Advisory Committee of the WHO Centre for Health Development 25th Meeting Report

11-12 November 2021



Universal Health Coverage as populations age



Health Emergencies and Disaster Risk Management



Local Engagement: Contributing to our community





Contents

Executive Summary	3
1. Opening	
2. Strategic achievements and challenges	
3. Research Achievements	
3.1. UHC – Metrics and Measurement	8
3.2. UHC – Service Delivery and Health Financing	g
3.3 Health Emergencies and Disaster Risk Management (HEDRM)	10
4. Local Engagement	
5. Recommendations	13
6. Conclusion	15
	4.6
Annexes	16

Annex 1: Meeting Programme

Annex 2: Participants

Annex 3: Technical Briefs

Executive Summary

The WHO Centre for Health Development (WHO Kobe Centre – WKC) was established in 1995 with support from the Kobe Group¹ and endorsement of WHO's Executive Board. WKC's research plan for 2018-26 aims to study health systems in the context of population ageing and health emergencies and disaster risk management (HEDRM) to accelerate progress towards Universal Health Coverage (UHC). The Advisory Committee for WKC (ACWKC) is appointed by the WHO Director-General (DG) to represent WHO's six regions, the host country, local community, and donor group. The 25th annual meeting on 11-12 November 2021 advised the Director-General and the Director of WKC about strategic priorities.

The meeting discussed the Centre's progress in 2020-21 in research and local engagement, and followup to the 2020 ACWKC recommendations. The Chair, Dr Irene Agyepong, and Rapporteur, Dr Viroj Tangcharoensathien, presented the Committee's conclusions and following recommendations:

Specific recommendations on research and research uptake include:

- Consider expanding research to include COVID-19 under the UHC and HEDRM themes.
- Identify best practices by local government related to pandemic preparedness, response and recovery from COVID-19, which inform future local policies and programs and benefit local people.
- Explore the use of qualitative research and qualitative synthesis to complement the findings from the systematic reviews, health economics and epidemiology research.
- Strengthen efforts to other forms of research uptake activities in addition to policy briefs, including networking with country partners and engaging decision-makers.

Recommendations on *local engagement* include:

- Explore ways to increase WKC visibility, including for local policy makers. Ensure research findings benefit local communities.
- Continue to engage and listen to opinions of local officials and strengthen communication.
- Expand for for policy makers by including WHO HQ/regional offices and other policy makers.
- Explore the role of communities and local government in the COVID-19 response.

Recommendations on *cross cutting and governance* issues include:

• Develop a strategy to secure the budget for WKC, including maintaining core funding from Kobe Group and securing core budget from WHO for next biennium. Follow up on potential increase in the size of earmarked funding from the Japanese Ministry of Health Labour and Welfare (MoHLW) and explore opportunities to diversify funding.

Recommendations for management and strategic focus include:

- Noting the ongoing operational and resource mobilization plans, core funding from WHO and diversifying funding sources are key actions to be taken.
- Maximise contributions to WHO flagship products.
- At the next ACWKC meeting, present findings and policy implications of selected research.
 Recommend developing specific indicators to monitor WKC output in a dashboard or infographic.
 Create an overview infographic to present the big picture of all the work that WKC is undertaking.
- Acknowledging the time constraints of an online meeting for 2.5 hours per day over two days, versus
 two full days in a face-to-face meeting in Kobe, the ACWKC recommends exploring how to use the
 time more effectively.

¹ Hyogo Prefectural Government, Kobe City, Kobe Steel, Ltd. and Kobe Chamber of Commerce and Industry.



Meeting Chair Dr Irene Akua Agyepong Dodowa Health Research Center Representing WHO African Region (AFR)



Professor Maged Al-Sherbiny
Higher Education Senior Advisor
Direct Aid International
Representing WHO Eastern Mediterranean Region
(EMR)



Dr Sarah Louise Barber Director WHO Centre for Health Development (WHO Kobe Centre)



Dr Hajime Inoue Assistant Minister for Global Health and Welfare, Minister's Secretariat, Ministry of Health Labour and Welfare, Japan Representing the Host Government



Mr Yasutaka Katayama Vice Governor of Hyogo Prefecture Representing the Kobe Group



Professor Soonman Kwon
President
Korea Health Industry Development
Institute
Representing WHO Western
Pacific Region (WPR)



Dr David A. Lindeman
Director Health, Center for Information
Technology Research in the Interest of Society,
University of California, Berkeley
Representing WHO Americas Region (AMR)



Honourable Motohiko Saito Governor of Hyogo Prefecture



Professor Reiko Sakashita
Vice President
University of Hyogo
Representing the local community



Rapporteur
Dr Viroj Tangcharoensathien
Secretary General, International
Health Policy Program, Ministry of
Public Health, Thailand
Representing WHO South-East
Asian Region (SEAR)



Professor Lis Wagner
Professor Emeritus
University of South Denmark
Representing WHO European Region (EUR)

*Members presented in alphabetical order.

1. Opening

The Director of the WKC, Dr Sarah L. Barber, welcomed everyone to the 2021 meeting of the Advisory Committee of the WKC (ACWKC). She welcomed the new ACWKC members including Mr Yasutaka Katayama, Vice Governor of Hyogo Prefectural Government representing the donor group; Dr Hajime Inoue, Assistant Minister, Global Health and Welfare, MoHLW representing the host government; and Professor Reiko Sakashita, Vice President of the University of Hyogo representing the local community.

The Honourable Motohiko Saito, Governor of Hyogo Prefecture, expressed his gratitude to WKC for sharing evidence-based measures to counter COVID-19. He was reassured that WKC was focusing on ageing and dementia in Kobe City. He hoped that initiatives such as the Global Health High School Summit held recently in Himeji City would benefit the local community and be widely disseminated.

Dr Hajime Inoue expressed his appreciation to the Kobe Group and others in supporting the work of the WKC over the past 25 years. Ageing societies, universal health coverage and COVID-19 were crucial topics, and he hoped WKC would continue its work in these areas and publish and assured continued support to WKC's future work from the MoHLW.

Dr Naoko Yamamoto, WHO's Assistant Director-General (ADG) for UHC and Healthier Populations, delivered a video message of thanks to the ACWKC, and noted that WKC's finalized Task Force management plan was strongly supported by WHO leadership. The Centre's global technical products for 2022-23 are aligned with and contribute to WHO's 13th General Programme of Work (GPW 13).

The ACWKC² agreed with the nomination of the Chair, Dr Irene Agyepong, and the Rapporteur, Dr Viroj Tangcharoensathien Apologies were accepted from Dr David Lindeman.

Key points of the opening session:

- Governor Saito, on behalf of the Kobe Group, and Assistant Minister Inoue, representing the host government, expressed their appreciation to WKC for continued sharing of information around COVID-19, and highlighted the importance of the Centre's research.
- Dr Inoue thanked the Kobe Group for 25 years of sustained support and affirmed MoHLW support to WKC.
- Dr Yamamoto, WHO ADG, noted that WHO's leadership strongly supported WKC, and its global technical products for 2022-23 were aligned with WHO five- year plan.

2. Strategic achievements and challenges

Dr Sarah L Barber outlined the Centre's main achievements of 2020-21, which included two major reviews of WKC activities from 2016 to 2020. The first review was the Director-General's Task Force Review (2019-2021), which endorsed WKC's vision, mission, and the strategic focus of UHC and HEDRM. The task force made several recommendations to address strategic and research issues, governance, resource mobilization and communication. The Director-General endorsed the recommendations and committed

² WKC Advisory Committee members and profiles: https://extranet.who.int/kobe centre/en/advisory-committee

to support the Centre at a high level globally, advocating for WKC as a Global Centre of Excellence for UHC.

The second review was the WKC/Kobe Group joint Mid-Term Evaluation (2016-2020) in compliance with the terms of the Memorandum of Understanding between the Kobe Group and WHO. The evaluation found that WKC had strengthened research and governance functions as well as local engagement. There was agreement for future efforts to improve collaboration with local and international research institutions, and to further strengthen research functions and governance. On local engagement, the review recommended that WKC increase local visibility and ensure that research outcomes were disseminated to and benefitted the local community.

In terms of research accomplishments, ten projects were completed, and 20 projects are ongoing. Among ongoing projects include five projects on sustainable financing and two projects on health systems adaptation to population ageing; four studies measuring financial protection and unmet need among older persons; and ongoing activities of the managed by WKC as the Secretariat of the Health EDRM Research Network. The Centre published over 70 papers and academic publications between 2020 and 2021.

For local engagement, WKC shared lessons and encouraged collaboration across countries through sustained partnerships with Kansai-based institutions and boosted its communication and dissemination activities. The WKC organized multiple meetings including two core group meetings of the global WHO HEDRM and six fora with the Kobe Group to expand the Centre's communication and dissemination and conducted Special communication activities were undertaken around the Centre's 25th anniversary commemorations. A huge effort was made to translate more than 200 WHO COVID-19 technical guidance and public information, which were posted on special webpages³.

Dr Barber reported on the response to the 2020 ACWKC recommendations. For strategic areas, the WKC's has not yet been successful in obtaining WHO corporate support for WHO core funding, even though this recommendation was an agreed upon action in the management plan of the WKC Task Force. WKC is developing and implementing a resource mobilization strategy to widen the donor base. WKC is undertaking an engagement strategy to strengthen and expand on its partnerships with around 40 institutions in and outside Japan. WKC collaborated closely with the Hyogo Prefecture, Himeji City, and MOHLW to organize a relevant event on the sidelines of the WHO Regional Committee of the Western Pacific Region in October 2021. The Centre took advantage of its 25th anniversary to disseminate reports and commemorative products to locally and abroad. The Centre joins WHO's Output Development Teams to broaden its engagement within WHO to ensure responsiveness at regional and country office levels.

2020 recommendations included ensuring the Centre's work linked with the Sustainable Development Goals (SDGs) and WHO's 13th GPW, which is achieved through WHO's workplan development. WKC is preparing a five-year operational plan and an annual achievement report. WKC will lead two WHO flagship products in the next biennium. The Centre has incorporated the impact of COVID-19 into both the UHC and HEDRM research areas, including a chapter in the *WHO Guidance*. New and existing research projects include qualitative data analysis. Three policy dialogues on the Kobe Dementia Study were organized. WKC makes its study results accessible to local governments, the community, and partners by translating into Japanese research briefs and case studies website content and social media.

Dr Barber discussed key challenges and approaches to ongoing challenges. While the COVID-19 pandemic slowed implementation of regular activities, the situation has improved as the Centre worked closely with research institutes to modify research designs. Research deadlines were extended as needed, and meetings took place online. COVID-19 was incorporated into the research agenda. Although many of the

_

³ See https://extranet.who.int/kobe centre/en/covid

WKC task force recommendations require decisions by WHO senior management, WKC has implemented activities for which it is responsible (e.g., resource mobilization, communication, engagement strategies). WKC has taken advantage of the WHO Secretariat's new planning processes to initiate communications with HQ colleagues, establish new collaborations, propose two technical flagship products, and strengthened links with Output Development Teams (ODTs-global technical networks of WHO colleagues in Geneva, regional offices, country offices) for communication and joint activities.

Dr Viroj Tangcharoensathien led the discussion. He observed that both reviews were very positive and had synergies in their recommendations. WKC's sustainable resource base remained a continuous challenge and he expressed disappointment on the continued lack of core funding from WHO. He urged continuous efforts to fill the resource gap and encouraged more dialogue with the MOHLW. WKC's work aligned well with GPW13; stronger collaboration with WHO Headquarters and regional offices was acknowledged. He noted good research progress in both UHC and HEDRM and observed that WKC could promote research to policy by collaborating with in-country policy entrepreneurs. He encouraged WKC to identify and establish long-term research collaborations with health systems and policy research institutes in low- and middle-income countries which could influence domestic policies. He supports more research on unmet need and is advocating globally for an additional SDG target to monitor the prevalence of unmet need. He suggested strengthening the policy relevance of WKC's research focus by including COVID-19. He noted WKC's significant contributions on ensuring that its work benefit the local community and recommended that this achievement be sustained. Other recommendations included maximizing its contribution to WHO flagship products and opportunities to tap resources through WHO's ODTs.

Dr David Lindeman congratulated the Centre on its banner year and excellent efforts despite the COVID-19 pandemic. He noted that good progress on local engagement, strategic focus, the UHC research area and communication and dissemination. He recommended that the 2020 ACWKC recommendation on WHO Core Funding remain a continuous priority, and the fundraising strategy needed a clear, realistic goal. He suggested that WKC explore additional opportunities to cooperate with WHO regional offices. Regarding HEDRM, he suggested expanding research on COVID-19 during emergencies, and consider data-driven activities on emergencies, disaster risk management and climate.

ACWKC members acknowledged WKC's impressive number of publications and noted that most of the ACWKC 2020 recommendations had been addressed well. Professor Maged Al-Sherbiny stressed the importance of the operational and resource mobilization plans.

Key points of the session

- The ACWKC congratulated the Centre on impressive progress in UHC, HEDRM, and local engagement, and for responding very well to the 2020 recommendations.
- Sustainable funding to WKC remains a challenge and priority, and WKC was urged to develop realistic operational and resource mobilization plans.
- Collaboration with regional offices could be further strengthened, including collaborating with incountry policy entrepreneurs.
- The research focus should expand to include COVID-19 for enhanced policy relevance, and to consider data-driven activities in emergencies, disaster risk management.
- The ACWKC urged the Centre to sustain its local engagement, address local health issues, and engage more with the local government on translating research into policy.

3.1. UHC – Metrics and Measurement

Dr Megumi Rosenberg presented achievements and ongoing research in metrics and measurement. Three projects were completed. The highlight was a study measuring financial protection for older persons by the Viet Nam Health Strategy and Policy Institute. The study is one of the first of its kind in Viet Nam which provided detailed information on the breakdown of out-of-pocket spending of older people on both health and long-term care, and their financial coping strategies. The results of the study are informing national and regional policies and are being included in the 2021 Global Monitoring Report on Financial Protection in Health.

