Disrespect and Abuse During Childbirth in Tanzania: Evidence from the 2022 Demographic Health Survey

Marco Abdon Marco (1)
Ganchimeg Togoobaatar (2)

1 : Master of Public Health Program, Graduate School of Comprehensive Human Science, University of Tsukuba
2 : Institute of Medicine, University of Tsukuba

Background : Disrespect and abuse (D&A) during childbirth undermine the fundamental rights of women and newborns, compromise the quality of maternity care, affect maternal and newborn health outcomes, and discourage women from seeking healthcare. This study examines the prevalence and factors associated with D&A in Tanzania using the 2022 Demographic and Health Survey data.

Methods : We analyzed 4,891 women (aged 15-49) with facility-based childbirths within three years before the survey. D&A was defined as experiencing at least one of the eight forms: physical abuse, verbal abuse, inadequate care, non-consented care, denial of care, detention, abandonment of care, and facility constraints. Multi-level logistic regression identified individual and community-level factors (adjusted odds ratios [aOR] with 95% CIs).

Results : Overall, 41.6% (95% CI: 39.42-43.90) experienced at least one form of D&A. At the individual level, D&A was higher among women with ≥4 antenatal visits (aOR: 1.19, 1.01-1.42) and birth companions (aOR: 1.20, 1.01-1.14), but lower in private/religious facilities (aOR: 0.61, 0.47-0.80) and births attended by doctors (aOR: 0.58, 0.46-0.73). Community-level risks included low education (aOR: 1.29, 1.03-1.61). Geographically, D&A was lower in western (aOR:0.55), southern (aOR: 0.36), and southern highlands (aOR: 0.41), but higher in eastern (aOR: 1.70) and Zanzibar (aOR: 0.21) versus the central zone.

Conclusion : D&A during childbirth remains a public health issue in Tanzania, driven by both individual-level factors and community factors. Addressing this problem requires integrating respectful maternity care into routine monitoring, strengthening provider training, and improving facility conditions to ensure women receive dignified and respectful care.

Keywords : Disrespect and Abuse, Childbirth, Respectful Maternity Care, Tanzania

Risk Factors for COVID-19 Hospitalization Among Patients with Dementia: A Nationwide Cohort Study

Chih-Ching Liu (1)
Chien-Hui Liu (2)

1 : Department of Health Care Management, National Taipei University of Nursing and Health Sciences, Taipei City
2 : National Yang Ming Chiao Tung University, Institute of Biomedical Informatics, Taipei, Taiwan

Background : Patients with dementia have been reported to face an elevated risk of severe COVID-19, yet the underlying reasons remain unclear. This study investigated factors associated with COVID-19–related hospitalization in this population.

Methods : We conducted a retrospective cohort study of 336,152 patients aged ≥40 years with an initial dementia diagnosis (2009–2020) from Taiwan's National Health Insurance Research Database (NHIRD), followed through December 31, 2022. COVID-19 hospitalization was defined as the first admission within one month after confirmed infection, identified via the Taiwan Centers for Disease Control's COVID-19 Confirmation Registry (2021-2022) and the NHIRD. Cox proportional hazards models assessed associations between sociodemographic characteristics, vaccination status, and comorbidities with hospitalization risk. These comorbidities included the Charlson Comorbidity Index, specific mental health comorbidities (e.g., bipolar disorder, major depressive disorder, anxiety, schizophrenia, and substance use and alcohol-related disorders), and chronic diseases (e.g., diabetes, hypertension, stroke, chronic kidney disease, chronic obstructive pulmonary disease [COPD], Parkinson's disease [PD], heart disease, and cancer).

Results : The incidence density of COVID-19–related hospitalization among patients with dementia was 23.19 per 1,000 person-years. An increased risk was observed in males, older individuals, those with lower income, residents of highly urbanized areas, unvaccinated individuals, those with elevated Charlson Comorbidity Index scores, and patients with specific comorbidities, including bipolar disorder, diabetes, hypertension, stroke, chronic kidney disease, COPD, and PD.

Conclusion : Dementia patients face substantial risk for COVID-19 hospitalization, shaped by demographic, clinical, and vaccination factors. Tailored public health strategies are essential to mitigate adverse outcomes in this vulnerable group.

Variations in the monthly artificial fetal death rate in Japan during the COVID-19 pandemic

Mihoko Takahashi (1)

1 : Department of Social Medicine, Faculty of Medicine, Saitama Medical University

Background : Impact of the COVID-19 pandemic on artificial fetal death rate (AFDR) in Japan was unclear. This study aimed to analyze and clarify that AFDR distribution.

Methods : Monthly AFDRmod was calculated as follows:

Monthly AFDRmod = (monthly artificial fetal deaths ≥12 weeks ÷ monthly pregnancies ≥12 weeks) × 1000

Monthly pregnancies (≥12 weeks) Jan 2006-Dec 2022 were estimated by retroactively adding the stillbirths and the live births from the Japanese national vital statistics. The expected value (EV) and 95% range (reference ranges: RR) of normal AFDRmod in each month were calculated using seasonal indices and annual averages of AFDRmod. The point estimates and range of excess AFD were estimated by comparing those values and the observed AFDRmod. Additionally, trends of annual AFDR (per 1000 total births) were investigated by legitimacy status: in or out of wedlock.

Results : Abnormal increases in AFDRmod occurred in Jan and Apr 2020 and Mar 2021; abnormal decreases occurred in Aug-Nov 2020 and Jan-Feb 2022. Apr 2020 had the largest increase in AFD: point estimate (range): 94 (39 to 146). Jan 2022 had the largest decrease in AFD: -113 (-200 to -36). Lower annual AFDR and total live births were observed out of wedlock in 2020-2021.

