

Humanistic burden pre- and post- COVID-19 on caregivers of cancer patients in Japan and China: A NHWS survey

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Introduction

- The COVID-19 outbreak has caused substantial disruptions in various daily life aspects regardless of patients' or caregivers.
- The impact of COVID-19 on Health-related Quality of Life (HRQoL) of cancer patients is substantial. However, attention on the impact on caregivers of cancer patients remains limited.

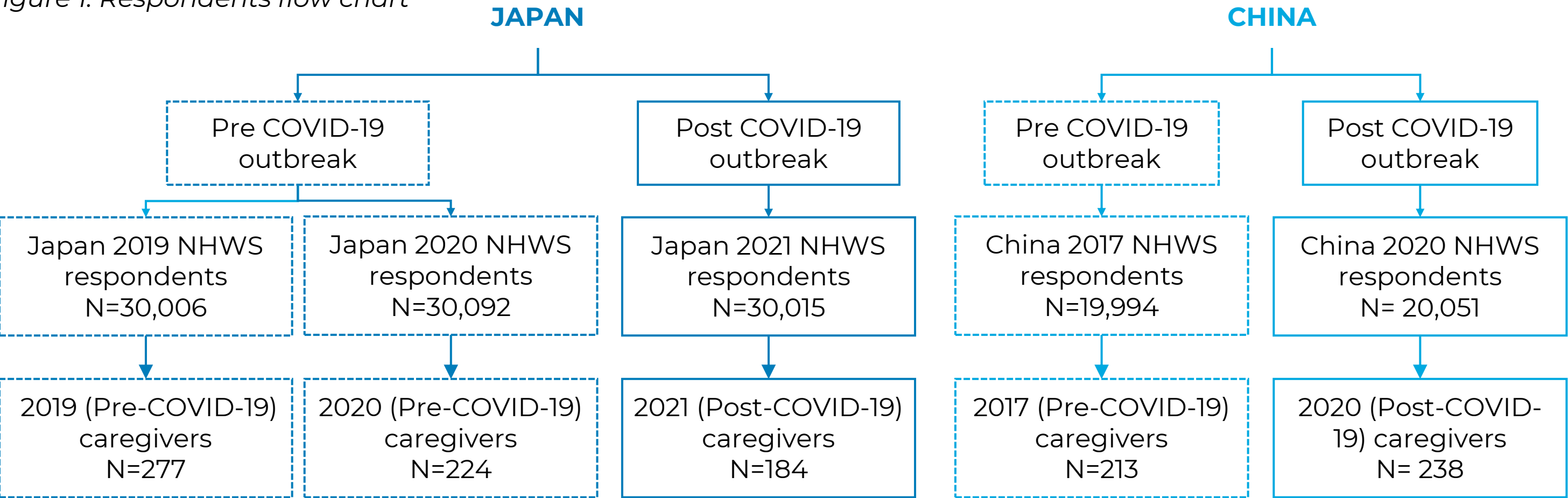
Objective

- To assess the humanistic burden of caregivers of cancer patients in Japan and China pre- and post-COVID-19 outbreak

Methods

- Using existing data from the internet-based National Health and Wellness Survey (NHWS) from Japan and China.
- Inclusion criteria of caregivers: (a) aged ≥18 years; (b) self-reported caring for patients diagnosed with any type of cancers (solid / hematologic)

Figure 1. Respondents flow chart



Results

Table 1. Demographics and health characteristics of caregivers during pre- vs. post COVID-19 outbreak