The second completed study involved collaboration between the Universities of Sheffield and Liverpool and Osaka University in Japan to conduct a scoping review of the literature to identify key factors that determine equity in health service access for older people, such as complex care needs, decision-making capacity, and accessibility of services. The third study completed this past year was a collaboration with the Universities of Tokyo and Hitotsubashi for a joint study with WHO's Health System Governance and Financing Department on financial barriers to accessing health services and unmet healthcare needs. A systematic review and meta-analysis were performed to synthesize available evidence from 56 countries on the prevalence of and reasons for forgone care. It showed that about 1 in every 10 people forgo care with unaffordability cited as the most common cause.

Four projects are ongoing. One is WHO's first attempt to examine the impact of people's age on health expenditures and financial hardship, an approach which WKC strongly advocated. The SDG indicators for monitoring catastrophic health spending were compared between households with different age structures. The 2021 WHO Global Monitoring Report on Financial Protection in Health will include the results of this research. Two new Kansai-based studies are addressing financial hardship due to high health spending and unmet care needs of older people and exploring barriers to effective implementation of financial protection policies and programmes. Finally, a multi-country study is underway to produce estimates of self-reported unmet needs for health care based on a secondary analysis of survey data for over 80 countries globally. Additional model-based analysis is being pursued to estimate unmet needs for health and social care among older people and their determinants.

Responding to the 2020 ACWKC recommendation to complement quantitative research with qualitative methods, the scoping review on the measurement of equity in health care access for older persons produced a qualitative synthesis of relevant concepts and frameworks, and new research is underway on financial protection in the Kansai region using both quantitative and qualitative methods. Efforts are intensifying to bring research results to the public through social media channels and new products such as evidence summaries. WKC continues to explore ways to measure the financial protection of older persons at the individual level by studying the breakdown of out-of-pocket health spending on older person's care and measuring forgone care due to cost among older people.

Professor Soonman Kwon led the discussion. He congratulated WKC for very impressive achievements. He suggested systematically including long-term care (LTC) for older people in the research on UHC. For example, examining financial protection and unmet needs with respect to LTC and health care. He also suggested that the impact of COVID-19 on older people's access to and unmet needs for LTC and health care could be examined. Dr Barber noted there are several groups working on LTC and COVID-19 and that it would be important for WKC to link with them. WKC has been invited to participate in the London

School of Economics' project on LTC and COVID-19, and new research on countries' LTC eligibility criteria and unmet need for LTC is being explored.

Dr Irene Agyepong commended WKC on the impressive body of work. She noted that the nuances of financial protection indicators would be interesting to explore. For example, while low out-of-pocket spending is viewed as ideal, low spending could be due to lack of access, while high spending could mean improved access and utilization. In terms of research uptake, it was noted that in addition to producing communication products such as briefs, webinars could be effective tools for dissemination.

3.2. UHC – Service Delivery and Health Financing

Dr Barber presented the projects in service delivery, sustainable financing and innovations, which are conducted by all technical staff. Six projects were completed under ASEAN Health Systems and Ageing portfolio including an evaluation of interprofessional training in the Philippines and Viet Nam; studying the process of strengthening health systems to enable a shift from acute to chronic care under existing resources in Cambodia; a cross-sectional survey on cognitive function among adults in Lao PDR; a randomized control trial (RCT) of community integrated intermediary care for older adults in Thailand; and in Myanmar, a systematic review about inclusion of older adults in health and social services to inform the new National Health Plan to 2030.

Two ongoing service delivery projects include the Kobe Dementia project (2017-22), a flagship project initiated in 2017 studying the health system response to the management of patients with cognitive decline in Kobe City. In June 2021, the preliminary results of this study were presented at the Annual Conference of Japanese Society for Dementia Prevention 2021, and the possible application of the study results both nationally and other countries was highlighted. In Singapore, the evaluation of an enhanced community of care model for high-risk older persons was extended to 2022 due to COVID-19.

In the area of sustainable financing, five projects are underway. Simulations of the impact of population ageing on expenditures in six countries report many opportunities for people to age in good health and that healthy ageing can contribute to the economy. Joint collaborations with the WHO European region are undertaken to produce an investment case for long-term care. A closely related project on sustainable financing in the context of population ageing with the London School of Economics is contributing towards a global WHO flagship product in the updating of WHO's financing guidance for long-term care. Collaboration with the OECD and universities in the EURO and WPRO regions on price setting long-term care for older persons will continue, with a special journal issue scheduled for 2022. WKC is also leading the global WHO flagship product on evidence-based guidance about purchasing instruments for quality of health services for chronic illnesses.

The research highlight is the <u>Population Ageing financial Sustainability gap for Health systems (PASH)</u> <u>Simulator</u>, an innovative tool that allows policymakers to see how health expenditures and health revenues are expected to change over time due to changes in population age-structure. The key message is that the way population ageing affects health financing is a policy choice, rather than an inevitable consequence of population ageing. The simulator is being rolled out in the WHO WPR and WKC is exploring interest in other regions.

Responding to the ACWKC's 2020 recommendations, WKC continues to work with WPRO to promote its research. WKC has integrated COVID-19 issues into the book about LTC and Health EDRM. To promote learning opportunities among Asian researchers, a special issue of the journal *Health Research Policy and Systems* is being prepared on the theme of "Health systems response to population aging," and an online

launch is planned to facilitate learning and exchange. A publication on the Dementia Checklist Study is underway and a WKC Evidence Summary has been prepared.

Professor Maged Al-Sherbiny and Professor Lis Wagner led the discussions. Professor Al-Sherbiny expressed appreciation for the simulator he found to be a very practical, innovative tool. He supported the finding that how population ageing affects health financing was a policy choice and hoped this message would be disseminated clearly to policymakers. He suggested removing the research priority "to identify innovations that empower older adults" if this was no longer supported. He congratulated the Centre on the impressive research achievements for ASEAN projects on health systems and ageing and the notable cooperation with regional partners. On integrating COVID-19 into WKC's research activities, he suggested exploring a study with the consortium of universities studying LTC and COVID-19, in recognition of the resources poured into the pandemic which may affect the financial resources for UHC.

Professor Wagner commended WKC on the impressive publications in 2020-21, the implementation and sustainability of research in LMICs, and was pleased to see the inclusion of the impact of COVID-19 on the ageing population in the forthcoming book on LTC. She asked whether qualitative data of older people was used. The ongoing research project on managing dementia in Kobe had high priority and interest locally in sharing the new knowledge.

Dr Barber responded that qualitative data collection was used in the area of metrics and measurement. The policy briefs were one important way for WKC to disseminate findings to stakeholders, and the translation of research into policy is more readily achievable with the country-based studies.

Key points of the session

- The Committee commended WKC on the impressive publications, research achievements, and the extensive collaborations, particularly with regional partners.
- In particular, the PASH Simulator was highly appreciated as an innovative, practical tool for policymakers to see the impact of policy choices on health revenues and expenditures.
- Future research could assess consider COVID-19 impact, particularly related to LTC.
- Dr Barber agreed that the research priority on identifying innovations that empower older adults would be removed from the research agenda.

3.3 Health Emergencies and Disaster Risk Management (HEDRM)

Dr Ryoma Kayano presented the achievements and ongoing research. One project was completed, a scoping review of the impacts of disasters and health adaptation on vulnerable populations in China, Viet Nam and Indonesia. It revealed inconsistencies of concepts and terminology, and an evidence gap in adaptation measures and measuring impact. Eight projects are ongoing. The highlighted research project focuses on identifying common key competencies for the health workforce in emergencies and disasters and lessons. The research synthesizes knowledge from literature reviews and 13 case studies from all six WHO Regions, and a Delphi consultation is underway with global experts.

Ongoing research includes a study of health data management before, during and after emergencies and disasters, and case study analysis about the implementation of the WHO standardized health data collection tool by emergency medical team in Mozambique and Japan, and its effectiveness in rapidly identifying vulnerable groups. A systematic review of long-term mental health outcomes after disasters

and health emergencies has highlighted the need for investment in community mental health services. This project also established the Asia Pacific Disaster Mental Health Network, which holds monthly meetings to discuss research gaps.

A technical working group for developing WHO's research agenda on HEDRM was established in September 2021. The WHO Guidance on Research Methods for Health Emergency and Disaster Risk Management was published as a living reference.⁴ The HEDRM Knowledge Hub is being developed. As the Secretariat of the WHO HEDRM Research Network, WKC hosted the 3rd Core Group meeting online in November 2021 with WHO HQ and all Regional Offices. Discussions aimed to identify research needs in countries and improve implementation of global collaborative research activities.

A new area of work has begun to address emerging health needs in the context of COVID-19 to identify and evaluate strategies for strengthening community resilience. A further project in this area is studying country experiences of HEDRM using a whole-of-society approach through case studies of Japan, Republic of Korea, USA, Thailand, the Islamic Republic of Iran, and Mongolia.

In response to the 2020 ACWKC recommendations, the WHO Guidance on Research Methods for Health Emergency and Disaster Risk Management is being disseminated through webinars, podcasts, and chapter summaries; the book will be translated into Japanese and Chinese. The results of prior research on older people's health needs after disaster will be included in the work of knowledge hub on mapping existing evidence. Addressing the increasing need for research on climate change, collaborations with the well-established HQ department on environment and climate change will continue.

Prof Reiko Sakashita led the discussion. She was impressed by breadth of research, dissemination efforts and contribution to capacity building. She supported the initiative to establish the WHO HEDRM Knowledge Hub and appreciated that COVID-19 was being integrate into the HEDRM research. She suggested further expansion of research collaboration with Information and Communication Technology and artificial intelligence. She suggested further efforts to translate research findings into policy and practice for both HICs and LMICs. She also suggested improving the usability of webpages by adding a short description on the significance of research projects.

Dr Kayano expanded on some key findings and relevance of the HEDRM research portfolio. For the health data management project, the standardized data collection tool has found the evidence of early onset of mental health issues during the acute phase, which was previously believed to appear after acute physical health effects. This finding provides evidence to support policies on early intervention for mental health support for disaster survivors. Regarding the ease and cost of administering the tool in HICs and LMICs, Dr Kayano explained that the minimum dataset comprised a simple, easy checklist which could be used manually at very low cost or digitally. Dr Agyepong suggested including economic analysis in future studies. Dr Barber acknowledged the significant contribution in capacity building given little research in health emergency settings.

Key points of the session

- The Committee was impressed by breadth of research, dissemination efforts and contribution to human resource development/capacity building. It appreciated the inclusion of COVID-19 projects in the research agenda, and the work on the WHO HEDRM Knowledge Hub.
- Implementation research could be used for the work on health workforce development to support the relevance of research for policy and practice in countries.
- The Committee recommended that studies be included in the materials sent in advance of the meeting.

4.Local Engagement

Mr Loïc Garçon presented WKC's contribution to the local community under three objectives: to share lessons learned and encourage global collaboration across countries; to communicate and disseminate information about WKC's research activities; and to contribute to the community in Kobe city and Hyogo prefecture through awareness-raising and health advocacy.

The Centre continues to share lessons learned and encourage collaboration by partnering with local research institutions to address common health challenges within each of the three research themes of WKC's Research Plan (2018-2026). By providing opportunities to integrate teams of researchers based in Kansai and international academia, WKC stimulates synergies and strengthens its research network both locally and globally. WKC's 25th Anniversary commemoration was an occasion to share its work, while highlighting its key achievements since 1996 by publishing articles in two major Japanese public health journals, and producing commemorative brochure and memorabilia which were distributed to all major stakeholders

WKC hosts at least three public fora on topics of interest with the Kobe Group each year to communicate and disseminate information about WKC's research activities in the local community. During 2020-21, six fora were held including three high school summits. WKC engages with local and global audiences through its bilingual website and social media accounts on Twitter and YouTube. There was been a significant increase in the number of Twitter followers (8800 in 2021) and website viewers (164,000 new viewers in 2021). Each research project has a communications plan which includes Tweets and web stories; since ACWKC 2020, the Centre has posted 43 news stories in Japanese and 20 in English on its website.

Despite COVID-19 restrictions, the Centre continued to contribute to health awareness in the community through 60 online student lectures and webinars about WHO and WKC activities. Staff regularly participate in 15 local technical committees and other meetings to promote public health and share research findings of interest to the local community. The Centre translated and disseminated over 200 WHO COVID-19 technical guidelines and WHO COVID-19 public infographics in 2020-21 through its dedicated Japanese web pages, Twitter, and YouTube.

Going forward, WKC will continue to strengthen and expand links and engagement with international researchers and Kansai-based institutions, as well as with the local community. Two fora have already been scheduled for 2022, the annual high school students' forum co-hosted with the Hyogo Board of Education and Kobe University in February 2022, and a forum on mental health in March 2022.

Vice Governor Katayama led the discussion. He expected that further research collaborations would address locally relevant issues using the carry-over funds as well as additional contributions from the Kobe Group for the current third MOU period. He stresses the involvement of local university and institutions, and for the work on HEDRM to be further strengthened. The Kobe Group highly appreciated the translations of the WHO Disease Outbreak News, information sharing, translations of WHO technical guidance, and WKC's participation in the committee on COVID-19. He suggested enhancing research on COVID-19 and emerging infections and hoped that dissemination of research would be improved through the programme review committee meetings.

The Vice Governor recommended that WKC make further efforts to increase its visibility, particularly the findings of research to benefit local citizens and policymakers, using social networks, forums, brochures, and publications. To improve mutual understanding, WKC should keep assigning a focal point for

communication with the Kobe Group. For local government officials, workshops and trainings would be helpful. He noted how the recent High School Forum in Himeji had contributed to increasing awareness of WKC in the local community and helped young people to develop social consciences by preparing the Himeji High School Declaration which was presented to high-ranking officials at the Forum.

The ACWKC appreciated the significant contributions and continued support of the Kobe Group, and congratulated the Centre for its local engagement efforts. To enhance dissemination, the Committee suggested developing key performance indicators to examine the effectiveness of communications, and conducting online fora for policymakers in different countries, with the support of concise policy briefs. Preparing articles on WKC's research and activities could be a good practice.

The Chair commented that WKC was unique, a global health centre based and funded in a local setting, and its local engagement efforts could be evaluated in terms of policy impact, with learnings for other countries. Dr Inoue noted that communications between the MoHLW and WKC could be strengthened.

