives : Cambodia has among the highest rates of stunting and wasting in the WHO Western Pacific Region. Japan has supported maternal and child health through Official Development Assistance (ODA) and NGOs. This study assessed dietary diversity among infants aged 7–22 months in rural Cambodia using the Minimum Dietary Diversity (MDD) indicator, and examined the feasibility of combining caregiver dietary records with photographic documentation.

Methods : From a baseline survey in Preah Vihear Province, 12 infants aged 7–22 months identified as stunted or wasted were enrolled with caregiver consent. In February 2024, caregivers recorded three days of intake using Khmer-translated forms and photographed meals before/after eating and feeding scenes. Local staff received online training, and household visits by staff and a Japanese dietitian were conducted to validate intake and collect data. MDD was assessed from one day of intake.

Results : Data were obtained from 38 children (95.0% response), including 12 infants (2 <11 months, 10 ≥12 months; 7 female). Seven infants (58.3%) consumed ≥5 of 8 MDD food groups. All consumed breast milk and grains/roots/tubers. Only two infants (28.6%) consumed meat/fish, eggs, vitamin A–rich produce, and other fruits/vegetables. Portion sizes were small, notably in younger infants, and some foods were reported but not counted due to <10 g intake.

Conclusions : Infants <15 months consumed very small portions, and foods <10 g were excluded from MDD scoring. Breastfeeding frequency was not assessed, but collaboration with local staff and household visits were effective for verifying intake. Photos showed infants actively eating, and processed foods outside MDD groups were noted, indicating need for post-weaning care. These findings support the feasibility of dietary records with photos in rural Cambodia and suggest that expanding sample size and areas will strengthen evidence for nutrition strategies.

Depression following spousal bereavement before and during the COVID-19 pandemic

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During the COVID-19 pandemic, social restrictions prevented end-of-life care and individual mourning processes. This study investigated the change in depression among individuals who experienced spousal bereavement, comparing before and during the pandemic. Our data were obtained from the 2013 to 2022 waves of the Japan Gerontological Evaluation Study. Participants married at baseline (2013, 2016, or 2019) were followed for three years to assess their marital status (married or widowed) at follow-up (2016, 2019, or 2022), respectively. We employed a difference-in-differences (DID) approach to compare depression between bereaved and non-bereaved groups across three distinct cohorts (the 2016, 2019, and 2022 follow-up cohorts). We assessed the depression using the 15-item short form of the Geriatric Depression Scale (GDS-15), and categorized participants with a score of 5 or higher as having depression. We used propensity score matching to balance covariates between the two groups, including gender, age, chronic diseases, history of depression, the GDS-15 score, and lifestyle/social factors at baseline. The number of participants in the bereaved and non-bereaved groups across the 2016, 2019, and 2022 follow-up cohorts was as follows: 2,005 and 36,627 participants, 2,124 and 38,249 participants, and 2,157 and 39,258 participants. After the matching, the baseline characteristics between the two groups for each cohort were well balanced. The parallel trend assumption across the 2016 and the 2019 follow-up cohorts was assured. In the 2019 follow-up cohort, depression was 29.8% in the bereaved group and 27.1% in the non-bereaved group; in the 2022 follow-up cohort, 27.9% in the bereaved group and 27.5% in the non-bereaved group, respectively. The estimated coefficient of the DID analysis suggested a downward trend of -2.1% (95% confidence interval: -5.3% to 1.2%). The DID analysis showed a downward trend, though not statistically significant.

Quality assessment of long-term care in ASEAN regions - Subanalysis among stakeholders

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Objective : This study aims to assess the quality of long-term care (LTC) for older adults in ASEAN region.

Method : Between October 2024 and March 2025, a questionnaire survey was conducted targeting 29 individuals, including policymakers, practitioners and geriatric medicine specialists, from Thailand, Cambodia, the Philippines, Malaysia and other countries. The survey assessed 32 indicators across seven areas of care quality (e.g. LTC resource and access, QOL for users and caregivers, Integration of services (including primary health care), Dementia care, ICT utilization, Rehabilitation, Prevention and coordination), which were developed through field research and a literature review. Items were rated on a five-point scale, with consensus criteria set as a median of 4 or above, an interquartile range (IQR) of 1 or below, and a consensus rate (the proportion of 4 or 5 ratings) of 70% or above. We conducted sub-analysis to clarify differences among responded stakeholders (e.g. policymakers, care providers, geriatricians, NGOs.) using chi-square tests.