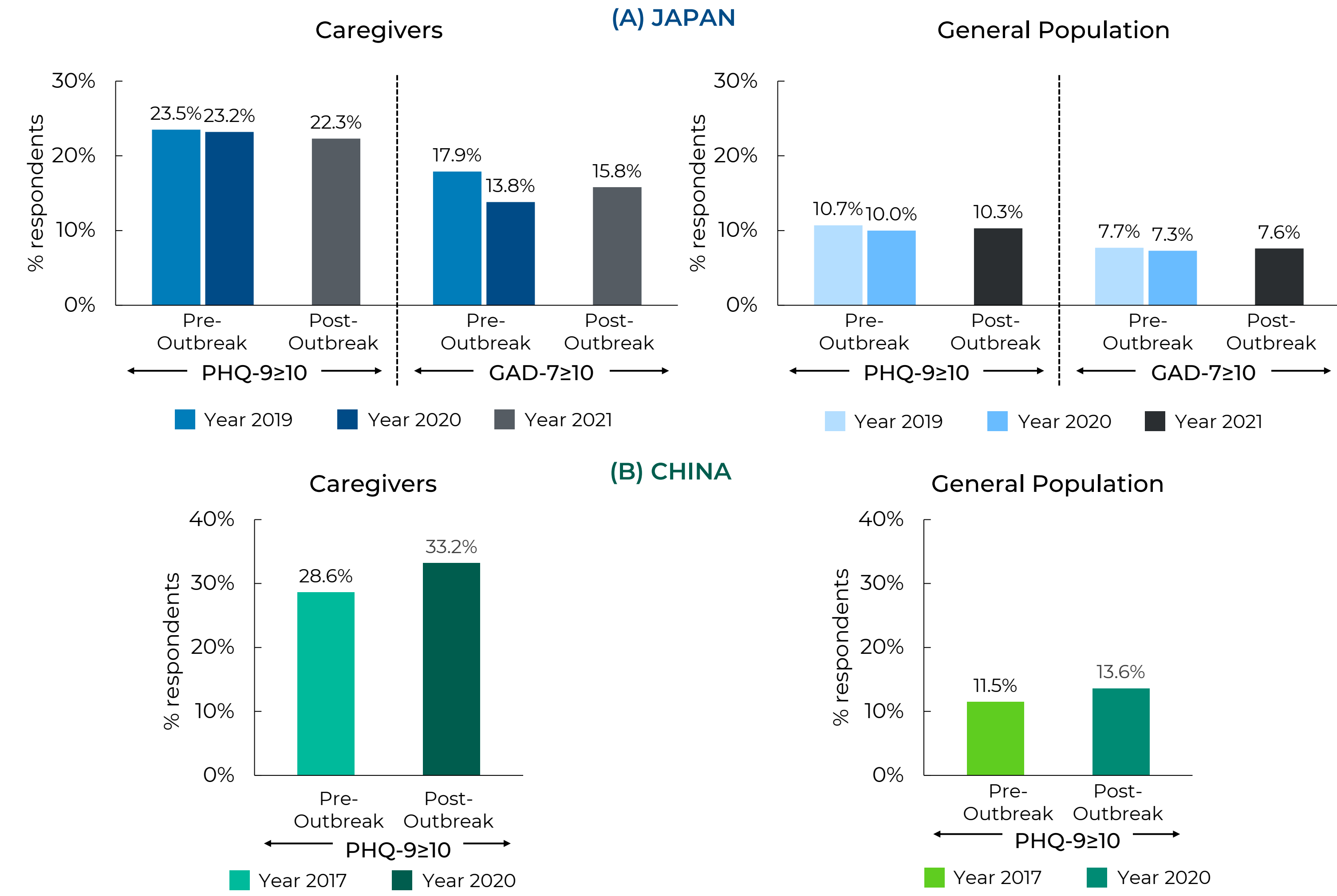
Caregivers COVID-19 Outbreak Year of NHWS		Japan			China	
		Pre-		Post-	Pre-	Post-
		2019	2020	2021	2017	2020
Age (years)	<30	16.6%	12.1%	15.8%	24.9%	21.8%
	30-39	14.1%	13.8%	7.6%	21.1%	25.6%
	40-49	16.6%	17.4%	16.8%	22.1%	15.1%
	50-59	18.1%	14.3%	16.8%	19.2%	20.2%
	≥60	34.7%	42.4%	42.9%	12.7%	17.2%
Sex	Male	45.1%	46.9%	51.6%	54.0%	50.0%
	Female	54.9%	53.1%	48.4%	46.0%	50.0%
Education level	University degree	45.1%	52.2%	48.4%	66.7%	58.4%
Employment status	Not employed	39.0%	44.2%	41.3%	17.4%	26.5%
Smoking status	Never	46.6%	53.6%	50.0%	59.2%	54.2%
	Former	25.3%	22.8%	27.7%	8.5%	11.3%
	Currently smoking	28.2%	23.7%	22.3%	32.4%	34.5%
Alcohol use per week	≤once	60.3%	62.5%	55.4%	66.7%	68.9%
	≥2-3 times	39.7%	37.5%	44.6%	33.3%	31.1%
Exercise frequency in the past 30 Days	0-11 times	77.3%	72.8%	71.7%	76.5%	63.4%
	≥12 times	22.7%	27.2%	28.3%	23.5%	36.6%

Overall, the humanistic burden of caregivers (mental burden, HRQoL, and WPAI) were higher than the general population (Figures 2-4). While COVID-19 outbreak appeared to have minimal impact on caregivers' burden, some differences were observed:

- MCS was increased among caregivers in China (Figure 3)
- Absenteeism was lower in Japan post-COVID-19 outbreak (Figure 4)

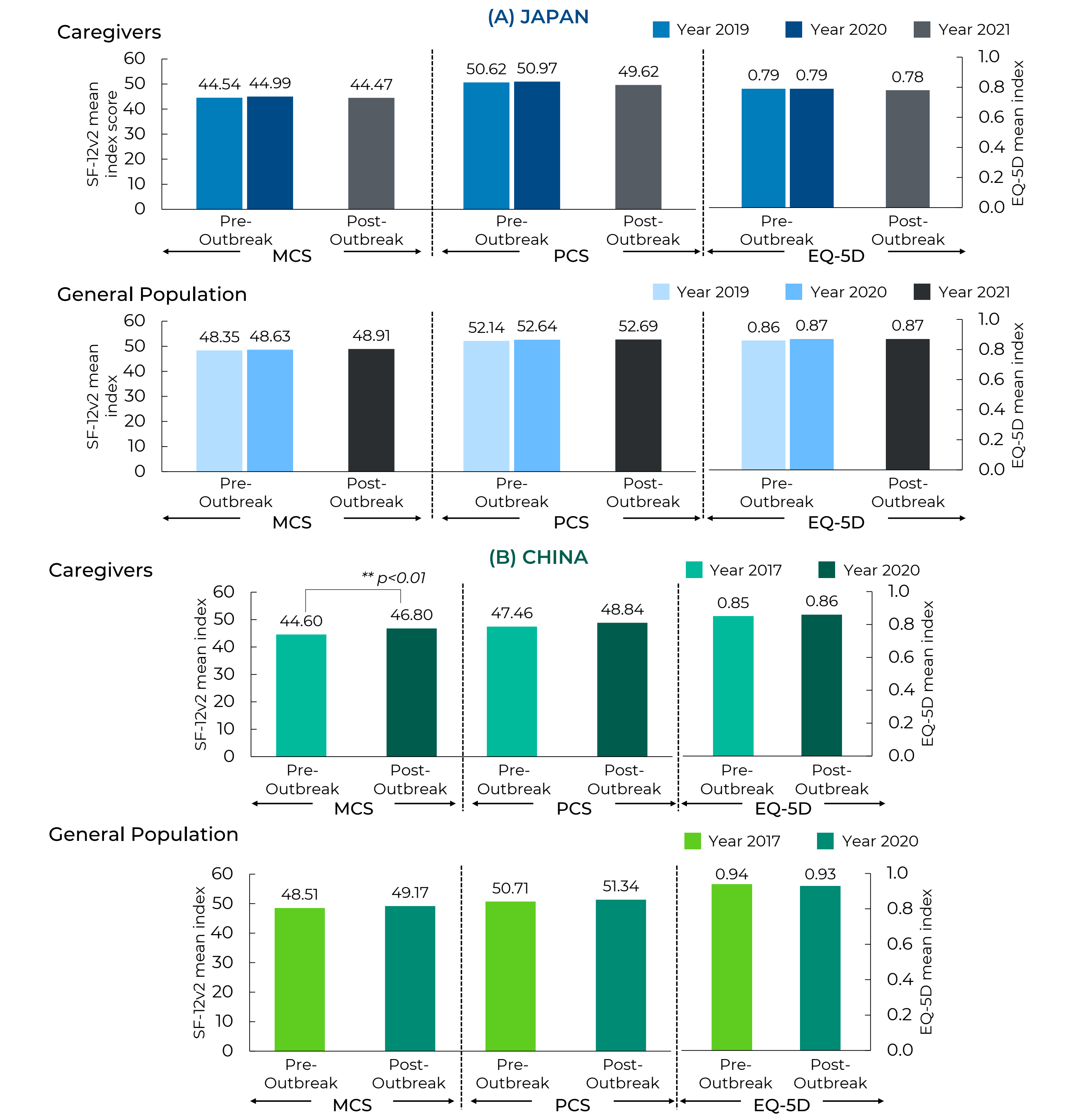
Mental burden

Figure 2. Mental burden of caregivers and general population in (A) Japan and (B) China in terms of depressive (Patient Health Questionnaire-9 [PHQ-9]≥10) and anxiety (Generalized Anxiety Disorder, GAD-7≥10) symptoms.