Key points of the session

- The ACWKC expressed its appreciation to the Kobe Group for its sustained support of WKC and recommended that carry-over funds continue to be used for locally relevant research and to benefit local policies and practice.
- The Kobe Group greatly appreciated WKC's efforts to communicate on COVID-19 and suggested enhancing research on the pandemic and emerging infections. The MoHLW hoped to improve communication with the Centre.
- The Committee congratulated the Centre for its local engagement efforts and urged it to increase its visibility even further using a wide range of communication strategies.
- The Centre's capacity building initiatives such as high school fora were greatly appreciated and could be expanded through greater exchange with local government officials.

5. Recommendations

The Chair of the 25th ACWKC, Dr Irene Agyepong, and the Rapporteur, Dr Viroj Tangcharoensathien, presented the Committee's recommendations and conclusions. The Committee commended the Centre on meeting all the recommendations of the previous ACWKC meeting.

Recommendations on research include:

- a) Consider expanding research portfolios to respond to issues related to COVID under the UHC and HEDRM themes which can attract new funding resources, such as studies on
- Best practices applied by local government related to pandemic preparedness, response and recovery from COVID-19 which inform future local policies and programs and benefit the local people. Pandemic impacts on mental health and well-being and specific population groups of high vulnerability such as older persons.
- Supporting COVID recovery, specifically: building back better, fairer, and more sustainable health systems; improving UHC and boosting public health emergency capacities and sustaining fiscal space for health in the context of the fiscal crunch.

b) Explore the use of qualitative research and qualitative synthesis to complement the findings from the systematic reviews, health economics and epidemiology research.

- Qualitative research methods can be beneficial in areas such as studying unmet needs for long term
 care, social, economic and other effects, costs of informal care giving to individuals and households
 and the society etc.
- In qualitative methods, look broadly and to the wider methodological options from diverse fields such as sociology, anthropology, political science etc.
- This includes exploring co-production and participatory action research approaches to work with people and communities to develop and evaluate interventions to address some of the emerging issues.

Recommendations on research uptake include:

c) Strengthen efforts to other forms of research uptake activities in addition to policy briefs. Specifically:

- Explore more networking with country partners to embed evidence in policy decision processes at
 national and sub-national level options, and engaging decision makers and implementers in some of
 the research and in co-producing interventions and solutions.
- Explore how to use the unique opportunity of the collaboration within Kobe City to explore and share
 potentially generalizable lessons on local engagement and how to effectively reach and work with
 local government and communities in research and research uptake from the WKC experience.

d) On *local engagement*, the Committee congratulated WKC and highly appreciated the Disease Outbreak News and WKC's participation in committees. Recommendations include:

- Explore ways to increase WKC visibility, including for local policy makers, ensuring that the findings
 of research benefit local communities.
- Continue to engage and listen to opinions of local officials and strengthen communication.
- Expand for policy makers by including HQ/regional offices, other policy makers. WKC has great experience in dealing with ageing and the success stories in Japan need to be shared with others.
- Explore the role of communities and local government in the COVID-19 response.

e) Recommendations on cross cutting and governance issues include:

- Strategy to secure the budget for WKC. This includes
 - Maintain core funding from Kobe group
 - Secure core budget from WHO HQ for next biennium
 - o Follow up on potential increased size of earmarked funding from MoHLW
 - Funding diversification:
 - ➤ Competitive grant within Japan: Overcome legal issues with AMED through working with local academic research institutes as PI and WKC as co-investigator
 - > Grant from outside sources:
 - E.g., Gates Foundation, Wellcome Trust and other potential sources
 - COVID-19 related studies may attract substantial new grants

f) Recommendations for the management/strategic focus include:

- Note the ongoing work on the operational plan, and strategic resource mobilization plan. Core funding from WHO and diversifying funding sources are key actions to be taken.
- Maximise contributions to WHO flagship products.
- At the next ACWKC meeting, present some findings and policy implications of selected research instead of reporting overall achievement.
- Recommend specific KPIs be developed to monitor WKC output (publications, policy briefs, communication) in a dashboard or infographic for dissemination.
- Create an overview infographic/big picture of all the work that WKC is undertaking.
- The Committee acknowledges the time constraints of an online meeting for 2.5 hours per day over two days, versus two full days in a face-to-face meeting in Kobe.
 - Recommend exploring how to use the time more effectively despite this challenge.
 - Suggest the next ACWKC virtual meeting should conclude all presentations by Day 1, leaving Day
 2 to formulate and discuss recommendations.

6. Conclusion

Dr Agyepong thanked the Advisory Committee and WKC staff for the efficient organization of the second virtual ACWKC meeting and the active contributions of all concerned. The Centre was congratulated for its exemplary contribution in the light of COVID-19 constraints. The contributions of the Kobe Group were deeply appreciated by the Advisory Committee and the Government of Japan. Dr Barber thanked the ACWKC for the very constructive input and welcomed the contributions for improving the performance of the Centre in the future. She hoped that the 2022 ACWKC meeting could take place in Kobe. The WKC will confirm the date in due course.

Annexes

Annex 1: Meeting Programme

Annex 2: Participants

Annex 3: Technical Briefs



WHO CENTRE FOR HEALTH DEVELOPMENT

Twenty-Fifth Meeting of the Advisory Committee of the WHO Centre for Health Development (ACWKC) Kobe, Japan, 11–12 November 2021 (online)

November 2021

Programme

11 November 2021 (Day 1)

16:55–17:00	Housekeeping announcement	Mr Loic Garcon
		Programme Officer, WKC
17:00-17:15*	Opening of the meeting	(Agenda item 1)
(based on Kobe	Welcome remarks	Dr Sarah Louise Barber
time, pls refer to		Director, WKC
the time below		
for each city)	Representative from the Kobe Group	Hon. Motohiko Saito
		Governor, Hyogo Prefecture
	Representative of the Host Government	Dr Hajime Inoue
	r	Assistant Minister for Global Health
		and Welfare, Ministry of Health,
		Labour and Welfare
	Representative from WHO HEP Division	Dr Naoko Yamamoto
	(video message)	Assistant Director-General
		WHO (TBC)
	Statutory business	(Agenda item 2)
	Opening remarks by Chairperson, ACWKC	Chairperson: Dr Irene Agyepong
	Opening remarks by Champerson, MC Wice	
	Announcing Appointment of Rapporteur	Chairperson
17:15–17:45	Strategic achievements and challenges	(Agenda item 3)
	- Presentation Summary (10 min)	Presentation: Dr S. L. Barber
	- Lead commentator and discussion (20 mins)	
		Lead Commentator:
		Dr Viroj Tangcharoensathien,
		Dr David Lindeman (to receive
		comments in advance)
17:45–18:15	Research Achievements: Metrics and	(Agenda item 4-Part 1)
	Measurement	Dr Megumi Rosenberg
	- Presentation summary (5 min)	Technical Officer, WKC
	- Lead commentator and discussion (25 mins)	
		Lead Commentator:
		Prof Soonman Kwon
18:15–18:25	Break	



WHO CENTRE FOR HEALTH DEVELOPMENT

18:25–18:55	Research Achievements:	(Agenda item 4- Part 2)
	UHC-Service Delivery and Sustainable	Dr Sarah L. Barber
	Financing	WKC
	- Presentation summary (5 min)	
	- Lead commentator and discussion (25 mins)	Lead Commentator:
		Prof Lis Wagner,
		Prof Maged Al-Sherbiny
18:55-19:25	Research Achievements: Health Emergencies	(Agenda item 4- Part 3)
	and Disaster Risk Management	Dr Ryoma Kayano
	- Presentation summary (5 min)	Technical Officer, WKC
	- Lead commentator and discussion (25 mins)	
		Lead Commentator:
		Dr Hajime Inoue
		Prof Reiko Sakashita
19:25–19:30	Wrap-up Comments on Day 1	Chairperson
19:30	Meeting adjourned	

12 November 2021 (Day 2)

17:00–17:30	Local Engagement	(Agenda item 5)
	- Presentation summary (5 min)	Mr Loic Garcon
	- Lead commentator and discussion (25 mins)	Programme Officer, WKC
		Lead Commentator:
		Mr Yasutaka Katayama
17:30–18:30	Closed Discussion of ACWKC to prepare Recommendations	ACWKC + WKC Rapporteurs
18:30–18:40	Break	
18:40–19:10	Recommendations	(Agenda item 6) ACWKC
19:10–19:20	Conclusions and other matters	(Agenda item 7) Chairperson
19:20	Close of the meeting	Chairperson

*Meeting time at each city

City	Accra	Bangkok	Kobe/Tokyo	Kuwait	Copenhagen	Seoul
Time	08:00–10:30	15:00–17:30	17:00–19:30	11:00–13:30	09:00–11:30	17:00–19:30



WHO CENTRE FOR HEALTH DEVELOPMENT (WHO KOBE CENTRE – WKC)

Twenty-Fifth Meeting of the Advisory Committee of the WHO Centre for Health Development (ACWKC) Kobe, Japan, 11–12 November 2021 (online meeting)

Nov 2021

PROVISIONAL LIST OF PARTICIPANTS

ACWKC Members

Dr Irene Akua Agyepong, Public Health Consultant, Public Health Faculty of the Ghana College of Physicians and Surgeons; Dodowa Health Research Center, Ghana

Professor Maged Al-Sherbiny, Higher Education Senior Advisor, Direct Aid International, Kuwait

Dr Hajime Inoue, Assistant Minister for Global Health and Welfare, Minister's Secretariat, Ministry of Health, Labour and Welfare, Japan

Mr Yasutaka Katayama, Vice Governor, Hyogo Prefectural Government, Japan

Professor Soonman Kwon, President, Korea Health Industry Development Institute (KHIDI), Republic of Korea

Dr David A. Lindeman, Director Health, Center for Information Technology Research in the Interest of Society (CITRIS), University of California, Berkeley, United States of America

Professor Reiko Sakashita, Vice President, University of Hyogo, Japan

Dr Viroj Tangcharoensathien, Secretary General, International Health Policy Program Foundation, Ministry of Public Health, Thailand

Professor Lis Wagner, Professor Emeritus, University of South Denmark, Odense, Denmark

Guest

Hon. Motohiko Saito, Governor, Hyogo Prefecture, Kobe, Japan

Kobe Group

- Dr Wakiko Ajiki, Director General, Public Health Bureau, Health and Welfare Department, Hyogo Prefectural Government
- Mr Ryu Gansa, Director, Medical Affairs Division, Public Health Bureau, Health and Welfare Department, Hyogo Prefectural Government; Secretary General of the WKC Cooperating Committee
- Mr Hideki Azuma, Deputy Director, Medical Affairs Division, Public Health Bureau, Health and Welfare Department, Hyogo Prefectural Government
- Mr Yasuhiro Nakui, Group Leader, Policy Planning and Coordination Group, Medical Affairs Division, Public Health Bureau, Health and Welfare Department, Hyogo Prefectural Government
- Mr Kohei Segawa, Policy Planning and Coordination Group, Medical Affairs Division, Public Health Bureau, Health and Welfare Department, Hyogo Prefectural Government
- Ms Nami Nishida, Secretariat of the WKC Cooperating Committee (JCC)
- Mr Hideki Nishio, Chief Operating Officer, Biomedical Innovation Cluster and Business Promotion Headquarters, City of Kobe
- Mr Ryuichiro Ishino, Director, Kobe Biomedical Innovation Cluster Department, Biomedical Innovation Cluster and Business Promotion Headquarters, City of Kobe
- Mr Kazuyuki Ikezawa, Manager, Research Division, Kobe Biomedical Innovation Cluster Department, Biomedical Innovation Cluster and Business Promotion Headquarters, City of Kobe
- Mr Akinari Umeki, Assistant Manager, Research Division, Kobe Biomedical Innovation Cluster Department, Biomedical Innovation Cluster and Business Promotion Headquarters, City of Kobe
- Mr Kazuho Miyamoto, Research Division, Kobe Biomedical Innovation Cluster Department, Biomedical Innovation Cluster and Business Promotion Headquarters, City of Kobe
- Mr Shinichi Goto, Director, General Manager of Industry Division, Kobe Chamber of Commerce and Industry
- Ms Ayane Taniguchi, Industry Division, in charge of International Affairs, Kobe Chamber of Commerce and Industry
- Mr Yasuji Kusuyama, General Manager, General Administration and CSR Department, Kobe Steel, Ltd.
- Mr Jotaro Hayashi, General Manager, General Administration Group, General Administration and CSR Department, Kobe Steel, Ltd.
- Mr Komei Nishizawa, Assistant Manager, General Administration Group, General Administration and CSR Department, Kobe Steel, Ltd.

WHO Kobe Centre

Dr Sarah Louise Barber, Director

Mr Loïc Garçon, Programme Officer (Management)

Dr Ryoma Kayano, Technical Officer (H-EDRM, Mental health, Dementia, Noncommunicable diseases)

Dr Paul Ong, Technical Officer (Service delivery, Financing and Innovations) ¹

Dr Megumi Rosenberg, Technical Officer (Metrics and measurement, Equity, Ageing)

Dr Ludovico Carrino, Consultant (Health economics, Economics of ageing, Economics of long-term care)

Ms Yunhwa Jo, Consultant (Communication)

Ms Makiko MacDermot, Consultant (H-EDRM, Health workforce development, Public health, Community health)

Dr Masayuki Teramoto, Consultant (Risk factors, Noncommunicable diseases, Digital health, Innovation)

Dr Shinichi Tomioka, Consultant (Public health, Health policy, Health economics, Health metrics, Ageing, Community health)

Mrs Greer Van Zyl, Consultant (Communication)

^{1.} Unable to attend

Metrics and Measurement for Universal Health Coverage in the context of population ageing

Background

Universal Health Coverage (UHC) is among the Sustainable Development Goals (SDGs) for 2030. Striving towards UHC means that countries make efforts to offer every person the quality health services they need, while also ensuring that accessing these services does not result in financial hardship. Currently, the global standard of reference for measuring and monitoring UHC is a framework developed by the WHO and World Bank. While the global monitoring framework provides an important standard of reference, it is expected that the indicators for monitoring UHC will need to be adapted to local contexts to ensure their relevance in a rapidly changing environment. As a result of population ageing and changes in health needs, countries adapt UHC measurement and monitoring systems to be relevant to health systems challenges. Therefore, WKC seeks to study how countries are monitoring UHC and measuring how their health systems are responding the needs arising from population ageing.

