

JSPS BILATERAL JOINT SEMINAR



Bilateral Joint Seminar Program

Sustainability of Health, Environment and Development

Date: 10, 11 MARCH 2022

Venue: Online - Webex

Event Program

*We aim to establish international
research networks of health
economics.*



*Presentation Language
English : EN
Chinese : CN

DAY 1 THURSDAY, 10 MARCH 2022

OPENING REMARKS

10:00 – 10:10 (JST)
09:00 – 09:10 (CST)

Motohiro Sato Director of HIAS Health
Professor, Hitotsubashi University

KEYNOTE SESSION : Health, Inequality, and Sustainable Growth

10:10 – 12:20 (JST)
09:10 – 11:20 (CST)

Keynote 1: Exploring the health-relevant poverty line in Japan (EN)

10:10 – 10:40 (JST)
09:10 – 09:40 (CST)

Takashi Oshio Professor, Hitotsubashi University

Keynote 2: The Growth–Poverty–Inequality Triangle in China (EN)

10:40 – 11:10 (JST)
09:40 – 10:10 (CST)

Guanghua Wan Professor/Director, Fudan University

Keynote 3: Modernization of Medical Insurance Supervision and Governance System and Governance Capacity (CN)	11:10 – 11:40 (JST) 10:10 – 10:40 (CST)
Qunhong Wu Professor, Harbin Medical University	
Keynote 4: Theories and Cases of Integrated Medical and Health Service System (CN)	11:40– 12:10 (JST) 10:40 – 11:10 (CST)
Jun Wang Professor, Renmin University	
Discussion and Group Photo	12:10– 12:20 (JST) 11:10 – 11:20 (CST)
Lunch Break	
SESSION 1 : Development and Social Welfare	14:00 – 16:10 (JST) 13:00 –15:10 (CST)
Ryota Nakamura Session Chair Professor, Hitotsubashi University	
Paper 1: The Income Inequality-CO2 Emissions Nexus: Transmission Mechanisms (EN)	14:00 - 14:40 (JST) 13:00 – 13:40 (CST)
Jinxian Wang Lecturer, Central South University	
Paper 2: Prosumers' Investment Decisions and Social Welfare under Different Pricing Schemes (EN)	14:40 – 15:20 (JST) 13:40 – 14:20 (CST)
Kazuya Ito PhD Candidate, National Graduate Institute for Policy Studies	
Paper 3: Promoting Better Integration of Healthcare in China: Policy Evolution and Theoretical Framework (EN)	15:20 – 16:00 (JST) 14:20 – 15:00 (CST)
Xueyao Wang Research Associate, Renmin University	
Wrap-up	16:00 – 16:10 (JST) 15:00 – 15:10 (CST)

DAY 2 FRIDAY, 11 MARCH 2022

SESSION 2 : Health Policy

09:50 – 12:30 (JST)
08:50– 11:20 (CST)

Ayako Honda Session Chair
Professor, Hitotsubashi University

Paper 4: Reducing Inequality While Improving Health: The Long-Run Impacts from the Onset of Universal Health Insurance in Japan (EN)

09:50 – 10:30 (JST)
08:50 – 09:30 (CST)

Hongming Wang Research Associate (Specially Appointed), Hitotsubashi University

Paper 5: The impact of contracting formal care benefits on informal care provision and caregiver well-being: evidence from Japan (EN)

10:30 – 11:10 (JST)
09:30 – 10:00 (CST)

Rong Fu Assistant Professor, Waseda University

Paper 6: Increasing physical activity and reducing sedentary behavior at the workplace: an umbrella review (EN)

11:10 – 11:50 (JST)
10:10 – 10:50 (CST)

Thomas Rouyard Research Associate (Specially Appointed), Hitotsubashi University

Paper 7: Research on perfecting financial transfer payment policy in the field of medical and health care (EN)

11:50 – 12:30 (JST)
10:50 – 11:30 (CST)

Shengjie Zhang Research Associate, Renmin University

Lunch Break

SESSION 3 : Sustainability of Health Care System

14:00 – 16:00 (JST)
13:00 – 15:00 (CST)

Makoto Tanaka Session Chair
Professor, National Graduate Institute for Policy Studies