Discussion : Abnormal monthly variations were not always at the peak of the COVID-19 waves, but within the waves. WHO declared Public Health Emergency of International Concern on 31 Jan 2020. Abortion increases in Apr 2020 were from pregnancies beginning around Dec 2019-Jan 2020 (without COVID-19). Abortion decreases in Aug-Nov 2020/Jan-Feb 2022 were from pregnancies beginning around Apr-Aug 2020 (for about 5 months from the start of the 1st state of emergency)/Sep-Oct 2021 (when the area of the 3rd state of emergency was enlarged).

Conclusion : Strengthened preventive behaviors in the COVID-19 waves, like avoiding close-contact settings, might have reduced pregnancies that would have been aborted, especially out of wedlock.

Disproportionate Mortality Impacts of Acute Air Pollution Exposure Across Generations

Lei Yuan (1)
Aurelio Tobias (2,3), Yasushi Honda (2,4), Chris Fook Sheng Ng (1,2), Hironori Nishikawa (5), Masahiro Hashizume (1,2)
on behalf of Japan Air Pollution and Health Research Network (JAPHER)

1 : Department of Global Health Policy, School of International Health, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan
2 : School of Tropical Medicine and Global Health, Nagasaki University, Nagasaki, Japan
3 : Institute of Environmental Assessment and Water Research (IDAEA), Spanish Council for Scientific Research (CSIC), Barcelona, Spain
4 : Institute of Health and Sport Sciences, University of Tsukuba, Tsukuba, Ibaraki, Japan
5 : Global Environment Department, Japan International Cooperation Agency, Tokyo, Japan

Background : The Global Burden of Disease Study 2021 identified particulate matter air pollution (AP) as a leading contributor to global disease burden. Although Japan has reduced levels of SPM, SO_2, and NO_2, related mortality risks have not shown concurrent declines. This study aimed to assess intergenerational susceptibility to short-term AP-related mortality using an adapted Age-Period-Cohort model.

Methods : Daily mortality and AP data (SO_2, NO_2, SPM, Ox) from 1977–2015 were collected for ten populous Japanese cities. Data were stratified by 5-year age and birth cohorts, focusing on middle-aged (40–64) and elder (65–89) adults. Associations between AP and mortality were estimated using a space-time-stratified case-crossover design with conditional quasi-Poisson regression, adjusting for temperature and holidays. Results are presented as relative risks (RRs) per 10 $\mu g/m^3$ increase in AP concentration with 95% confidence intervals (CIs).

Results : City-level average concentrations declined for SPM (42.86 to 31.99 $\mu g/m^3$), NO_2 (29.19 to 25.48 $\mu g/m^3$), and SO_2 (9.37 to 4.54 $\mu g/m^3$), while Ox (29.81 to 35.52 $\mu g/m^3$) and mean temperature (15.48 to 16.04 ° C) increased across the observational period for generations. Among middle-aged adults, SPM showed significant associations with all-cause mortality in the most recent generation (RR for birth $cohort_{1951–1955}$ = 1.0097, 95% CI: 1.0047–1.0147). Similar but generally weaker patterns were observed for NO_2. Among elder adults, acute effects of SPM on all-cause mortality increased across generations, consistently significant in bi-pollutant models. SO_2-related mortality risks also increased across generations, notably in models adjusted for Ox. No significant effect modification by city was found.

Conclusions : This study reveals intergenerational differences in susceptibility to short-term AP exposure among both middle-aged and elderly adults across their respective generations.

Comparison of coping strategies against stress by cluster analysis

Etsuko Ozaki (1,2)
Kazuya Setho (2), Daisuke Matsui (2), Risa Kubo (2), Kumiko Ohara (2), Rika Shimada (1), Nagato Kuriyama (2,3)
Naoyuki Takashima (2)

1 : Department of Nursing Faculty of Health and Medical Sciences, Kyoto University of Advanced Science
2 : Department of Epidemiology for Community Health and Medicine, Kyoto Prefectural University of Medicine
3 : Department of Social Health Medicine, Shizuoka Graduate University of Public Health

Excessive phycological stress is one of important social issue in contemporary Japan. We conducted a comparative study on coping strategies under the stressful society. Subjects in our current study were the 3,801 of general population who completed questionnaire among in the first follow-up study of the J-MICC Kyoto Study. Using hierarchical cluster analysis based on the presence or absence of five items for coping with stress, we classified them into the following five categories: C1 (no particular action), C2 (working hard), C3 (working with encouragement), C4 (encouraged but not working), and C5 (expressing thoughts and not acting). The five types were compared using the chi-square test and one-way ANOVA. The number (N)and mean age of each group was as follow: C1 (N=1,416, 58.7), C2 (N=1,503, 57.9), C3 (N=620, 54.3), C4 (N=160, 53.0), and C5 (N=103, 58.3). Many of young subjects were classified into groups with encouragement (C3, C4). Subjects experiencing a lot of stress were observed in C4 significantly ($p<0.01$). More than half of male subjects (N=697) belonged to C2 (51.3% of male subjects). On the physical functions, the score expressing the severity of locomotive syndrome was significantly high in C2 ($p<0.01$). Grip strength was significantly weak among subjects in C4 ($p<0.01$). No significant differences were observed among the five groups in terms of sedentary time and physical activity. Regarding the evaluations of sleep quality, although less subjects felt well enough in C4 (26.9%), the Pittsburgh sleep quality index was not significantly different among the five groups. Those who try hard to overcome their stress problems seem to be the male subjects and the subjects with normal physical functions. Besides, younger subjects tend to require encouragement for their stress management. In the future, associations between the coping strategies to stress and the dietary behaviors will be analyzed.