WKC focuses on understanding the current state of measuring and monitoring UHC from the perspective of how health systems respond to an older person's right to health. This includes monitoring health service coverage, financial protection, equity and care quality. WKC also supports research to develop or improve tools for measurement and monitoring, as well as research focused on promoting knowledge translation from evidence to practice, for the advancement of UHC in the context of population ageing.

Key research areas

- 1. To analyse the current research landscape related to the measurement of essential health services, financial protection, quality and equity for older populations.
- 2. To document current country practices in measuring and monitoring UHC from the perspective of ensuring older persons' right to health.
- 3. To document effective approaches for research and knowledge translation to advance UHC in the context of population ageing.
- 4. To support the development of metrics and measurement tools that enable countries to monitor UHC in the context of population ageing.

Progress report 2020-21

Results from research completed in 2020-21

Measuring financial protection for older persons in Viet Nam (Viet Nam Health Strategy and Policy Institute, 2019-21) collected data on health expenditures from 1,536 people aged 60 years and older through a multi-stage cluster sampling survey in three provinces in the north, central and south regions of the country. The study found that despite near universal coverage with health insurance, care was not sought in over a third of episodes of ill health, often resulting in out-of-pocket (OOP) spending on self-medication. When care was sought, most patients paid OOP for co-payments, medicines not covered by insurance and non-medical costs (travel, meals, etc.). More than half of the households which had to pay OOP for the care of older persons had to borrow money, get a loan or sell property. In addition, 20 in-depth interviews and 28 focus group discussions were carried out with policymakers, health managers, health care providers and older people. These discussions identified limitations in current financial protection policies such as the inadequate level of social assistance benefits, lack of coverage for social care services and gaps in social health insurance coverage especially among self-employed and low-income older people. This research will be among the studies featured in a journal supplement organized by WKC. It is also informing the WHO Western Pacific Regional Strategy on Ageing.

Equity in the health care needs and service coverage of older people: a scoping review (Univ of Sheffield, Liverpool Univ, Osaka Univ, 2020-21) is the first phase of the programme of work on equity in service coverage of older people. This involved a global scoping review of the conceptual and theoretical literature to determine what should be measured to assess equity of service coverage for older people. The review found that monitoring equity in health services coverage for older persons requires attention to aspects like multi-morbidities, complex care needs, patient capacity to make decisions and accessibility of services. The study showed that these factors correspond to major concepts underlying current UHC monitoring frameworks and therefore can potentially be incorporated into national monitoring frameworks depending on country priorities and data availability. The conceptual framework developed by this research has informed a subsequent statistical study that aims to quantify unmet needs for health and social care among older people across multiple countries (see *Research ongoing in 2020-23 and expected results*). The research collaborators from Osaka University carried out an additional study to review the literature on health care service coverage of older people in Japan to understand how equity is conceptualized. This review found that debates about equity in healthcare access among older people in Japan are mainly focused on issues related to financial barriers, availability of services and geographical/regional disparity, giving less attention to patient factors such as gender, knowledge and awareness of resources, care needs and capacity to make decisions.

Systematic review and meta-analysis: financial barriers to accessing health services and unmet healthcare needs (Univ of Tokyo, Univ of Hitotsubashi, 2020-21) was carried out as part of a series of collaborative research activities addressing the issue of foregone care with the Economic Evaluation and Analysis Unit in the Health System Governance and Financing Department in Geneva Headquarters. The meta-analysis included 114 studies which covered around 58 million people from 56 countries. For the subgroup analysis of older people, 79 studies reporting data on people aged 65 years and older and 14 studies related to unmet need for long-term care (LTC) were included. Results showed that, on average, foregone healthcare affects about one tenth of the population. The prevalence of foregone care among older people aged 65 and above is nearly double that among those aged 31 to 64. The most reported reason for forgone healthcare is affordability, irrespective of the age of the person needing care. The study also found that a quarter of the older population has unmet needs for LTC. This research is contributing to the 2021 WHO-World Bank Global Monitoring Report on Financial Protection in Health.

Research ongoing in 2020-23 and expected results

Age-disaggregated analysis of national household survey data on financial hardship due to health care utilization (WHO Geneva Headquarters, WHO Regional Offices, International consultants, 2020-2021) is the focus of our ongoing collaboration on financial protection of households with older members with the Economic Evaluation and Analysis Unit in the Department of Health System Governance and Financing in WHO Geneva Headquarters. This research is the first attempt by WHO to systematically disaggregate the financial protection indicators used for the global monitoring of SDG 3.8.2 by the age structure of households. The analysis has been performed by using available data for several countries including low- and middle-income countries, and the results are being reviewed through country consultations. The results of this study will contribute to the 2021 WHO-World Bank Global Monitoring Report on Financial Protection in Health and the statistical outputs will be added to the WHO Global Health Observatory. Research findings will also be published in peer-reviewed journals.

As part of this global programme of research, and in line with WKC's local research mandate, we have initiated new research on financial protection among older people with a focus on the Kansai region of Japan. Two proposals have been selected for funding by WKC following a call for proposals issued in early 2021. The Kansai area is known to have some of the highest rates of households receiving public assistance, many of which are households with older people. The first study, Household survey analysis of financial hardship due to excessive health spending and unmet care needs of older people in Japan with implications for the Kansai region (Tokyo Metropolitan Geriatric Hospital and Institute of Gerontology, Keio Univ, Konan Univ, National Center for Global Health and Medicine, Japan, Osaka Univ,

2021-23) was started in July 2021. The primary goal of this study is to produce statistical estimates of financial hardship and unmet care needs comparing older people in Kansai to their counterparts in other regions of Japan and to people in other age groups. The study will also involve a review of existing evidence in the literature about financial protection policies, financial hardship and unmet care needs related to older people in Kansai, and Japan more broadly. The researchers plan to conduct interviews with local government officials toward the end of their study period to contextualize the research findings and identify relevant implications for the region. The second study, **Financial** protection of older persons in health care in the Kansai region of Japan: Barriers to effective implementation of financial protection policies and programmes (Kyoto Univ, 2021-22) is an exploratory study of the difficulties that older people in the Kansai region face when paying for health care services, and the barriers that both the older patients and service providers face when trying to utilize existing financial support systems and policies. The research is expected to start in October 2021 and will involve a mail survey of social workers in hospitals, local governments and communitybased social welfare and other relevant agencies in all six prefectures of Kansai, followed by in-depth interviews with a sub-set of the survey respondents. The results are expected to provide practical insights about the caveats of existing financial protection policies and how the policies could be better implemented for the benefit of older people in the Kansai region and across Japan. The research outcomes will also contribute to future global and regional monitoring reports on financial protection developed by WHO.

Multi-country cross-sectional and longitudinal studies to quantify unmet needs for health and social care among older people (International Health Transitions, National Research Council, Institute of Neuroscience (CNR-IN), Italy, Univ of Gothenburg, January – December 2021) is the second phase of the programme of work on equity in service coverage of older people. It builds on the first phase, the scoping review of equity in the health care needs and service coverage of older people completed in early 2021, and aims to generate statistical estimates of unmet needs for health and social care among older people. Datasets from a diverse set of 60 countries across all WHO regions have been identified for inclusion in the analysis. The first stage of analysis focused on direct questions asked in the survey about self-reported unmet needs for healthcare. The second stage of analysis applies a theory-based multifactorial model to generate empirical estimates of older people's unmet needs for health and social care in select countries. The results of this research are to be published in scientific journals and will contribute to future WHO global reports on monitoring service coverage. Data visuals of the statistical outputs are planned to be displayed on the WKC website for further dissemination.

Publications

Journal articles

- 1. Jebeli SSH, Rezapour A, Rosenberg M, Lakeh MM. Measuring universal health coverage to ensure continuing care for older people: a scoping review with specific implications for the Iranian context. *East Mediterr Health J.* 2021. https://doi.org/10.26719/emhj.21.040
- 2. Shah SA, Safian N, Ahmad S, Wan Ibadullah WAH, Mohammad ZB, Nurumal SR, et al. Factors associated with happiness among Malaysian elderly. *Int J Environ Res Public Health* 2021;18:3831. https://doi.org/10.3390/ijerph18073831
- 3. Sasaki Y, Shobugawa Y, Nozaki I, Takagi D, Nagamine Y, Funato M, et al. Rural—urban differences in the factors affecting depressive symptoms among older adults of two regions in Myanmar. *Int J Environ Res Public Health* 2021;18:2818. https://doi.org/10.3390/ijerph18062818
- 4. Safian N, Shah SA, Mansor J, et al. Factors associated with the need for assistance among the elderly in Malaysia. *Int J Environ Res Public Health*. 2021;18:730. doi: 10.3390/ijerph18020730
- 5. Win HH, Nyunt TW, Lwin KT, et al. Cohort profile: healthy and active ageing in Myanmar (JAGES in Myanmar 2018): a prospective population-based cohort study of the long-term care risks and health status of older adults in Myanmar. *BMJ Open* 2020;10:e042877. doi: 10.1136/bmjopen-2020-042877

6. Rosenberg M, Kondo K, Kondo N, Shimada H, Arai H. Primary care approach to frailty: Japan's latest trial in responding to the emerging needs of an ageing population. *Integrated Healthcare Journal* 2020;2:e000049. doi: 10.1136/ihj-2020-000049

- 7. Ono R, Chaiyawat P, Melinda G, et al. Developing a conceptual framework with a life course approach to support universal health coverage monitoring systems. WHO Centre for Health Development (WHO Kobe Centre WKC) Working Paper (#K18021). August 2020. https://extranet.who.int/kobe_centre/sites/default/files/pdf/Life-course UHCmonitoring KobeUniv.pdf
- 8. Hosseinijebeli SS, Rezapour A, Lakeh MM. Measuring universal health coverage to ensure continuing care for older people: a scoping review with specific implications for the Iranian context. WHO Centre for Health Development (WHO Kobe Centre WKC) Working Paper (#K18022). April 2020. https://extranet.who.int/kobe centre/sites/default/files/pdf/metrics_Iran_working_paper_20200401_0.pdf
- 9. Tomioka S, Rosenberg M, Fushimi K, Matsuda S. An analysis of equity in treatment of hip fractures for older patients with dementia in acute care hospitals: Observational study using nationwide hospital claims data in Japan. BMC Health Services 2020;20:830. https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-020-05690-9

Universal Health Coverage: Service Delivery, Sustainable Financing, and Innovations

Background

With population ageing, health care needs change and increase. The WKC conducts research on health systems innovations to accelerate progress towards Universal Health Coverage (UHC) in the context of population ageing. We also seek to translate this research into concrete policy options, particularly for low- and middle-income countries. Service delivery models are at the heart of the health system. Few countries have successfully implemented a person-centred approach and instead rely on hospital-based models of care, which are ill-equipped to manage patients with chronic diseases and complex multi-morbidities – which can include physical and mental health, and cognitive functioning.

Older people use more health care on average in comparison with younger people, resulting in higher per person spending. This observation contributes to fears among policymakers that population ageing will lead to unconstrained growth in health care expenditures that will become unsustainable. At the same time, population ageing can impact the way in which revenues are generated for health care, and particularly systems that rely on payroll contributions. This may lead to concerns about generating sufficient, stable revenues to pay for health and social services. WKC seeks to investigate these topics, and the policy options that affect growth in health expenditures and the ability to generate revenues. Innovations are defined broadly as new methods and approaches – whether policy, systems, or technologies – and imply the translation of ideas to action towards UHC. WKC's focus on innovations is cross-cutting for all areas and emphasizes innovations in service delivery and financing.

Key research areas

- 1. To evaluate service delivery models that are resilient, adapt continuously and innovatively to population ageing and address multi-morbidities.
- 2. To provide evidence of country-level policy and systems innovations that promote quality care as health systems respond to changes in disease burden and increases in life expectancy.
- 3. To identify innovations that empower older adults to determine their own treatment and care options, and the implications for adoption and scaling-up.
- 4. To study the impact of population ageing on revenue generation and expenditures for health and to understand how countries have adapted and made policy adjustments.

Progress report 2020-21

Results from research completed in 2020-21

In 2018-19, the WKC launched a series of research projects in ASEAN countries to study service delivery models and how health systems are adapting to population ageing. The majority of these research projects were completed in 2020-21, resulting in final project briefs, journal publications, and working papers with implications for other countries. Many of these studies are planned to be published in 2022 in a special supplement of BMC/Springer's Health Research Policy and Systems organized by WKC on the theme of health systems responding to population ageing.

Researchers in the Philippines, Viet Nam and Japan developed an Interprofessional training for delivering quality services for older people in the Philippines and Viet Nam (University of the Philippines Manila, Tokyo Medical and Dental University, Hue University of Medicine and Pharmacy and University of Hyogo, 2018–2020). This research project developed a competency-based inter-professional training programme for health workers in the Philippines and Viet Nam which can be adapted for use in other low- and middle-income countries. The training programme developed through this study showed that in-service interprofessional education improves attitudes and care-

coordination performance towards the delivery of integrated care for the growing number of older people in the Philippines.

Sustainable primary care in Cambodia (Duke-National University of Singapore Medical School, KHANA Centre for Population Health Research and Ministry of Health, Cambodia, 2019-21) was a study that involved a partnership between researchers in Singapore and Cambodia to study health systems strengthening at the primary care level to enable the system to shift from acute to chronic care under existing resources. The research has been completed and it is anticipated that the findings can be translated into concrete programs at the district level in Cambodia.

A community based cross-sectional investigation was conducted in both rural and urban settings in three provinces of Lao PDR in the Management of cognitive impairment in Lao People's Democratic Republic (Lao Tropical and Public Health Institute, 2019-21). Some 2,320 individuals 60-98 years participated in the study. The Lao version of Revised Hasegawa's Dementia Scale (HDS-R) was used to assess the cognitive function of the study participants. The survey reported that 58.4% (49.2% in males and 67.8% in females) of adults over 60 years had reduced cognitive function. In addition to age, several factors were significantly associated with cognitive impairment including educational level, care needs, living in rural area and underweight. This study demonstrated the urgent needs for health systems to identify interventions for addressing future care needs.