Paper 8: Association Between Social Integration, Social Exclusion and Vaccination Behavior Among Migrants in China (EN)

14:00 – 14:40 (JST)
13:00 – 13:40 (CST)

Yang Bai Research Associate, Renmin University

Paper 9: Global, regional, and national progress in financial risk protection towards universal health coverage, 2000-2030 (EN)

14:40 – 15:20 (JST)
13:40 – 14:20 (CST)

Mizanur Rahman Assistant Professor (Specially Appointed), Hitotsubashi University

Paper 10: Analysis on main features and regulatory strategies of the new health service industry (EN)

15:20 – 16:00 (JST)
14:20 – 15:00 (CST)

Fukang Zhang PhD Candidate, Renmin University

CLOSING REMARKS

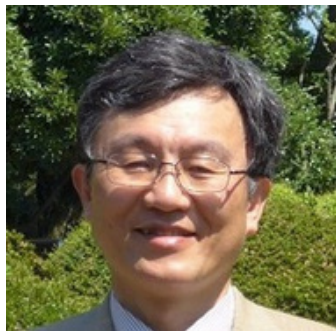
16:00 – 16:10 (JST)
15:00 – 15:10 (CST)

Ying Yao Assistant Professor (Specially Appointed), Hitotsubashi University

BIOGRAPHIES and ABSTRACTS

Takashi Oshio

Professor,
Institute of Economic Research, Hitotsubashi University



After working for eleven years as a researcher and economist in the Japanese government and at J.P. Morgan, Takashi Oshio started his academic career from 1994 and has been serving at Hitotsubashi University since 2009 as a professor at the Institute of Economic Research. He obtained a Ph. D. in international public policy from Osaka University in 2002. His research has largely focused on social security, income distribution, education policy, and other issues related to public finance. His interests are in public health, social epidemiology, and occupational health. He has published several journal articles in these fields and has published more than ten books in Japanese.

Keynote 1: Exploring the health-relevant poverty line in Japan

Abstract

Income poverty is known to be associated with poor health outcomes. However, the poverty line, which is used to calculate the poverty rate, is arbitrarily set without specific reference to health. This study explored the health-relevant poverty line to understand poverty in terms of population health. Using repeated cross-sectional data from approximately 663,000 individuals obtained from the nationwide population surveys conducted in Japan from 1986 to 2016, we calculated a health-relevant poverty line. We showed that the health-relevant poverty line should be drawn, respectively, at 72–86% and 67–69% of median income. These levels were somewhat higher than the conventional 50% or 60%, suggesting that the conventionally defined poverty line may underestimate poverty in terms of population health.

Guanghua Wan

Professor/Director,
Institute of World Economy, Fudan University



Guanghua Wan is Director of the Institute of World Economy at Fudan University (IWEFU). Before joining the IWEFU, he was Principal Economist at the Asian Development Bank (ADB), Project Director at UNU-WIDER, and taught in several universities in Australia and China. Trained in development economics and econometrics, he has an outstanding publication record of over 150 professional papers and reports, over 60 in international and refereed economic journals, and a dozen books, including two by Oxford University Press. In addition, he was the Guest editor of 11 special issues of leading journals in development economics or Asian economies and a guest speaker in more than 30 countries. He has also directed the productions of multiple ADB flagship reports, which attracted the attention of the global development community and various national governments, including the State Department of the USA.

Keynote 2: The Growth–Poverty– Inequality Triangle in China

Abstract

Since the 1990s, China's absolute poverty rate has fallen dramatically, while wealth inequality has increased. To investigate the causes of this paradox, we use poverty decomposition and panel-VAR modelling to assess and compare the roles of income growth and income inequality in affecting absolute and relative poverty rates. The results show that miracle reduction in absolute poverty is completely attributable to fast growth, while income inequality played a small aggravating role. Moreover, relative poverty is largely driven by fast growth and, to a moderate extent, by income inequality. It is suggested that in the short- and medium-run, China shall continue to target absolute poverty with a higher poverty line rather than shifting policy direction to focus on relative poverty.

