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In Reply to the Letter to the Editor Regarding "The COVID-19 Pandemic and Global Neurosurgery: The Situation in Japan and the Philippines"



LETTER:

We thank the editors for the opportunity of this reply to the Letter to the Editor by Maiguel-Lapeira et al. We thank and take delight in the authors for their interest in our perspective. We wish to phenomenologically build on their perspective and weave their concern for research into the goals of global neurosurgery as a whole.

"WAKON-YOUSAI" AND "BAYANIHAN"

We concur with the observations of Maiguel-Lapeira et al. that low-to middle-income countries (LMICs) have fewer resources and lack priority toward investments in science and technologyrelated research. State-sponsored or publicly financed research machinery is commonplace in high-income countries (HICs), where a mixture of deliberate policies and surplus resources in the field of public health, for example, establishes robust investments in basic science and impactful clinical research.^{2,3} Universityrelated and even private funding also provide the enabling environment for the ease of doing research in resource-abundant settings.4 We argue that this perpetuates a productive and virtuous cycle often seen in developed countries wherein their medical communities generally become the scientific thought leaders, whereas in developing countries, the health professionals get mired in "running fast just to keep pace" with the gargantuan task of providing greater access to care for their socioeconomically disadvantaged catchment populations. We, authors from both Japan and the Philippines, do experience this stark contrast, being neurosurgeons who are involved in both research work and the care of patients. And yet we think that the time is ripe for the pivot to the Japanese adage of "Wakonyōsai," roughly translated as "Japanese spirit with Western learning"—which in a manner of speaking would be to "think globally and act locally." As the global neurosurgery movement has quite intentionally facilitated, meaningful research can come from anywhere in the world—data on traumatic brain injury in LMICs are now perceived to be important,⁵ while interest on the inquiry into the management of traumatic brain injury in lowresource settings has now gained traction.6-

A particular trait among citizens in rural Philippines would be to help each other out as their neighboring family literally transfers a house to a different location (Figure 1). Interestingly also, the derivative word "Bayani" means "hero," whereas its root word "Bayan" means the "local community." This so-called "Bayanihan" has evolved in contemporary times as a thoughtful concern for others that would translate into action. We believe the time is also right for the Filipino "Bayanihan" spirit to be employed as all neurosurgeons from HICs and LMICs alike endeavor to build collaborative ties in thought and in action, for research and other pursuits.

THE ROLE OF MULTIDISCIPLINARY RESEARCH IN AID OF "GLOBAL NEUROSURGERY"

We recapitulate the message of Andrews⁹ that it is essential to widen our attention to include issues far beyond the

neurosurgical operating room, especially when we are now becoming cognizant that, indeed, certain issues do affect the care of our patients in ways both subtle and profound. Observing how societies perceive and frame certain issues, we ask the readers' indulgence in our bringing up of the example of climate change as a global issue. The global community is now becoming increasingly aware about how climate change is affecting the world at large, that some proponents would like to coin climate change as more of a "climate crisis." The new label is hoped to reflect the urgency that our society ought to act upon, with various sectors of our world order pitching in efforts to address the issue. Governments and multilateral organizations have ramped up international agreements that would provide the framework for incremental changes among the divergent interests of its member-states. The economic and financial sectors that include asset-management, insurance, and banking corporations have awaken to "green investing" and purposefully targeted investments into sustainable business ventures, away from non-renewable energy industries.11 The medical research community even has a contribution to the solutionestablishing the research agenda for the so-called "planetary health" that serves to build the evidence base for the intersect of human health and the sustainable living of our civilization. 12,13

But we digress. The inequities in the delivery of neurosurgical care the world over should be seen as akin to a similar crisis of our times, 14 and one could even go as far as to perceive it as a scandal. When a significant proportion of the global population cannot receive proper neurosurgical treatment because of various reasons that have been elaborated in the literature—among others: that many patients could not afford it, that there are so few of us surgeons who operate on the brain, or that the current ways of how countries have structured their health systems are not in the best interest of our patients with resource-intensive illnesses of the nervous system—then we argue that it is partly the failing of our profession. Indeed, solutions can come from "beyond the neurosurgical operating room"—that multidisciplinary engagement is the key to swing the pendulum of global neurosurgery literature away from belaboring the problems and instead into the direction of formulating solutions. In a manner analogous to how our society tackles the climate crisis, perhaps we neurosurgeons also ought to align our research agenda not only in terms of improving the technical aspects of the care we provide our patients but also inquiring into the systems-level factors at the outset of our field that nonetheless matter to the day-to-day management of our patients. Can we work to become more outspoken about our perspective as clinicians on how the socioeconomic conditions of our patients affect their outcomes or their survival? Might a responsive health financing be the solution to the availability and accessibility of neurosurgical care? Is there room for us to channel the creativity and innovativeness of neurosurgery as a field into the research craft of evidence-building that would inform policy and further the work of advocacy?

This time more than ever, we need the "Wakon-yōsai" and the "Bayanihan" spirit with our medical and neurosurgical colleagues beyond the silos of our own institutions and onto the greater community of our country and global society—where the experience of the 'other' may broaden our own perspectives—that the



Figure 1. The Filipino Bayanihan spirit: volunteering to help out the transfer to a new location of a neighbor's house. (This file is licensed under the Creative

Commons Attribution-Share Alike 3.0 Unported license. Source: https://commons.wikimedia.org/wiki/File:Bayanihan_1.JPG

one from an LMIC can aspire to more realistically reach and work toward a better state for his or her catchment of patients, and that the one from a HIC might be attuned to the needs of the developing world. We also need to build bridges with our colleagues from other learned professions to bring to bear their perspectives into imagining a better future for our ever-vulnerable patients throughout the world.

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