In Thailand, researchers implemented a Randomized controlled trial to evaluate a model of community integrated intermediary care (CIIC) services for older adults in Thailand (Juntendo University, Tokyo, Chiang Mai Rajabhat University, Thailand, Tokyo Ariake University and Chulalongkorn University, 2019-21). This study evaluated the impact of community integrated intermediary care (CIIC) facilities after six months of CIIC services and found significantly lower caregivers' burden, less functional decline among the older people and fewer people with depression in the intervention clusters. However, the geriatric depressions scores increased in both arms of the study when comparing the baseline and evaluation, possibly reflecting the stress induced by the pandemic.

In the Analysing data availability and policies in Myanmar for the progressive realisation of UHC in light of population ageing (University of Economics, Yangon, Asian Development Bank, Ministry of Health and Sports, Myanmar, University of Public Health, Myanmar and Mahidol University, Thailand, 2019-20), researchers reported gaps in data about the health and social care needs of older people and their families, especially when compared to available data in other Asian countries; no systematic means to assess disability and related service needs; and a lack of defined health and social care benefits for older people. A technical report was produced.

Research reviews are being conducted about service delivery models globally that are responding to the needs of ageing populations. In the project, Service delivery models for older people with advanced progressive chronic diseases, Phases 1 and 2 have been completed. In Phase 2, researchers conducted a tertiary review to Map service delivery models that optimise quality of life and health services use for older people with advanced progressive chronic diseases (King's College, London, University of Southern California, Kobe and Kyoto Universities, 2019-21). The research teams are jointly preparing a manuscript for publication.

Research ongoing (2018-2022) and expected results

Because of the restrictions imposed as a result of the COVID-19 pandemic, and the difficulty of collecting data, the research project in Singapore was extended to early 2022. Rigorous evaluation of community-based care services for high risk and poor older adults is ongoing in the research project, **Evaluating an enhanced community of care model for high-risk older people in Singapore (Duke-National University of Singapore Medical School and Singapore General Hospital, 2019-22)**. Results are expected by mid-2022.

The multi-year research project about Managing dementia patients in Kobe City (Kobe University and Kobe Municipality, 2017–2021) studied the health systems response to the management of dementia patients. This is a continuation of a research study started in 2017 in Kobe Municipality to strengthen health systems and inform policy to better manage people with cognitive decline. This project consists of four parts in its fourth year of implementation. A protocol paper was published on a peer-reviewed journal. Four journal papers for each part of

the study are under preparation and will be submitted in 2021 and early 2022. The design of this project has been presented at conferences in Japan, Austria, and Switzerland, as well as shared with Japanese local municipalities as a unique model of public health study through collaboration between a local municipality and a local university (Yokohama workshop 2019). It has contributed to the Kobe Ordinance for Dementia-Friendly City. Kobe is recognized nationally for its work on managing dementia patients. Formal dialogue with Kobe City has been undertaken multiple times to discuss using the study results for future policies and programs. In June 2021, the preliminary results of this study were presented at the Annual Conference of Japanese Society for Dementia Prevention 2021 and the possible application of the study results in LMICs was highlighted.

In terms of sustainable financing, several collaborative projects are continuing. A partnership with WHO EURO Observatory on Health Systems and Policy and WHO Regional Office for the Western Pacific (WPRO) was initiated to study the impact of population ageing on revenue generation for health and health expenditures (WHO EURO Observatory on Health Systems and Policy and WPRO, 2018–2022). In 2020-21, WKC worked with WPRO and the EURO Observatory on Health Systems and Policies to conduct two sets of six country case studies (Japan, Mongolia, Republic of Korea, Viet Nam, Australia, New Zealand) to better understand how healthy ageing impacts trends in health expenditures and economic growth, respectively. Simulations predicted that improvements in health among people of working age could lead to increases in the growth of GDP. These results were observed for simulations carried out in the six different country contexts. Taken together, the reports indicate that there are many opportunities for people to age in good health and that healthy ageing can contribute to the economy. Twelve policy briefs were completed, and a regional report is under publication.

This research also resulted in the **Population Ageing financial Sustainability gap for Health systems (PASH) Simulator**, which allows policymakers to see how both health expenditures and health revenues are expected to change through the end of the century due to changes in population age-structure across a wide range of countries. Where there is a financing gap between revenues and expenditures, users can explore potential policy options. The overall message is that how population ageing affects health financing is a policy choice, rather than an inevitable consequence of ageing societies. The simulator will be tested and disseminated in countries in cooperation with WHO regional offices and globally in 2021-22.

A new collaboration was established with the WHO EURO Observatory on Health Systems and Policy and WHO Regional Office for the European Region (EURO) for research about Making the case for investing in long-term care systems (WHO EURO Observatory on Health Systems and Policy and WPRO, 2021–2023). The goal of this research is to systematically present the components and policy options for long-term care (LTC) in an edited volume, that demonstrates the benefits of investing in quality LTC for economies and society as a whole for countries at all income levels. This research will commission studies to describe how, as populations age, countries of all income levels are adapting their service delivery configurations to the needs and demands of older persons, especially through building sustainable systems of long-term care.

A closely related new research project is about **Sustainable Financing in the Context of Population Ageing (WHO Health Governance and Financing Department, WHO Ageing Department, London School of Economics, 2021-23)**, which is a joint global technical collaboration among three HQ technical departments. Collaborations with the London School of Economics have been initiated to prepare preliminary analysis. It is anticipated that this research will result in an updated WHO Financing Brief for Long-Term care.

A collaboration with the Organisation for Economic Development and Co-operation (OECD) was initiated in 2018 and has developed into three Phases. Under Phase 1, WKC partnered with OECD to publish a book with the summary findings and nine case studies (including Japan) about how countries set prices for health services and the investments they have made to institutionalize pricing as a policy instrument to promote coverage and financial protection: Price setting and price regulation in health care – lessons for advancing UHC (OECD, WPRO, and universities in the EURO and WPRO regions, 2018–2021). Using the research in this book, WKC also published a brief for countries on price setting and regulation, under the WHO Health Financing Policy Brief series in collaboration with the Health Financing and Governance Department. Under Phase 2, the study expanded to financing and pricing long-term care for older adults: Pricing long-term care for older persons (OECD and

universities in the EURO and WPRO regions, 2020-21). In 2021, this research resulted in a second joint WHO WKC/OECD publication, summarizing the lessons from nine case studies. To disseminate the research, WKC created the WKC Policy Series on Long-Term Care, in which nine policy briefs were developed to provide readable summaries of each case study, accompanied by nine video interviews. Phase 3 of this collaboration started in 2021. Purchasing instruments to strengthen quality health services for chronic illnesses (OECD, WHO Health Governance and Financing Department, 2021-23) will focus on the role of purchasing instruments and arrangements to improve the quality of health services for chronic illnesses. The research will produce evidence-informed policy guidance on the use of purchasing instruments and arrangements to improve quality of non-communicable diseases (NCDs) management and chronic care for low- and middle-income countries.

Publications (2020-21)

Books

Barber SL, van Gool K, Wise S, Woods M, Or Z, Penneau A et al. Pricing long-term care for older persons. Geneva: World Health Organization, Organisation for Economic Co-operation and Development; 2021. Licence: CC BY-NC-SA 3.0 IGO.

Barber S.L., Ong P., Han Z.A. (2020) Long-Term Care in Ageing Populations. In: Haring R., Kickbusch I., Ganten D., Moeti M. (eds) Handbook of Global Health. Springer, Cham. https://doi.org/10.1007/978-3-030-05325-3_65-1

Journal articles

Aung TNN, Aung MN, Moolphate S, Koyanagi Y, Ichikawa M, Supakankunti S, Yuasa M. Estimating Service Demand for Intermediary Care at a Community Integrated Intermediary Care Center among Family Caregivers of Older Adults Residing in Chiang Mai, Northern Thailand. Int J Environ Res Public Health 2021; 18(11):6087. https://doi.org/10.3390/ijerph18116087

Aung TNN, Aung MN, Moolphate S, Koyanagi Y, Supakankunti S, Yuasa M. Caregiver Burden and Associated Factors for the Respite Care Needs among the Family Caregivers of Community Dwelling Senior Citizens in Chiang Mai, Northern Thailand. Int J Environ Res Public Health 2021; 18(11):5873. https://doi.org/10.3390/ijerph18115873

Aung TNN, Aung MN, Moolphate S, Koyanagi Y, Mulati N, Supakankunti S, Yuasa M. Thai older people's willingness (intention) to participate in a care prevention, community group exercise program: an assessment before implementing an intervention trial in Chiang Mai, Northern Thailand. Int J Environ Res Public Health 2021;18:4044. https://doi.org/10.3390/ijerph18084044

Aung M, Moolphate S, Yuasa M, Aung T, Koyanagi Y, Supakankunti S, Ahmad I, Kayano R, Ong P. Community-Integrated Intermediary Care (CIIC) service model to enhance family-based, long-term care for older people: protocol for a cluster randomized controlled trial in Thailand. JMIR Res Protoc 2021;10(3):e20196. URL: https://www.researchprotocols.org/2021/3/e20196. DOI: 10.2196/20196

Han TDT, Nakamura K, Seino K, Duc VNH, Vo TV. Do communication patterns affect the association between cognitive impairment and hearing loss among older adults in Vietnam? Int J Environ Res Public Health 2021;18:1603. https://doi.org/10.3390/ijerph18041603

Moncatar TRT, Nakamura K, Siongco KLL, Seino K, Carlson R, Canila CC, Javier RS, Lorenzo FME. Interprofessional collaboration and barriers among health and social workers caring for older adults: a Philippine case study. Hum Resour Health 2021;19:52. https://doi.org/10.1186/s12960-021-00568-1

Moncatar TR, Nakamura K, Siongco KLL, Rahman M, Seino K. Prevalence and determinants of self-reported injuries among community-dwelling older adults in the Philippines: A 10-year pooled analysis. Int J Environ Res Public Health 2020;17:4372. doi.org/10.3390/ijerph17124372

Nagai Y, Kojima S, Kowa H, Kayano R, et al. Kobe project for the exploration of newer strategies to reduce the social burden of dementia: a study protocol of cohort and intervention studies. BMJ Open 2021; 11:e050948. https://doi.org/10.1136/bmjopen-2021-050948

Pitchforth et al. (2020) The effectiveness of community-based social innovations (CBSIs) for healthy ageing in middle-and high-income countries: a systematic review. *Journal of Health Services Research and Policy* 25(3):202-21. https://doi.org/10.1177/1355819619888244

Siongco KLL, Nakamura K, Seino K. Reduction in inequalities in health insurance coverage and healthcare utilization among older adults in the Philippines after mandatory national health insurance coverage: trend analysis for 2003–2017. Environmental Health and Preventive Medicine 2020;25:17. doi.org/10.1186/s12199-020-00854-9

Vo THM, Nakamura K, Seino K, Nguyen HTL, Vo TV. Fear of falling and cognitive impairment in elderly with different social support levels: findings from a community survey in Central Vietnam. BMC Geriatrics 2020;20:141. doi.org/10.1186/s12877-020-01533-8

Policy briefs

Barber SL, Lorenzoni L, Roubal T. Price setting and price regulation in health services. Geneva: The World Health Organization 2020 (Health Financing Policy Brief no. 7), https://apps.who.int/iris/bitstream/handle/10665/331964

How does healthy ageing affect economic growth in Vietnam? The economics of healthy and active ageing series: new evidence for the Western Pacific Region. Copenhagen: World Health Organization, 2020.

How does healthy ageing affect economic growth in Australia? The economics of healthy and active ageing series: new evidence for the Western Pacific Region. Copenhagen: World Health Organization, 2020.

How does healthy ageing affect economic growth in Korea? The economics of healthy and active ageing series: new evidence for the Western Pacific Region. Copenhagen: World Health Organization, 2020.

How does healthy ageing affect economic growth in New Zealand? The economics of healthy and active ageing series: new evidence for the Western Pacific Region. Copenhagen: World Health Organization, 2020.

How does healthy ageing affect economic growth in Mongolia? The economics of healthy and active ageing series: new evidence for the Western Pacific Region. Copenhagen: World Health Organization, 2020.

How does healthy ageing affect economic growth in Japan? The economics of healthy and active ageing series: new evidence for the Western Pacific Region. Copenhagen: World Health Organization, 2020.

How will population ageing affect health expenditure trends in Australia and what are the implications if people age in good health? The economics of healthy and active ageing series: new evidence for the Western Pacific Region. Copenhagen: World Health Organization, 2020.

How will population ageing affect health expenditure trends in Japan and what are the implications if people age in good health? The economics of healthy and active ageing series: new evidence for the Western Pacific Region.

Copenhagen: World Health Organization, 2020.

How will population ageing affect health expenditure trends in Mongolia and what are the implications if people age in good health? The economics of healthy and active ageing series: new evidence for the Western Pacific Region. Copenhagen: World Health Organization, 2020.

How will population ageing affect health expenditure trends in New Zealand and what are the implications if people age in good health? The economics of healthy and active ageing series: new evidence for the Western Pacific Region. Copenhagen: World Health Organization, 2020.

How will population ageing affect health expenditure trends in Republic of Korea and what are the implications if people age in good health? The economics of healthy and active ageing series: new evidence for the Western Pacific Region. Copenhagen: World Health Organization, 2020.

How will population ageing affect health expenditure trends in Viet Nam and what are the implications if people age in good health? The economics of healthy and active ageing series: new evidence for the Western Pacific Region. Copenhagen: World Health Organization, 2020.

WKC Policy Series and working papers

Bakx P, Schut E, Wouterse B. Price setting and contracting help to ensure equitable access in the Netherlands. <u>WKC</u> Policy Series on Long-Term Care No. 6. The Netherlands. August 2021.

Flores M. Increasing beneficiaries and the decline in informal care in the Spanish long-term care system for older persons. WKC Policy Series on Long-Term Care No. 7: Spain. August 2021.

Ikegami N. Long-term care insurance in Japan: expanding services, increasing costs and developing new forms of institutional care. WKC Policy Series on Long-Term Care No. 4: Japan. August 2021.

Kwon S. Long-term care in the Republic of Korea: overcoming coordination challenges between health and social services to achieve universal coverage. WKC Policy Series on Long-Term Care No. 5: Republic of Korea. August 2021.

Lorenzoni L. "Ageing in place": how Sweden provides and pays for universal and comprehensive long-term care for older persons. WKC Policy Series on Long-Term Care No. 8: Sweden. August 2021.