Qunhong Wu

Professor,
Harbin Medical University



Qunhong Wu is the dean of School of health management, Harbin Medical University. She distinguished professor of the "Changjiang Scholar" of the Ministry of education, winner of the 863 project of the Ministry of science and technology, key projects of the National Natural Science Foundation and key projects of the National Social Science Foundation. She is the leader of social medicine and health management in key disciplines in Heilongjiang Province, the leader of talent echelon in Heilongjiang Province, and the chief expert of provincial key high-end think tanks.

She is engaged in research on health emergency management, health policies and systems, population and health, and medical and health services. She has published more than 300 papers at home and abroad, including more than 80 SCI papers, 16 textbooks and monographs planned by the chief editor / deputy chief editor, and has won 9 national patents and computer software copyrights, the second prize of scientific and technological progress of the Ministry of education, the health management award of Science and technology award of the Chinese Medical Association, the first prize of provincial outstanding achievements in Social Sciences, 3 second prizes of provincial scientific and technological progress and 6 other awards. She presided over the national excellent teaching team, national excellent resource sharing courses, national bilingual demonstration courses, national open video courses and national first-class courses of virtual simulation experiment teaching, and won the second prize of national teaching achievement, national excellent scientific and technological workers, middle-aged and young experts with outstanding contributions from the Ministry of health, provincial famous teachers, provincial excellent middle-aged and young experts, provincial excellent teachers CMB distinguished professor and other honorary titles.

Keynote 3: Modernization of Medical Insurance Supervision and Governance System and Governance Capacity

Jun Wang

Professor,
School of Public Administration and policy, Renmin University
Director,
Health Policy Research and Evaluation Center, Renmin University



Jun Wang is a professor at the School of Public Administration and policy of Renmin University of China; director of the Health Policy Research and Evaluation Center of Renmin University of China. His honors include: "Four Groups" of National Cultural Masters, National "Ten Thousand Talents Program" Philosophy and Social Science Leaders, National "Ten Thousand Talents Program" Young Top Talents, Ministry of Education "New Century Talents", Beijing the young and middle-aged philosophy and social science theoretical talents are selected as the "Hundred Talents Project". In the international academic field, he served as a visiting professor at the University of Paris, France, a visiting professor at the University of Birmingham in the United Kingdom, a financial and economic expert of the World Health Organization (WHO), a research partner of the World Bank (WB), and a UNICEF (UNICEF) medical and health project evaluation Expert and senior research partner of the French Embassy in China in social and health affairs. He has long been engaged in research in the fields of health economics, health management, health policy, aging and social security. Currently, he leads the team to concentrate on medical and health policy formulation and mechanism design and other related academic and policy decision-making research work.

Keynote 4: Theories and Cases of Integrated Medical and Health Service System

Jinxian Wang

Lecturer,
Business School, Central South University



Jinxian Wang is a lecturer at the Business School of Central South University, China. She got Ph.D. in Economics in 2016 from Leiden University, the Netherlands. Her research interests include income distribution, environmental protection, and public health. She has published papers in *Ecological Economics*, *Energy Economics*, *China Economic Review*, *Cambridge Journal of Economics*, *Journal of the Asian Pacific Economy*, and *The Singapore Economic Review*.

Paper 1 : The Income Inequality-CO2 Emissions Nexus: Transmission Mechanisms

Abstract

Income distribution and environmental degradation represent two of the most important goals in the SDGs (Sustainable Development Goals). However, the linkage between income inequality and carbon emissions remains controversial. Relying on a large set of cross-country panel data (217 countries from 1960 to the latest), this paper contributes to the literature by using the instrumental variable approach to estimate the causal impact of income inequality on carbon emissions and exploring the underlying transmission mechanisms. Our modelling results indicate that there is a trade-off between income inequality and CO2 emissions. And the underlying mechanisms include (1) diminishing marginal propensity to emit (DMPE) coupled with the economic law of diminishing marginal propensity to consume (DMPC); (2) high income inequality induces increases in R&D expenditure, leading to reductions in CO2 emissions; (3) political freedom does not significantly affect the relationship between income inequality and CO2 emissions.

Kazuya Ito

PhD Candidate,
National Graduate Institute for Policy Studies (GRIPS)



Completion of PhD at the National Graduate Institute for Policy Studies (GRIPS) in 2022. Research Keywords: Investment decision-making in electricity market, Optimization, Renewable energy policy.

