## PRECARIOUS EMPLOYMENT AND HEALTH OF WORKERS

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**Introduction** Part-time, fixed-term, and temporary workers are collectively called 'precarious workers', and currently in Japan, more than one third of the workers are with precarious employment. Although a growing number of studies have suggested that precarious work is associated with deleterious impacts on workers' health in Europe and the United States, few studies to date have examined this issue in Japan. To address the lack of evidence, our research team has studied the health effects of precarious work and its mechanisms. In this poster, we present our previous published work and unpublished findings on social security and safety issues.

**Methods** First, we reviewed our published paper. Next, regarding our unpublished work, we analyzed data from two national surveys: 'Comprehensive Factual Investigation on the Diversification of Employment 2003' and 'Report on Workers Compensation for the Occupational Accident and Diseases with Cardio/Cerebral and Mental Diseases 2010'. Then, we compared the coverage rates of social

**Results** (1) Health status Our repeated cross-sectional study [1] showed that the health status of workers in Japan deteriorated from 2004 to 2007. Considering the effects of prolonged economic stagnation on the employment structure, this deterioration of workers' health was speculated to be due to the increase in precarious work. Next, our another cross-sectional study [2] showed that a higher effortreward imbalance was associated with existence of subjective symptoms and obesity in fixed-term workers while this tendency was not found in permanent workers (fig 1). Finally, the high rates of physical complaints were reported by precarious workers who had lost their jobs and accommodation after the economic crisis in 2008 in the non-comparative study [3]. (2) Treatment-seeking behavior The 1-year follow-up study [4] showed that on-site clinic utilization for mental concerns were higher among fixed-term than among permanent workers (fig 2). (3) Health-related behavior Fixed-term researchers were reported to drink alcohol more frequently and eat breakfast less regularly compared with the tenure-track researchers (fig 3)[5]. (4) Social security The coverage rates of social security was lower among fixed-term than among permanent workers (fig 4). (5) Safety issue Even after stroke and cardio-cerebral event related to overwork, precarious workers were less likely to be compensated compared to permanent worker (fig 5).







Figure 2. Odds ratio of associations with clinic utilization among male fixed-term workers compared to permanent workers \*Adjusted for age, smoking, alcohol, job stress, and depressive complaints.

Data source: reference 4

insurance insurance pension

Health

Welfare

Figure 4. Coverage Rates of Social Security

Data source: Comprehensive Factual Investigation on the Diversification of Employment 2003

**Conclusion** Our previous studies indicate the adverse health effects of precarious work, which may be associated with worse health related behaviors, frequent treatment-seeking, and low coverage rates of social security. However, as with all cross-sectional studies, causal relationships cannot be inferred from the data. Further studies are needed to clarify the mechanism underlying the association between precarious work and adverse health.

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