Lorenzoni L. A safety net that leaves large gaps in access to needed long-term care services in the United States of America (USA). WKC Policy Series on Long-Term Care No. 9: United States of America. August 2021.

Milstein R. Mueller M, Lorenzoni L. Germany's difficult balancing act: universality, consumer choice and quality long-term care for older persons. <u>WKC Policy Series on Long-Term Care No. 3: Germany.</u> August 2021.

Or Z, Penneau A. Long-term care in France: the loose connection between pricing, costs and quality with regional inequalities. <u>WKC Policy Series on Long-Term Care No. 2: France.</u> August, 2021.

Wise S, Woods M, van Gool K. Aged care in Australia: consumer choice and control within a highly regulated market-based system. <u>WKC Policy Series on Long-Term Care No. 1: Australia.</u> August 2021.

WKC Working papers

Barber SL, Lorenzoni L, Roubal T. Price setting for health services: a taxonomy. <u>Working Paper. WHO Centre for Health Development.</u> 22 June, 2021

Barber SL. Government initiatives to publish price and quality information. WKC working paper. Jan 2020. https://extranet.who.int/kobe_centre/sites/default/files/Priceandqualityinformation.pdf

Technical reports

Promoting healthy ageing in the Western Pacific Region: implications for health expenditure trends and economic growth. The economics of healthy and active ageing series: New evidence for the Western Pacific Region. WHO Centre for Health Development and the European Observatory for Health Systems and Policies. World Health Organization 2021.

Exploring available data and coordination mechanisms in Myanmar to Examine how Ageing and Older Adult Populations are included in Health and Social Services as part of Achieving UHC by 2030. University of Economics, Yangon, Myanmar. Dec 2020.

Global Simulator

Population Ageing financial Sustainability gap for Health systems (PASH) Simulator. https://eurohealthobservatory.who.int/themes/observatory-programmes/health-and-economy/population-ageing-financial-sustainability-gap-for-health-systems-simulator

Presentations

In-service inter professional training program for geriatric care. Seino K, Nakamura K, Siongco KL, Moncatar TJR, Canila C, Javier R, Lorenzo FM, Takano T. 79th Annual Meeting of Japanese Society of Public Health, October 2020, Kyoto, Japan, J Jpn Soc Public Health, 67 (10 suppl.), 2020.

Determinants of collaboration for elderly care in a low-resource context. Moncatar TJR, Nakamura K, Siongco KL, Seino K, Canila C, Javier R, Lorenzo FM, Takano T. 79th Annual Meeting of Japanese Society of Public Health, October 2020, Kyoto, Japan, J Jpn Soc Public Health, 67 (10 suppl.), 2020.

Improvement in attitudes toward collaboration in the Philippine healthcare setting. Siongco KLL, Nakamura K, Moncatar TJR, Canila C, Javier R, Lorenzo FM, Seino K, Takano T. 79th Annual Meeting of Japanese Society of Public Health, October 2020, Kyoto, Japan, J Jpn Soc Public Health, 67 (10 suppl.), 2020.

Hearing impairment and cognitive function among older adults in Viet Nam. Han TDT, Nakamura K, Seino K, Vo MTH, Vo VT, Takano T. 79th Annual Meeting of Japanese Society of Public Health, October 2020, Kyoto, Japan, J Jpn Soc Public Health, 67 (10 suppl.), 2020.

Association between living alone and fear of falling among Vietnamese elderly. Vo MTH, Nakamura K, Seino K, Han TDT, Vo VT, Takano T. 79th Annual Meeting of Japanese Society of Public Health, October 2020, Kyoto, Japan, J Jpn Soc Public Health, 67 (10 suppl.), 2020.

Health Emergency and Disaster Risk Management (Health EDRM)

Background

One of the three strategic priorities under the WHO's 13th General Programme of Work for 2019-23 is to ensure that one billion more people will be better protected from health emergencies. This priority aims to build and sustain resilient national, regional and global capacities, and to ensure that populations affected by acute and protracted emergencies have rapid access to essential life-saving health services. The WKC has contributed to the global movement to enhance scientific evidence to improve Health EDRM, as represented by the WHO Thematic Platform for Health EDRM Research Network (TPRN). Health needs have been highlighted in the Sendai Framework on Disaster Risk Reduction 2015-2030 (Sendai Framework), the resulting document of the 3rd UN World Conference on Disaster Risk Reduction, followed by WHO Health EDRM Framework 2019.

The WKC is uniquely placed to continuously engage with experts in Japan and globally who have extensive experience in prevention, preparedness, response and recovery from severe disasters. Based on the research gap analysis and recommendations from an expert meeting in Kobe in 2018, the 1st TPRN Core Group Meeting in Awaji in 2019, and the lessons and experience from Japan, WKC has selected several research areas to focus on during 2018-2026. In addition, WKC has sought to incorporate COVID-19 in response to the emerging research needs of Health EDRM in the context of COVID-19.

Key research areas

- 1. To address gaps and information needs in the research architecture to enable standardization and ethical issues.
- 2. To inform about the most appropriate format and key content for health data collection and management and enable greater standardization and comparative analysis of health impact across disaster prevention, preparedness, response and recovery.
- 3. To carry out research that supports evidence-based policy development enabling effective disaster response, with focus on a holistic approach to the health needs of survivors through adaptable health systems
- 4. To study the specific health needs of vulnerable sub-populations, including older adults.

Progress report 2020-21

Results from research completed in 2020-21

Based on the results of the Kobe Expert Meeting 2018, WKC published a call for proposals in 2019 for Health-EDRM research to address the identified research gaps and needs in four areas: health data management (Area 1), mental health and psychosocial support (Area 2), health needs of sub-populations and health literacy (Area 3), and health workforce development (Area 4). Four research projects below were selected and are currently being implemented. One of the four research projects (Area 3) was completed in January 2021.

(Area 3) A Scoping Review of the Impacts of Disasters and Health Adaptation on Vulnerable Populations in China, Viet Nam and Indonesia was completed by Griffith University Centre for Environment and Population Health in January 2021. The project aims to map existing studies on adaptation strategies addressing the health impacts of disasters, particularly for vulnerable populations, in China, Indonesia and Viet Nam. A total of 298 out of 10,139 papers were reviewed in full text, and the research team identified that very limited policy and programme for vulnerability management were implemented. This study identified the urgent needs of adaptation strategies to reduce the vulnerability for the populations most at risk. A journal paper is under development.

Research ongoing (2018-2022) and expected results

Three of the four research projects (Area 1, 2, 4) are ongoing.

(Area 1) Systematic review and implementation research for health data management before, during and after emergencies and disasters. This research is being carried out by Hiroshima University, University of Occupational and Environmental Health, the Johns Hopkins University, Hyogo Emergency Medical Centre, Kibi International University, Ministry of Health Mozambique, Japan DMAT Secretariat, and the WHO Emergency Medical Team (2020-2021). This project aims to establish a comprehensive evidence-based understanding of health data collection systems during and following emergencies and disasters through examining facilitators and barriers to implementation of standardized health data collection systems by conducting systematic review and case studies on the lessons learnt from disaster responses in Mozambique and Japan.

(Area 2) Determinants of Long-Term Mental Health Outcomes after Disasters and Health Emergencies: A systematic review and establishment of the Asia Pacific Disaster Mental Health Network, are being carried out by Curtin University, the Japan National Institute of Mental Health, the Hyogo Institute for Traumatic Stress, University of Melbourne, and Harvard University (2020-2021). The project aims to determine the risk and protective factors associated with long-term mental health trajectories in the years following disasters and health emergencies, as well as to assess the quality of monitoring and evaluation evidence in the field of disaster mental health research, in line with the Interagency Standing Committee (IASC) Common Monitoring and Evaluation Framework for Mental Health and Psychosocial Support in Emergency Settings. Through the research activity to achieve these goals, the Asia Pacific Disaster Mental Health Network was established and was introduced by a journal paper published in December 2020. The systematic review was completed in August and being summarized into a journal paper.

(Area 4) Health workforce development strategy in health-EDRM: evidence from literature review, case studies and expert consultations. This research is being carried out by The Chinese University of Hong Kong, Harvard University, Sichuan University, Tohoku University, University of Hyogo, University of Piemonte Orientale, and the University of the Philippines in Manila (2020-2021). The project aims to develop a Health EDRM health workforce development strategy for ministry of health to inform policy and practice across WHO regions. To synthesize the existing knowledge, a systematic review and twelve case study analysis are ongoing. A protocol paper and a case study paper in rural area of China were published in early 2021.

Based on the progress in conducting the four studies, WKC is working on establishing WHO Health EDRM Knowledge Hub, in collaboration with the principle investigators (PIs) of the four studies and global expert working groups for the four research areas. Four call for proposal to address the further research gaps in the four research areas will be published in late 2021 and early 2022. Along with the progress of these projects, WKC is organizing a technical working group to develop WHO Research Agenda on Health EDRM. Those projects are based on the discussion and agreement in the 2nd Core Group Meeting of the WHO Thematic Platform for Health EDRM Research Network (Health EDRM RN), held online in November 2020. The results of the meeting were summarized into a peer-reviewed journal paper in 2021. The meeting report is available on WKC website. WKC has been acting as the secretariat of the Health EDRM RN since 2019.

An ongoing activity of Health EDRM RN since 2019, the first web edition of the WHO Guidance on Research Methods for Health EDRM will be published in fall 2021. It will be revised in early 2022 by adding a chapter on how to use the Guidance in the context of COVID-19. A global dissemination project is being carried out by Evidence Aid, which will produce educational and training materials for each chapter including short chapter summaries, audio podcasts, video lectures and webinars. Dedicated webpages for Health EDRM research methods will be established with the produced dissemination materials. In addition, several universities have offered using the Guidance for their education and training for students and young professionals. An informal Japanese translation of the Guidance will be conducted in collaboration with Japanese Health EDRM experts. The Chinese University of Hong Kong will also produce an informal Chinese translation of the Guidance.

WKC also facilitates and contributes to studies about Health EDRM in the context of COVID-19. In 2020, based on the results of an online survey among Health EDRM RN participants and Core Group members, WKC published a call for proposals to address key research needs on Health EDRM in the context of COVID-19 including a whole-of-society approach and community resilience. Two projects were selected and launched in 2021.

The first project is **Systematically identifying and evaluating strategies for strengthening community resilience**, being carried out by **Baylor University**, **Hiroshima University**, **McLennan County Medical Education and Research Foundation**, **University of Hyogo**, **Robin Moore and Associates**, **Queensland University of Technology**, **Bangladesh Ministry of Health and Family Welfare**, **and University of Texas Southwestern Medical Center**. This project aims to develop priority actions for achieving long-lasting and sustainable strategies to reduce health risks of future emergencies. The research aims to generate evidence to support a "whole of society approach" in enhancing public health system resilience. The research brief is available on WKC website.

The second project is Experiences in health emergency disaster risk management using a whole of society approach in the context of the COVID-19 pandemic, being carried out by Hiroshima University, University of Occupational and Environmental Health, The Catholic University of Korea, Ritsumeikan Asia Pacific University, Mongolian National University of Medical Sciences, Johns Hopkins University, Universita del Piemonte Orientale, Thailand Ministry of Public Health, Japan National Hospital Organization Disaster Medical Center, and Yodogawa Christian Hospital. This project aims to study countries' experiences of health emergency and disaster risk management using a whole-of-society approach in the context of COVID-19 pandemic, through conducting a systematic review and case study analysis of cases in Japan, Korea, USA, Italy, Thailand, Iran and Mongolia.

In addition, a call for proposals on Research to address mental health issues in the context of COVID-19 – towards local policy recommendations for the Kansai Region, Japan was published in August (closing date 19 September). The call aims to identify vulnerable populations suffering from mental health problems;

- describe practical means in how to monitor and assess over time the mental health problems identified among these vulnerable populations;
- identify non-pharmacological innovations, approaches and interventions;
- and develop concrete tangible policy and practice recommendations for the Kansai region.

Publications

Books

World Health Organization (2021). WHO Guidance on Research Methods for Health Emergency and Disaster Risk Management. World Health Organization. https://extranet.who.int/kobe_centre/en/project-details/GUIDANCE

Journal articles

Kayano R, Nomura S, Abrahams J, Huda Q, Chan EYY, Murray V. Progress towards the Development of Research Agenda and the Launch of Knowledge Hub: The WHO Thematic Platform for Health Emergency and Disaster Risk Management Research Network (Health EDRM RN). International Journal of Environmental Research and Public Health. 2021; 18(9):4959. https://doi.org/10.3390/ijerph18094959

Nomura S, Kayano R, Egawa S, Harada N, Koido Y. Expected Scopes of Health Emergency and Disaster Risk Management (Health EDRM): Report on the Expert Workshop at the Annual Conference for the Japanese Association for Disaster Medicine 2020. International Journal of Environmental Research and Public Health. 2021; 18(9):4447. https://doi.org/10.3390/ijerph18094447

Newnham EA, Dzidic PL, Mergelsberg ELP, Guragain B, Chan EYY, Kim Y, Leaning J, Kayano R, Wright M, Kaththiriarachchi L, Kato H, Osawa T, Gibbs L. The Asia Pacific Disaster Mental Health Network: Setting a Mental Health Agenda for the Region. International Journal of Environmental Research and Public Health. 2020; 17(17):6144. https://doi.org/10.3390/ijerph17176144

Hung KKC, Mashino S, Chan EYY, MacDermot MK, Balsari S, Ciottone GR, Della Corte F, Dell'Aringa MF, Egawa S, Evio BD, Hart A, Hu H, Ishii T, Ragazzoni L, Sasaki H, Walline JH, Wong CS, Bhattarai HK, Dalal S, Kayano R, Abrahams J, Graham CA. Health Workforce Development in Health Emergency and Disaster Risk Management: The Need for Evidence-Based Recommendations. International Journal of Environmental Research and Public Health. 2021; 18(7):3382. https://doi.org/10.3390/ijerph18073382

Hung KKC, MacDermot MK, Chan EYY, Liu S, Huang Z, Wong CS, Walline JH, Graham CA. CCOUC Ethnic Minority Health Project: A Case Study for Health EDRM Initiatives to Improve Disaster Preparedness in a Rural Chinese Population. International Journal of Environmental Research and Public Health. 2021; 18(10):5322. https://doi.org/10.3390/ijerph18105322

Meeting reports

Report of the 2nd Health EDRM RN Core Group Meeting: https://extranet.who.int/kobe_centre/en/project-details/TPRN

Presentations

Health emergency and disaster risk management in the context of COVID-19. Ryoma K. Summer forum of Hyogo Disaster Risk Reduction Alliance, September 2020, Kobe, Japan (Hybrid).