Paper 2: Prosumers' Investment Decisions and Social Welfare under Different Pricing Schemes

Abstract

The emergence of prosumers who own renewable distributed energy resources has brought about a paradigm shift in the electricity market. In this study, we formulate complementarity problems for all market participants (i.e., prosumers, consumers, producers, and independent system operators), focusing on prosumer investments in photovoltaics (PVs) with and without battery operations. Specifically, this study compares the equilibrium outcomes under two different pricing schemes, namely, net metering and net billing. First, we discuss that the capacity of PVs invested in by prosumers and the total social surplus increase as the capital costs of PVs decrease under both pricing schemes without considering battery operation. Next, we show that battery operation increases the capacity of prosumer investment in PV under both pricing schemes. Furthermore, the total social surplus under net billing is larger than that under net metering, with and without battery operation. This suggests that net billing could be a better regulatory scheme in the future, especially when the capital cost of PVs falls sufficiently.

Xueyao Wang

Doctoral candidate,
Renmin University



Xueyao Wang is an assistant researcher at the Health Policy Research and Evaluation Center of Renmin University of China and a doctoral student in the School of Public Administration and Policy of Renmin University of China. The main research field is health policy, and the research direction mainly includes the construction of an integrated medical and health service system and the integration of medical and prevention. In recent years, he has participated in nearly ten National Natural Science Foundation projects and commissioned research projects at the national, provincial and ministerial levels. The research reports and internal references that he participated in writing have been submitted to the National Health Commission, Beijing Municipal Health Commission and other relevant departments.

Paper 3: Promoting Better Integration of Healthcare in China: Policy Evolution and Theoretical Framework

Abstract

To build regional integrated healthcare systems(IHS) has been an important policy objectives of China's government. Since the new medical reform in 2009, China has issued many policies aiming at promoting the integration and collaboration between health organizations. The policy evolution of IHS in China mainly involve three stages, including the policy design, policy making and policy diffusion, and it's a process of interaction between central government and local governments. With the practices of HIS, different models of IHS emerged. The choice of integration model should take overall economic development level, health resource density, funds available for health system, transportation convenience and degree of government power transfer into account, or else the building of IHS can hardly promote the accessibility of health care.

Hongming Wang

Research Associate (Specially Appointed),
Hitotsubashi Institute for Advanced Study, Hitotsubashi University



Hongming Wang is a HIAS research associate (Specially Appointed) at Hitotsubashi Institute of Advanced Studies. He holds a BA in Finance and a BS in Math from Shanghai Jiao Tong University and a MA and Ph.D. in Economics from the University of Southern California. His research interests include health insurance systems and health policy reforms. His recent studies include the long-run impacts of universal health insurance in Japan and a modelling study of the optimal targeting of age and risk groups for COVID-19 vaccines in Japan.

Paper 4: Reducing Inequality While Improving Health: The Long-Run Impacts from the Onset of Universal Health Insurance in Japan

Abstract

Health insurance provides an important safety net to individuals in the distress of illness and financial hardships. Providing universal insurance is pursued by many governments to ensure the access to healthcare and to reduce the health and economic inequalities facing less advantaged populations. Exploiting the historic onset of universal insurance in Japan in 1956-1961, this paper examines the long-run impacts of universal insurance on population health and economic outcomes as well as the inequalities across gender. I find that exposure to universal insurance early in life led to lower mortality and chronic disease burdens in prime age. For women, universal insurance increased college enrollment and the probability of marrying a college-educated spouse. Within households, the homemaker's role shifted from women to men whereas employment and earnings increased for women relative to men. The results indicate that, in addition to improving population health in the long run, universal insurance could reduce the gender inequality in socio-economic status by increasing the education and earnings of women.

Rong Fu

Assistant Professor,
School of Commerce, Waseda University



Rong FU is an assistant Professor at School of Commerce of Waseda University. Her recent studies focus on the influence of demographic and socioeconomic factors on health statuses and various spillover effects of Japanese public health and long-term care policies. She received her PhD in Economics from Waseda University.