Results : The Cronbach's alpha coefficient for the entire questionnaire was 0.94. Comparing policymakers with other stakeholders on rating, significant differences were found for: Quality management in the private sector ($p = 0.043$), Involvement of informal carers (including family) ($p = 0.02$), Involvement of geriatric specialists ($p = 0.013$); Respite care for carers ($p = 0.008$); Mutual support within the community ($p = 0.007$). Additionally, equity in gender ($p = 0.013$); Equity for persons with disabilities ($p = 0.018$); Equity in geographical access ($p = 0.001$), 'Respect for carers' quality of life' ($p = 0.025$) and 'Necessity of social prescriptions' ($p = 0.043$).

Discussion and Conclusion : Comparisons between stakeholders directly involved in care for older and policymakers revealed differing assessments regarding non-family caregiving, access to care services, fairness, and the quality of life for carers.

SEED: A Self-Exciting Event-Dependent Exposure Design for Self-Controlled Study

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Self-controlled designs are widely used to control time-independent confounding by leveraging within-person comparisons. Standard methods for self-controlled designs, such as the self-controlled case series, rely on Poisson processes that assume history-independent event and exposure dynamics. In many real-world applications, however, past occurrences influence future risks and behaviors in history-dependent ways that are hisotry-dependent, and follow up may be truncated by a terminal event such as death. These features limit the apllicability of conventional self-controlled analyses. We propose a self-controlled framework that accommodates history-dependent outcomes, event-dependent exposures, and terminal events within a unified multi-process representation. The key idea is to preserve the advantage of self-controlled methods, namely implicit control of time-independent confounding through conditioning that removes subject-specific baseline intensity, while allowing remaining intensities to depend on the observed history. To capture clustering and feedback, we represent outcome and exposure dynamics using self-exciting point processes and introduce a terminal event process that ends observation when death occurs. The framework nests classical self-controlled case series as a special case and is designed for settings with recurrent adverse events, rescue medication that responds to recent outcomes, and termination of observation by death, thereby extending self-controlled methodology beyond Poisson processes while retaining robustness to time independent confounding.

Impact of COVID-19 on Out-of-Hospital Cardiac Arrest Incidence and Outcomes in South Korea

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Backgrounds : Out-of-hospital cardiac arrest (OHCA), the sudden cessation of cardiac activity outside hospitals, and it is a major global health issue, with an incidence of approximately 55 per 100,000 annually. In South Korea, OHCA incidence and burden have risen over the past decade, straining emergency services. During COVID-19, delayed responses, reduced bystander CPR, and strained healthcare worsened outcomes. This study aims to assess COVID-19's impact on OHCA incidence, case fatality rate (CFR), and mortality rates using interrupted time series (ITS) analysis.

Methods : Nationwide OHCA data (2013–2023) were aggregated weekly. ITS models included pre-COVID trends, level change at onset, and slope change post-pandemic. CFR was analyzed with linear regression; age-standardized incidence rates (ASIR) and mortality rates (ASMR) with negative binomial regression including seasonal terms and population offsets.

Results : From 2013–2023, 280,615 OHCA cases occurred. Weekly means ($\pm$SD): ASIR 0.62$\pm$0.08, ASMR 0.48$\pm$0.07, CFR 78.5$\pm$2.6. Pre-COVID, ASIR rose steadily (β=3.01$\times$10^{-4}, p<0.001), spiked at onset (β=0.117, p<0.001), then declined (β=$-$3.27$\times$10^{-4}, p<0.001). ASMR showed similar trends (rise β=1.66$\times$10^{-4}, spike β=0.185, decline β=$-$4.68$\times$10^{-4}, all p<0.001). CFR declined overall (β=$-$0.0061, p<0.001), briefly rose at onset (β=4.97, p<0.001), then continued downward (β=$-$0.0141, p<0.001).

Discussion and Conclusion : Rising ASIR and ASMR before COVID-19 likely reflect aging and cardiovascular risk. Pandemic-related spikes suggest delayed care, reduced CPR, and direct viral effects. CFR's brief rise followed by decline indicates emergency care adaptation. Post-pandemic declines suggest recovery, but long-term COVID-19 effects may sustain risk. Strengthening emergency systems, CPR training, preventive care, and continuous surveillance is essential to reduce OHCA burden.