COVID-19 and health emergency and disaster risk management research. Ryoma K. World Habitat Day Forum 2020, October 2020, Fukuoka, Japan (Hybrid)

Health emergency and disaster risk management research and COVID-19. Ryoma K. 40th Symposium of Japanese Association for Nursing Science, December 2020, Tokyo, Japan (Hybrid)

Health emergency and disaster risk management: key concepts and global research collaboration to improve the evidence base for better policy and programme. Ryoma K. UNITAR Women's Leadership Training Programme on Disaster Risk Reduction, January 2021, Hiroshima, Japan (Hybrid)

World situation on COVID-19 pandemic and actions to be taken. Ryoma K. One Health Forum Fukuoka 2021, January 2021, Fukuoka, Japan (Hybrid)

Health emergency and disaster risk management research progress and future WKC projects. Ryoma K. New Frontiers in Emergency and Disaster Care: Advancing Emergency Care in Greater China Symposium, April 2021, Hong Kong, China (Hybrid)

Health emergency and disaster risk management in the context of COVID-19. Ryoma K. Building back better after COVID-19: UNDRR event - Addressing cascading risks and systemic gaps for resilient peoples and economies, August 2021, Bangkok, Thailand (Hybrid).

Local Engagement: Our contribution to the community

Background

The WHO Kobe Centre (WKC) was established in 1995 following a WHO Executive Board Resolution and the Great Hanshin-Awaji Earthquake. WKC is a department of the WHO Headquarters and has a global mandate. At the same time, WKC seeks to contribute to the community where we live and work by sharing information and knowledge. As such, WKC has both a global and local role. As part of the local role, WKC established partnerships with Kansai-based research institutions and local governments to encourage collaboration towards common global health challenges. We also seek to better communicate and disseminate information about our research and other activities and strive to contribute to the local community.

Objectives

- 1. To share lessons learned and encourage collaboration across countries as they strive to attain similar goals under the commitments for UHC and the Sustainable Development Goals (SDGs).
- 2. To communicate and disseminate information about WKC's research activities.
- 3. To contribute to the community in Kobe and Hyogo prefecture for awareness-raising and health advocacy.

Mid-term review 2020

Results

In compliance with Article 5.1. of the Memorandum of Understanding (MoU) between the Kobe Group and WHO, a joint mid-term evaluation was carried out at the end of the first half of the current MoU's implementation period. In November 2020, WKC prepared an achievement report in line with the Kobe Group's "proposal of January 9, 2015." WKC issued an open call for proposals for an external evaluator, and Osaka University was selected to conduct the external evaluation during December 2020- February 2021. The external evaluation of WKC's efforts in the previous five years was conducted based on WKC's mid-term evaluation report and two rounds of interviews with the Kobe Group and WHO Kobe Centre, respectively.

The external evaluation made the following conclusions:

1. Strengthening research functions:

- WKC conducted joint research with more than 40 renowned domestic and overseas research institutions and published a total of more than 80 papers during the first half of this MoU period alone.
- WKC carried out numerous projects on local health issues including 'Ageing' and 'Health Emergencies', as
 well as several projects in collaboration with local partners including Kobe University, University of Hyogo
 and the Foundation for Biomedical Research and Innovation, Kobe.
- WKC organized 15 international meetings including the official side event at the 2016 G7 Kobe Health Ministers' Meeting.
- The large number of collaborative research projects, international conferences and research publications that WKC has produced with its limited number of staff is a great achievement that could only be accomplished by an international organization with linkages to global networks of experts.

2. Strengthening governance:

WKC has strengthened its governance including through an annual programme review by the Advisory
Committee and the implementation of an external evaluation in connection with the mid-term evaluation.
This is a considerable improvement compared to the first and second MoU periods.

• On the other hand, WKC obtained external funds which amounted to only 5% of the total budget during the first half of this MoU period and thus has yet to establish a self-sustaining financial base.

3. Strengthening local engagement:

- WKC promoted mutual understanding with the Kobe Group through annual and regular meetings with the WKC Cooperating Committee (JCC), and considerable improvement was observed in the third MoU period compared to the first and second periods.
- In addition to carrying out its regular work, WKC actively shared information on the COVID-19 pandemic including translating the latest scientific guidance and data from WHO and providing advice to the local administration.
- WKC's reconstruction of its official website, use of social media to inform the general public and regular organization of the WKC fora in Hyogo Prefecture are highly commendable.
- WKC's intern and volunteer programme contributes to local youth development, with 20-30% of the interns
 and volunteers coming from the local communities. Many lectures were also provided to local elementary,
 middle and high schools. Since 2016, WKC has co-organized the annual High School Forum with the Hyogo
 Prefecture Board of Education and Osaka University. These events have made a significant contribution to
 nurture global awareness among high school students in Hyogo Prefecture.

The external review team suggested considerations for the second half of the third MoU period include further strengthening collaboration with local and international research institutions; increase efforts to strengthen governance, improve transparency and establish a self-sustaining financial base for research; and further promote mutual understanding with the Kobe Group, enhance WKC's local visibility and ensure that research outcomes are disseminated to and benefit the local community.

Agreement for future efforts

The Kobe Group prepared a written opinion on the activities of WKC in the second half of the 3rd MOU period based on the WKC's mid-term evaluation report and the external evaluation report. After discussions between WKC and the Kobe Group, an agreement document for future efforts was drafted. The future efforts include:

1. Strengthening research functions

- A. Coordinate and cooperate with Hyogo Prefecture and Kobe City not only to share the research findings with researchers and experts, but also to make efforts to translate the research findings to benefit local citizens.
- B. Prepare research plans and research reports annually to visualize the progress of research activities. Also, consider setting indicators so that quantitative measurement and evaluation can be performed.
- C. Expand research on infectious diseases and depression, whose progress were not recognized well comparing to the research on ageing and healthy life expectancy. In particular, expand the research on health emergencies including response to emerging infectious diseases such as COVID-19.
- D. Following the Kobe Dementia Study, address new research projects that involve KBIC-related institutes and universities.
- E. Strive for mutual understanding and consensus building on research activities between the Kobe Group and WKC through the Programme Review Meeting and the Advisory Committee of WKC (ACWKC), and also at regular JCC meetings and other ad-hoc meetings among the WKC and JCC secretariat.

2. Strengthening governance

- A. Continue to strengthen and clarify governance.
- B. Continue to make efforts to obtain external funding.

3. Strengthening local engagement

- A. Continue assigning a responsible officer for local engagement/coordination in order to resolve any misunderstandings/misperceptions between the Kobe Group and WKC and to promote mutual understanding.
- B. Make efforts for more effective information dissemination to the general public during emerging infectious disease outbreaks such as COVID-19 by collaborating with Hyogo Prefecture and Kobe City, and to increase WKC's visibility and social presence.
- C. Develop and update the communication plan regularly and improve the WKC website to increase awareness of the Centre to carry out strategic communication activities.
- D. Enhance WKC's social presence by taking various opportunities and collaborating with Hyogo Prefecture and Kobe City to promote WKC's activities to the citizens.

WKC recognizes the high expectations that people currently have of WHO. WKC will work to strengthen its research function as an international research platform in Kobe utilizing the abundant experience that WKC has built up since its establishment. WKC will continue strengthening communication with the Kobe Group and improve its local engagement, and further make efforts to return the research outcomes to the local community.

Progress report 2020-21

Objective 1: To encourage collaborations across countries.

Joint research. The WKC continues to partner with local research institutions to jointly address common health challenges. Within each of the three research themes under the WKC Research Plan 2018-2026, we seek to identify the locally relevant challenge in the Kansai region and research partners. In such a way, lessons learned from the Kansai region form a part of our global research programme. WKC also strives to provide opportunities to integrate teams of researchers based in Kansai and international academia. This allows for strengthening ties and expanding WKC's network of research within the Kansai region, while maintaining a global mandate approach to research.

In 2020-21, for example, new projects were started that jointly support researchers from the Kansai region to conduct research with academics in other parts of the world. These include partnerships with the University of Hyogo, Hyogo Institute for Traumatic Stress, Kobe University, Konan University, Kyoto University, Kyoto Prefectural University of Medicine, Osaka University, Hyogo Emergency Medical Centre, Osaka Medical College, Nara Medical University and Wakayama Medical University. A detailed description of collaborative research is attached as Annex 1 (Annex 1 - Kansai collaboration table).

Secretariat for WHO Health Emergency and Disaster Risk Management (Health EDRM) Research Network (TPRN). WKC has played a key role in establishing the WHO Thematic Platform for Health Emergency and Disaster Risk Management Research Network (TPRN), consisting of international specialists as well as Kansai-based experts. WKC is serving as the Secretariat of this network, the first of its kind in the world. One of the key global collaborative activities through the network is the development of WHO Guidance on Research Methods for Health EDRM. Twelve experts from Japan are involved as co-authors to share the history and best practices of disaster risk reduction in Japan, including the experiences responding to the Great Hanshin Awaji Earthquake (1995) written by Kansai local researchers at the University of Hyogo and the Hyogo Institute for Traumatic Stress. WKC has organized three key meetings for the progress of TPRN activities in Hyogo and Kobe including the Kobe Expert Meeting on Health EDRM research needs at Asia Pacific Conference on Disaster Medicine 2018, the TPRN Core Group Meeting as well as the WKC Forum for Japanese experts in 2019 both on Awaji Island, and a workshop on Health EDRM research in Japan

context at the Congress of Japanese Association of Disaster Medicine 2020 in Kobe.

International visitors and meetings. During the ongoing COVID-19 pandemic, WKC staff have been working remotely and the office premises have been closed off to the public. Thus, during 2020-21, WKC has not been able to receive international visitors at the Centre or hold physical meetings. However, WKC shifted to online meetings and regularly meets with and consults international experts remotely and continues to virtually organize the annual Core Group Meeting of the WHO Thematic Platform for Health Emergency and Disaster Risk Management Research Network. The shift to online meetings in many instances allowed to reach a broader array of stakeholders and participants. In addition to the WKC fora, other notable online meetings included:

- November 2020. "The 2nd Core Group Meeting of WHO Thematic Platform for Health Emergency and Disaster Risk Management Research Network" was held online. Global and Kansai-based local experts participated in the meeting.
- November 2021 (TBC). "The 3rd Core Group Meeting of WHO Thematic Platform for Health Emergency and Disaster Risk Management Research Network" will be held online. Global and Kansai-based local experts will participate in the meeting.

Objective 2: To communicate and disseminate information about WKC's research activities.

The **WKC Fora** is an important means to communicate and disseminate WKC research as well as to contribute to the community in which we live. WKC is committed to organizing at least three fora per year. The participants may include academics and/or the public. In 2020/21 WKC organized 6 fora:

- **January 2020. "Alcohol awareness Forum".** In collaboration with Hyogo Prefectural Civic Centre, Hyogo Prefecture, and Japan MOHLW. 100 participants
- **February 2020. "High School Summit"** in cooperation with the Hyogo Prefectural Education Board and Osaka University 650 participants, mainly from high schools in Hyogo prefecture
- **February 2020. "Disaster medicine research"** in collaboration with the Japanese Society for Disaster Medicine & Hyogo Emergency Medical Centre 100 participants
- November 2020. "Nurses on the Frontline" was organized as an online forum in partnership with the Hyogo
 Nursing Association and involving nursing schools in the Kansai region to commemorate WHO's Year of the
 Nurse and Midwife.
- **February 2021. "High School Students Thinking Globally Day"** was organized in cooperation with the Hyogo Prefectural Education Board, Osaka University and high schools in Hyogo Prefecture for the 6th consecutive year. The meeting was held online for the first time due to COVID-19 impacts. WKC participated in a dialogue session with a JICA Kansai representative and answered questions from the students as part of WKC's contribution to local youth development. Over 200 students from 12 high schools across the prefecture participated in the online event.
- October 2021. "High school event on the side lines of the Regional Committee of the WHO Pacific Regional
 Office" was held in Himeji (Hybrid meeting style). Seven high school student teams gave presentations on
 four themes linking with school health and COVID-19. At the end of the forum, the students handed the
 "Himeji High School Declaration" to the WPRO representative, Himeji City Mayor and Hyogo Prefecture
 Governor.

WKC's 25th anniversary events. WKC commemorated its 25th anniversary in 2020-21. This was an opportunity to communicate and disseminate information about WKC's research activities to different audiences. The commemoration started with a special news article on the WKC website and social media activity around 22 August 2020, the day of the original MoU signing 25 years earlier. This was followed by a leaflet that summarized WKC's key local research and activities, specifically developed for the Hyogo/Kobe audience. Later in the year, articles about WKC's research activities were published in two Japanese journals widely circulated among Japanese public health researchers and practitioners in September and December 2020, respectively. In March 2021, around the date of the opening of the WKC office in 1996, official letters signed by the Director-General were sent to the four

representatives of the Kobe Group to express gratitude for their many years of continued support and to commit to further contributions to the local community. A special commemorative brochure highlighting WKC's local activities and contributions over the past 25 years was developed and sent widely across the country and overseas to WKC stakeholders and partners, along with commemorative items (notebook and eco-bag) marked with the logo of WKC's anniversary celebration. The leaflet is attached in **Annex 2 (Annex 2 - WKC 25th Anniversary leaflet**).

Website and social media. The website aims to provide wider access to its programme of work and ongoing research activities. Since 2018, WKC launched its redesigned bilingual website. The website now includes details in English and Japanese of each of the three research themes, each project, and local engagement activities. The website is complemented by a Twitter feed and a YouTube account. WKC works with communications experts to more broadly disseminate information about WKC's agenda through a wide range of media, including short news stories, project briefs, video interviews of researchers, and regular Tweets in both English and Japanese. This has resulted in increasing the readership to online activity and extending WKC's readership to new audiences both locally and globally.