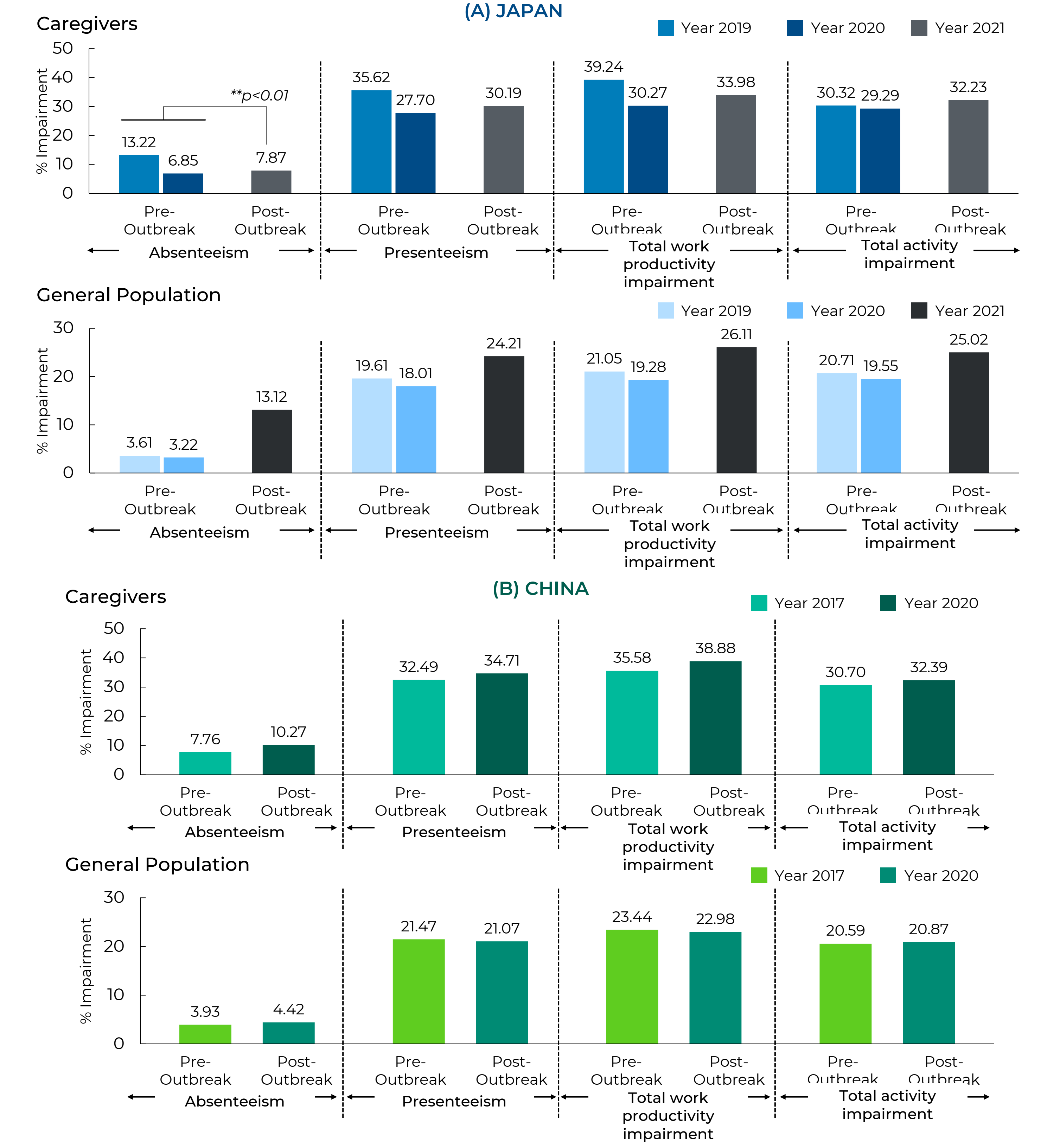
Health-related Quality of life (HRQoL)

Figure 2. Health-related quality of life (HRQoL) of caregivers and general population in (A) Japan and (B) China in terms of mental component summary (MCS), physical component summary (PCS) and EQ-5D health state.



Work productivity and activity impairment

Figure 4. Work productivity and activity impairment (WPAI) among caregivers and general population in (A) Japan and (B) China.



Conclusion

- The humanistic burden of caregivers in Japan and China remained consistently higher than the general population regardless of COVID-19
- This study indicated that changes in lifestyle under COVID-19 (e.g., flexible work-from-home arrangements) could potentially alleviate the humanistic burden for caregivers'