Paper 5 : The impact of contracting formal care benefits on informal care provision and caregiver well-being: evidence from Japan

Abstract

The rapid demographic transition has resulted in an ever-increasing demand for both formal and informal long-term care. This study investigated how changes in formal care availability affect informal caregiver well-being, which adds to the heated discussion on what constitutes an appropriate level of formal care that is both sustainable and adequate. We leveraged a reform of Japan's public long-term care insurance in 2006, which contracted formal care benefits among a group of recipients. By applying a difference-in-difference approach with fixed effects to a nationally representative sample of informal caregivers, we found that informal caregivers took on care duties when formal care benefits were reduced, which was detrimental to their well-being. The negative impact on well-being was reflected in decreased mobility and stability, as well as increased stress from financial strains and domestic work. We also found that the impact of contracting formal care was not always detrimental. Caregivers who are female, working, or low-income are particularly vulnerable to the negative effects of a lack of formal care, whereas male and non-working caregivers benefit from it in terms of reduced stress levels. The results suggest that policymakers should consider the diverse well-being impact of providing informal care for future reforms on long-term care systems.

Thomas Rouyard

Research Associate (Specially Appointed),
Hitotsubashi Institute for Advanced Study, Hitotsubashi University



Thomas Rouyard holds an M.Sc. in Economics from the Paris School of Economics, France, and a Ph.D. in Population Health from the University of Oxford, UK. His research interests lie in the area of global health, including theoretical and empirical work to inform the design of health-related interventions and policies. In particular, he is interested in using insights from behavioural economics to explore new approaches to improve the prevention and management of lifestyle-related diseases. Before joining HIAS in June 2019, Thomas was a Doctoral Transition Fellow supported by the European Institute for Innovation and Technology (EIT) at the University of Oxford.

Paper 6 : Increasing physical activity and reducing sedentary behavior at the workplace: an umbrella review

Abstract

Background:

Increasing rates of urbanization have been accompanied by higher levels of sedentary behaviour (SB) and reduced physical activity (PA) worldwide. While physical inactivity has long been identified as a major risk factor for morbidity and mortality, increased concerns about the detrimental associations between SB and health has led to the development of many interventions aimed at reducing SB and/or promoting PA. Due to the prominence of sedentary time spent at work, the workplace has been identified as a key setting to implement such interventions. While many systematic reviews (SR) have evaluated the effects of SB and PA workplace interventions, most of them have focused on specific interventions types or populations, making it difficult to draw a conclusive picture of the existing evidence.

Objective:

The objective of this umbrella review is to identify all SRs investigating the effects of PA and SB workplace interventions, and to evaluate and synthesize evidence based on intervention level.

Methods:

Systematic searches for relevant SRs published between January 2000 and June 2021 were conducted in six databases (Cochrane Systematic Review Database, CINAHL, EMBASE, MEDLINE, Scopus, and Web of Science). Backward citation tracking complemented the search. SRs with or without meta-analysis were included if they reported SB and/or PA outcomes in the occupational domain and if intervention level of primary studies could be identified. Two independent reviewers screened the identified articles by title, abstract, and full-texts for inclusion. Two independent reviewers also systematically extracted data and evaluated the risk of bias of included SRs using the AMSTAR2 tool. To analyze the data, we extracted the relevant primary studies identified in each SR and grouped them by intervention level (individual, social, environmental, organizational, multi-component), intervention type (e.g., self-monitoring intervention within individual level interventions), and outcome. For each PA and SB outcome of interest, we will synthesize evidence by performing meta-analyses of primary studies considered to be at low risk of bias, when possible. Finally, we will use the Grading of Recommendations Assessment, Development and Evaluation (GRADE) method to rate the quality of evidence for each outcome and at each intervention level.

Results:

The database search identified 6,444 items, of which 22 were included in the umbrella review. Additional search strategies identified 5 new studies, bringing the total of included SRs to 27. We identified 136 primary studies published on or after 2000, of which 31 were randomized trials reporting objective measures of behaviour change. These primary studies, covering a total of 54 interventions, will be included in the meta-analyses provided that all necessary quantitative information can be obtained (i.e., effect sizes, standard deviations, and sample size). We expect to complete the meta-analyses and the GRADE assessment process by the end of April 2022.

Conclusion:

Building an evidence base of effective strategies to reduce SB and/or promote PA at work is needed to help reduce the health risks faced by many sedentary employees. This umbrella review will provide guidance to policy makers and employers concerned with implementing such strategies in the workplace. This will also allow potential research gaps to be identified, so that the design of future studies can be better informed.