The COVID-19 pandemic started in 2020. Since the 2nd quarter of 2020, WKC has significantly contributed to providing reliable technical and general public information (please see section related to Objective 3 below for additional details). The WKC website was expanded with a dedicated section on COVID-19, translations of WHO technical guidance into Japanese for use by local governments as well as private and public entities involved in implementing technical recommendations. The website also hosts messages and infographics for the general public in an effort to provide direct access to risk communication material to the general public, as well as showing WKC's contribution to the community. WKC believes that this helped provide accurate information to the public to help manage the COVID-19 pandemic.

The WKC twitter account was a very important tool in the dissemination of COVID-19 information that was science and evidence-based. This increased visibility has led to Twitter Japan to add WKC's account as a trusted resource for COVID-19 information to their dedicated COVID-19 channel. This increased visibility has also made WKC known across the Kansai region as well as other regions because of the reach that social media tools (such as Twitter) provide. In 2020, WKC started to publish social media animations and videos from the WHO series 'Science in 5' on its YouTube account as well. As a consequence, the YouTube audience has grown organically (more than 200 followers as of Sept. 2021), and WKC has created three playlists, two related to COVID-19, and one on the latest research on pricing. The overall increased traffic through Twitter and WKC's website benefits other information published by WKC on its research programme and research partners activities, by broadening its audience. A dedicated local engagement page grouping News stories in Japanese related to local activities has been created, which helps to increase visibility of WKC's research and community-driven activities (lectures for example). Overall, WKC believes that these activities contributed substantially to help manage the COVID-19 outbreak in the Kansai region and beyond.

This strategy has yielded visible results. Since April 2019, the Twitter and website activities have steadily increased and this has drawn more visitors to WKC's website, with approximately 60% of these users accessing the site in Japan. When campaigns have integrated the website, twitter and media, we also observed spikes in the number of visits and increased followers on social media, with Twitter followers growing to over 8000, major posts reaching 3 million views on Twitter and more than 1 million visitors to our website.

Communication plans to disseminate findings for each research project. For each research project, the WKC identifies how the results will be disseminated. This includes traditional journal articles, as well as initial and final research briefs in Japanese and English, updated website research descriptions, interviews with researchers, tweets and videos about specific research projects and investigators. Stronger linkages have been made with the local newspaper, the Kobe Shimbun, and local and national press clubs which receive media releases of important findings and events. WKC leveraged its increased visibility on social media and web due to the COVID-19 magnifying effect, to engage systematically with Twitter messaging to support communication around research results. Some 43 news stories in Japanese and 20 in English were published on WKC's website (a slight increase from 2020), and 400 tweets were made in both English and Japanese on WKC Twitter account.

Objective 3: To contribute to health awareness in the community.

Student lectures. Due to the COVID-19 pandemic, WKC has ceased hosting students at the Centre in 202-2021. However, WKC continues to provide lectures about WHO and WKC activities for students in primary schools, high schools, and universities, remotely. In 2020, WKC staff members gave 20 lectures to schools and academic faculties. In 2021, WKC has delivered or committed to 40 lectures, most of which are for local schools and universities.

Participation in local committees. WKC staff make every effort to contribute to local technical committees and meetings, to improve population health. In 2020-21, WKC participated in the following committees:

- External Advisory Board; Department of Global Health, Kyoto University (online)
- FBRI Health Care Strategy Committee (online)
- Health Creative City Kobe Promotion Committee
- Kobe Health Medical Strategy Meeting
- Hyogo Prefecture Council of Advisors on Influenza
- Hyogo Prefecture Communicable Diseases Response Consultation
- Hyogo/Kobe Expert Committee for Health Emergencies
- Hyogo Prefecture Expert Committee on COVID-19 response
- Kobe City Expert Meeting for Dementia Friendly City
- Kobe City Expert Meeting for Healthcare Service Development
- Kobe City Expert Meeting for Resilient City for Infectious Diseases
- Disaster Reduction Alliance Board Meeting
- International Recovery Platform (IRP) Steering Committee Meeting
- Kobe Quarantine Drill for Communicable Disease Control
- Osaka EXPO Planning Committee 2025 (online)

Participation in local events: WKC staff make every effort to contribute to local events in our community, and also events that took place outside of Kansai that gave WKC the opportunity to disseminate research findings or communicate information related to COVID-19. In 2020- 21, WKC participated in the following events:

2020

- Jan 22: DRA Forum 2020
- Jan 27: Alcohol Addiction Prevention Forum
- Jan 27 & 28: International Recovery Platform Annual Forum 2020
- Feb 20: Kobe City Inter-hospital Communication Network Meeting
- Mar 24: Asian Conference on Education and International Development 2020 (online)
- Aug 18: The First Healthy Cities Alliances Seminar (online)
- Sep 7: DRA Annual Meeting and Summer Forum
- Oct 5: World HABITAT Day 2020 (online)
- Nov 5: Hyogo Prefecture: Discussion session with practitioners on COVID-19
- Nov 9: Kobe City Assembly Committee for the Future City Development
- Nov 12: Radio Kansai Interview Recording
- Dec 21: Radio Kansai Meeting (to provide advice on COVID-19 advocacy campaign song)

2021

- Jan 6: UNITAR workshop on disaster risk reduction
- Jan 12: 8th Hyogo Prefectural Council for the Control of COVID-19
- Jan 18: Lecture for Higashinada High School
- Jan 22: International Recovery Forum 2021
- Jan 26: International Recovery Platform Annual Forum 2021

- Jan 27: Tokyo University of Foreign Studies
- Jan 30: 'One Health' International Forum (Fukuoka Prefecture)
- Feb 03: Lecture for Hyogo High School
- Feb 07: 64th Hyogo Medical Association Academic Seminar
- Feb 08: 3rd Kobe Health and Medical Strategic Meeting
- Feb 12: Hyogo Prefectural Assembly Standing Committee on Health and Welfare Research
- Mar 04: 9th Hyogo Prefectural Council for the Control of COVID-19
- Mar 05: Lecture for Nagata High School
- Mar 13: UNISC International Annual Conference
- Mar 25: AHWIN webinar on building dementia-friendly communities in Asia Pacific
- Mar 30: Kobe City Strategy Committee on health care service development support business
- Apr 25: Symposium on new frontiers in emergency and disaster care
- May 07: Lecture for Kobe University School of Medicine
- May 14: "Finding opportunity in disaster resilience and crises: COVID-19 and natural disasters" (online symposium organized by the Japan Agency for Gerontological Evaluation Study)
- May 27 & Jun 03: Lecture for Hiroshima University, Graduate School of Biomedical and Health Sciences
- Jun 10: Lecture for Kobe College
- Jun 14: Lecture for Nippon Medical School
- Jun 25: 10th Annual meeting of Japanese Society for Dementia Prevention
- Jul 09: Kobe City Study group on how to create a space resistant to infectious diseases in Sannomiya
- Jul 13: Health Creative City Kobe Promotion Committee Meeting
- Jul 14: Lecture for Naragakuen University
- Jul 15: Interview by Kwansei Gakuin Senri International High School
- Jul 19: 1st FBRI Strategic Committee
- Jul 28: 12th Hyogo Prefectural Council for the Control of COVID-19
- Aug 25: Lecture for UN Seminar
- Aug 26: Interview by Konan Girls' Junior and Senior High School
- Aug 27: Lecture for UNDRR, Regional Office for Asia and the Pacific
- Sep02: Lecture for Kobe University Graduate School of Health Sciences
- Sep 03: 2nd Kobe City Study group on how to create a space resistant to infectious diseases in Sannomiya
- Sep 03: DRA Delegate's meeting
- Sep 16: Lecture for Fukiai High School
- Sep 17: Tokyo Medical and Dental University
- Oct 13: Lecture for Kyoto University Graduate School of Medicine
- Oct (tbc): 38th Joint research meeting of the Hanshin block school lunch service facilities
- Nov 01: Lecture for Kobe City Silver College

Translation of WHO Disease Outbreak News. WKC translated the Global WHO Disease Outbreak News (DONs). This was done in close cooperation with the Kobe/Osaka/Kansai Airport quarantine offices and the Narita Airport quarantine office, in addition to the technical support of the Hyogo/Kobe expert committee on health emergencies. By end of 2019, 38 DONs were translated and posted on the Japan Ministry of Health Labour and Welfare website (www.forth.go.jp). Since 2020, DON translations have been replaced by translations of technical guidance related to COVID19.

Translation of WHO COVID Technical Guidance and public information. To respond to the needs of local policymakers as well as local citizens, WKC has provided relevant and accurate information on COVID-19 in Japanese since February 2020. A dedicated set of pages have been created on WKC website that presents the Japanese translation of the WHO global situation reports, WHO technical guidance, and information for the general public:

1) WHO Global Situation reports: daily update on the global transmission situation (e.g. dashboard, https://extranet.who.int/kobe_centre/ja/covid),

2) WHO technical guidance for health professionals (e.g. clinical management guideline, public health response guidance, https://extranet.who.int/kobe_centre/ja/covid/covid-technical)

- 3) General public information materials (e.g. infographics, educational video materials, https://extranet.who.int/kobe_centre/ja/covid/covid-public),
- 4) Q&A (https://extranet.who.int/kobe_centre/ja/covid/qa)

The statistics and Information are updated regularly, and this information shared with local and national stakeholders, and also tweeted to thousands of followers. The translation has been disseminated through WKC website and twitter and by WKC partners and followers. WKC has also contributed to the information sharing and technical advice for the related committee of Hyogo Prefecture and Kobe City. Since the pandemic started, eight WKC staff dedicate between a share of their time to the identification of relevant guidance and public information, translation and checking translations for accuracy, and communication and dissemination of information on the website and through twitter. In 2020, WKC has translated and disseminated more than 140 new and revised technical and public information guidance notes, and more than 70 additional documents have been translated and disseminated in 2021.

A list of the -- WHO technical guidance documents, and -- public information documents that have been translated is attached in Annex 3. (Annex 3 - List of WHO COVID-19 documents translated into Japanese and disseminated).

Strengthen communications locally. WKC and the Kobe Group have worked to strengthen their regular communications. WKC and the Kobe Group conducted their annual program review in July 2021 as an exchange of documents, to discuss progress made and planning for future research and local engagement. WKC and the JCC Secretariat also met regularly to review WKC progress. Monthly meetings were held to discuss local engagement activities and strengthen communications among other topics. The Kobe Group is also represented in the annual WKC Advisory Committee (ACWKC) meeting in November every year. In 2020, WKC and the Kobe Group initiated written-meetings and online meetings to ensure the health and safety of both parties. This modus operandi continued in 2021.

Proposed program for 2021-22 and ongoing activities

Objective 1: To encourage collaborations across countries.

Joint research. WKC will continue to expand on the successful approach of encouraging collaboration between Kansai based institutions and international researchers outside of Japan, for all research themes outlined in WKC's research plan. At present, direct research collaborations and engagement in meetings and technical events have expanded to at least 15 local academic institutes, including University of Hyogo, Himeji University, Kansai University of Social Welfare, Hyogo Emergency Medical Centre, Hyogo Institute for Traumatic Stress, Kobe University, Kobe City College of Nursing, Kobe Gakuin University, Konan University, Kyoto University, Shiga University of Medical Science, Osaka University, Shitennoji University, Setsunan University, and Nara Gakuen University.

Secretariat for WHO Thematic Platform for Health EDRM Research Network (TPRN). WKC seeks to build on ongoing activities in promoting research collaborations among local, national and international experts in Health EDRM. In 2021-22, WKC will create dedicated webpages for a knowledge hub on Health EDRM. The knowledge hub will provide a database of up-to-date research and evidence to share among TPRN members and the public for effective knowledge synthesis and dissemination that can translate to better evidence-based policies.

WKC will facilitate the development of the WHO Research Agenda on Health EDRM, including aspects of emergency response in the context of infectious disease outbreaks including the COVID pandemic. Working within this network, in 2022, WKC also plans to revise the research method guidance with additional chapters on COVID-19 related issues.

Objective 2: To communicate and disseminate information about WKC's research activities.

WKC will continue to organize at least three WKC Fora per year. The following are already planned for 2021-22:

- 30 October 2021: WPRO relevant event High School Global Health Forum
- 5 December 2021: WKC Forum on Mental health
- 11 February 2022: Annual high school students forum co-organized with the Hyogo Board of Education with the cooperation of Kobe University

In addition, further efforts will be made to continue to strengthen WKC communication through its **website and social media account**s to better understand the different needs of the local audience in our community, as well as the global audience. Recognizing that many people access the site from cell phones, we are working to improve the user interface, and to increase our social media presence on Twitter and YouTube.

Communications plan for each research project. WKC staff continues to work with communications experts and has adopted tailored dissemination approaches for its research projects. This includes projects briefs updated at the beginning and end of the project, social media and web messaging about research results and feature stories about research collaborators in video interviews or social media clippings. The communication plan provides for a minimal set of actions for each research initiative (project brief, news article, and tweets of research result) as well as optional components actionable by WKC to highlight specific work (twitter storm campaign, webinars, media engagement, etc.). In 2022, WKC will continue to implement and integrate its communication plan into each project cycle to ensure greater visibility and dissemination.

Objective 3: To contribute to health awareness in the community.

WKC will continue to strengthen its ties to the community by participating in technical committees and attending meetings in Hyogo/Kobe as listed previously. WKC will also seek to continually improve communications with the Kobe Group to ensure mutual understanding and support.

Continued translation and dissemination of COVID-19 technical guidance and public information. WKC will continue to make specific efforts to translate and disseminate information on COVID19, involving staff effort, translation for technical and general public guidance, social media and media engagement. WKC will make stronger efforts to increase its capacity to manage this work, including streamlining the work by selecting key relevant guidance for translation and better coordinating the translation and dissemination tasks. WKC will also make further efforts to effectively disseminate this information locally and promote sharing information in collaboration with Hyogo Prefecture and Kobe City.

School lectures. School lectures are continuing in 2021-22, based on continuous ad-hoc requests from local primary and secondary schools and universities. WKC expects to provide mostly online lectures in the form of webinars.

Strengthen communications locally. WKC is routinely monitoring progress and considering new opportunities for local engagement. Through this process, we will work together with the Kobe Group and other stakeholders to identify common areas of interest. Through these discussions, WKC plans to expand on its local engagement activities.