Registration: This study has been registered with the PROSPERO International Prospective Register of Systematic Reviews (registration number CRD42020171774).

Shengjie Zhang

Doctoral candidate,
Renmin University



Shengjie Zhang is an assistant researcher at the Health Policy Research and Evaluation Center of Renmin University of China and a doctoral student in the School of Public Administration and Policy of Renmin University of China, a double bachelor of science and law, and a master of medicine in the Peking University School of Medicine. The current research focuses on public health policy research, research on improving the service capacity of primary medical institutions, and population health education and health promotion.

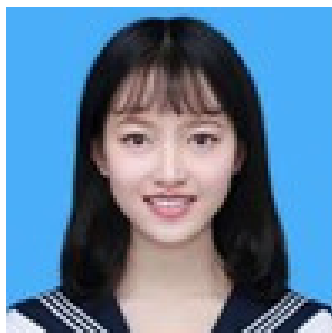
Paper 7 : Research on perfecting financial transfer payment policy in the field of medical and health care

Abstract

The purpose of transfer payment is to eliminate the horizontal imbalance between the amount of tax revenue between local governments and the expenditure of basic public service demand, and strive to ensure the consistency of social public service level in different regions. The empirical results of this paper show that although the distribution of transfer payment funds in the health field is directly proportional to the local financial gap, the existing five-tier distribution system is too rough and fails to take into account the ability of medical service providers, the health needs of people in each region and the cost of service provision. Since the capability of the provider and the server is not taken into account, the fund is only allocated from the perspective of finance, and its promoting effect on the equalization of public services needs to be improved.

Yang Bai

Doctoral candidate,
Health Policy Research and Evaluation Center, Renmin University



Yang Bai, an assistant researcher at the Health Policy Research and Evaluation Center of Renmin University of China and a doctoral student in the School of Public Administration and Policy of Renmin University of China. In recent years, she has participated in a number of health policy related projects, including the National Natural Science Foundation of China's New Coronary Pneumonia Governance Special Project "The Integration and Synergy Mechanism of the Public Health System, Medical Services and Medical Security System", and the World Bank Project "Promoting the Sustainable Development of National Basic Public Health Services—China's Experiences and Cases, etc. She also have gone to Hunan Province, Yunnan Province, Sichuan Province, Henan Province, Fujian Province and other places to conduct research. In recent years, she wrote and submitted seven research reports, internal reference and so on to World Bank, the National Health Commission, Health Commission and other relevant departments.

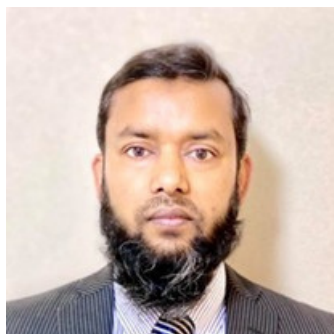
Paper 8 : Association Between Social Integration, Social Exclusion and Vaccination Behavior Among Migrants in China

Abstract

Cross-sectional studies about the association between social integration, social exclusion and vaccination behaviour among migrants in China are extremely lacking. In this study, we aimed to explore the association between the influenza vaccination behaviour and social integration as well as social exclusion in China based on a nationwide cross-sectional study. We included 12467 participants aged 15 years old or above from the 2017 Migrant Population Dynamic Monitoring Survey (MDMS). We used univariate analysis and logistic regression models to access the association between social integration, exclusion status and influenza vaccination rates. Results suggested that, although there was no negative association between social exclusion and influenza vaccination rate, the association between social integration and the vaccination rate was significantly positive. Significant association between influenza vaccination behaviour and education attainment, income status, health record and the awareness of basic public health services program was reported. Therefore, in order to reduce the incidence of influenza disease and increase the vaccination rate, policymakers and the public should promote social integration for migrants. Meanwhile, our finding also implies possible strategies to promote COVID-19 vaccination.

Mizanur Rahman

Assistant Professor (Specially Appointed),
Hitotsubashi Institute for Advanced Study, Hitotsubashi University



Mizanur Rahman is a specially appointed Assistant Professor in the Hitotsubashi Institute for Advanced Study. He received his Bachelor and Master's degree in Population Science in 2004 and 2005, respectively, from the University of Rajshahi, Bangladesh. He received a PhD in Global Health in 2013 from the department of Global Health Policy, the University of Tokyo, Japan. Before joining at the Hitotsubashi University in 2021, he worked as an Assistant Professor at the University of Tokyo and Associate Professor at the University of Rajshahi, Bangladesh. Apart from his experiences of working with academies, Mr. Rahman has regularly collaborated with national and international researchers from the University of Tokyo, World Health Organization, St Luke International University, and Global Public Health Research Foundation in Bangladesh. His specialized knowledge in topics of universal health coverage (UHC), SDG-related health indicators, health financing and policy evaluation, equity in health, maternal and child health, and systematic review and meta-analysis in global health, has resulted in several publications in prestigious peer-reviewed journals including *The Lancet*, *JAMA*, *Bulletin of the World Health Organization*, *Diabetes Care*, *American Journal of Clinical Nutrition*, *Obesity Reviews*, and *Ann New York Acad Sci*. Much of his current work relates to the development and implementation of innovative approaches to public health, maternal and child health, healthcare financial risk management, and policy development.

Paper 9: Global, regional, and national progress in financial risk protection towards universal health coverage, 2000-2030

Abstract

Background

Financial protection is a key dimension of universal health coverage (UHC) and conceptualized by two indicators: catastrophic health expenditure (CHE) and impoverishment. Evidence-based estimates must be at the heart of policy development for UHC, further research using updated data is essential to monitor, track, and compare country progress up to 2030. We estimate global, regional, and country-level CHE and impoverishment during 2000-2030.

Methods

We aggregated 626 data points from 140 countries for estimates, and constructed scenario-based projections based on 5% GDP spending on health and per capita health expenditure (PCHE) of \$86 with a Bayesian hierarchical model.

Results

Most countries fail to achieve financial protection targets by 2030, with the global incidence of CHE predicted to persist around 7%. CHE is predicted to increase in most of Asia (Southern: 8.1% in 2000 to 13.4% in 2030; Central: 3.6% to 23.2%; Eastern: 8.3% to 14.4%; and Western: 7.3% to 20.2%), Northern Africa (12.4% to 27.2%), Eastern (7.1% to 14.9%) and Northern Europe (6.6% to 13.2%). In contrast, a decrease is predicted in Oceania, Latin America and the Caribbean, and Northern America. By 2030, incidence of impoverishment is predicted to be 0% worldwide, however the highest impoverishment ($\geq 5\%$) is observed in Cyprus, Niger, Tanzania, Chad, Bangladesh, Central African Republic, Nepal, Georgia, Nigeria, Tajikistan, South Sudan, Afghanistan and Guinea. Widening urban-rural disparities draw attention to efforts required to reduce inequality in financial protection. The scenario-based analysis indicated that CHE and impoverishment is expected to decrease in 41 and 42 countries for GDP increase and 43 and 62 for PCHE increase respectively compared to current spending on health.

Conclusion

To accelerate progress towards reducing financial protection, governments should carefully assess the country context to determine how health can be prioritised through government spending to reduce out-of-pocket payments.

Fukang Zhang

PhD candidate,
Health Policy Research and Evaluation Center, Renmin University

PhD candidate in Social Medicine and Health Management, School of Public Administration, Renmin University of China as well as the assistant researcher of the Center for Health Policy Research and Evaluation. He is engaged in the research of health policy and health management. He went to Sichuan province, Yunnan province, Fujian province, Guangdong province and other places for research. The research reports and internal reference he once wrote was submitted to National Health Commission, Beijing Municipal Health Commission and other relevant departments.

Paper 10: Analysis on main features and regulatory strategies of the new health service industry

Abstract

Analysis on main features and regulatory strategies of the new health service industry

Abstract: Compared with the traditional health service industry, the new health service industry tends to be more comprehensive and integrated , and the various factors are in a dynamic change process, which is characterized by larger scale, intensive, agglomerative and special methods. Compared with the traditional medical and health industry supervision, its regulatory content has greatly changed in the new system. Under the new market relationship, the supply and the demand sides have put forward higher requirements for supervision, and the emerging business forms are networked, fragmented and flexible. The service boundary has broken through the traditional supervision mode ,and it simultaneously faces the challenge of defining the supervision responsibilities, complexity, the current tax system management, the current supervision mechanism hindrances, and the balance between the new health service industry and health quality access regulation which are undergoing an exponential trend of development. Therefore, this paper puts forwards some suggestion such as the establishment of a new health service industry supervision mechanism with information supervision as the core, the realization of the transition from direct control to bottom-line supervision, the establishment of multi-sectoral organic coordination, and a coordinated supervision mechanism which involves the participation of all social subjects.

Motohiro Sato

Professor, Graduate school of Economics and School of International and Public Policy, Hitotsubashi University
Director, Research Center for Health Policy and Economics, Hitotsubashi Institute for Advanced Study (HIAS Health)



Motohiro SATO has been serving as a professor at the Graduate School of Economics, Hitotsubashi University since 2009, after serving as an assistant professor from 1999 and an associate professor from 2002 at Hitotsubashi University. He is also a professor of the School of International and Public Policy, Hitotsubashi University. He graduated from Hitotsubashi University in 1992 with a BA and an MA in Economics and obtained a Ph. D. in Economics from Queen's University, Canada, in 1998. His areas of expertise are public finance, especially local public finance. In the field of health economics, he is studying dispensations of healthcare insurance systems and its theory and has been making policy recommendations based on this research. His publications include books that have been awarded prizes, such as *Economics of Local Grant Tax*, Yuhikaku Publishing Co., Ltd., 2004 (in Japanese) awarded the 47th Nikkei Prize for Excellent Books in Economic Science and *Reformation of Local Tax*, Nikkei Inc., 2011 (in Japanese) awarded the 52nd Mainichi Economist Prize in 2011.

Ryota Nakamura

Professor,
Hitotsubashi Institute for Advanced Study, Hitotsubashi University



Ryota Nakamura is a professor based in the Hitotsubashi Institute for Advanced Study. He is an applied microeconomist specialising in health. He holds a BA and an MA in Economics from Kyoto University and a PhD in Economics from the University of York. Prior to joining Hitotsubashi University in 2016, he held positions at the University of East Anglia and the University of York. His research interests include empirical and theoretical investigations of health-related behavior as well as healthcare systems to inform national and international public health policies, using a wide range of research methods including micro-econometric analysis of observational data, economic experiment, modelling, and evidence synthesis.

Ayako Honda

Professor,
Hitotsubashi Institute for Advanced Study, Hitotsubashi University



Ayako Honda has extensive experience in research on health systems in Africa and Asia. She previously worked in the Health Economics Unit at the University of Cape Town, South Africa and has collaborated with African and Asian researchers to address a range of health systems issues in LMIC settings. She holds a PhD in health economics from the London School of Hygiene and Tropical Medicine (University of London). Ayako is interested in understanding how different groups of actors respond to the implementation of policy options, particularly health care financing policy that aims to progress toward universal health coverage. She is also interested in the use of discrete choice experiment (DCE) in LMIC settings as a method to understand the needs, preferences and values of people working in health systems in order to reflect people's opinions in policy.

Makoto Tanaka

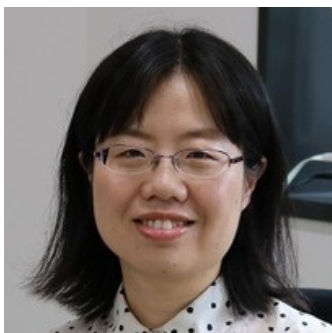
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National Graduate Institute for Policy Studies



Makoto Tanaka is a professor at the National Graduate Institute for Policy Studies (GRIPS) in Japan. He focuses on the interdisciplinary fields of economic analysis and operations research. His interests include energy, environment, and industry.

Ying Yao

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Ying Yao joined Hitotsubashi Institute for Advanced Study (HIAS) in 2017 after working as a research associate at the Asian Development Bank Institute (ADBI). She holds a PhD in public economics from the National Graduate Research Institute for Policy Studies (GRIPS) in Japan. Her research interests are health economics and industrial organization, with a focus on the pharmaceutical industry. She has worked on several policy-oriented projects on income inequality and health, health behavior, trade finance, digitalization and inclusion. Currently, her research focuses on pharmaceutical procurement and listings and smoking behavior.



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