International Journal of General Medicine

Dovepress
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EXPERT OPINION

Standardizing Generalist Definitions to Improve Evidence in General Medicine: Addressing Diverse Interpretations and Lack of Consistency

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Purpose: There has been growing interest in generalists in Japan in recent years. However, due to the diverse use of the term "generalist", the specific roles of these physicians remain ambiguous. Consequently, the target population for research on generalists is unclear, making it challenging to conduct studies within the generalist practice framework. Therefore, a literature search was conducted to examine how generalists are defined and classified in research worldwide.

Methods: We conducted a literature search that focused exclusively on articles written in English and used keywords related to generalists, general medicine (GM), primary care, and family medicine. Based on the results, six physicians working in GM reviewed the findings and discussed the identified issues and their potential solutions.

Results: The definition of generalists in studies targeting GM, family medicine, and primary care conducted worldwide, including Japan, varies. Generalists exhibit diverse roles even within university hospitals in Japan. No studies provide a precise categorization or definition of generalists based on specific medical practices or roles, except for hospitalists, who are primarily involved in inpatient management in the United States.

Conclusion: The definition of GM was unclear based on the results of the literature search, and the lack of uniformity in backgrounds has rendered the target population unclear. Consequently, in healthcare settings where medical systems vary by country or region, evidence from studies targeting generalists cannot readily apply to actual practice. Clarifying generalists through an explicit definition based on clinical practice will allow for a more precise target population for research on generalists and enable the accumulation of evidence related to well-defined groups of generalists, contributing to the advancement of GM. Therefore, future research is required to develop new indicators to precisely classify and define generalists.

Keywords: generalist, general medicine, definition, hospitalist

Introduction

The aging population and rising healthcare costs in Japan have heightened interest in generalists in recent years. However, the diverse nature of the roles performed by generalists poses a challenge in understanding their functions, not only for the general public but also for healthcare professionals.[1,2] The Ministry of Health, Labour and Welfare defines Japanese generalists as physicians with comprehensive diagnostic skills. Unlike organ-specific specialists, generalists cover a range of patient needs, addressing both diseases and patient backgrounds. They are characterized by their ability to adapt to varying requirements based on the settings.[3,4] In Japan, general medicine (GM) encompasses family medicine (FM),[5] hospital medicine (HM), and primary care (PC). Various academic societies delineate the roles expected of professionals, such as family physicians,[6] hospitalists,[7] and primary care physicians, within their respective

Received: 13 March 2024
Accepted: 23 June 2024
Published: 3 July 2024

domains,[8] resulting in some overlap.[9] Globally, the term generalist is used synonymously with physicians practicing in non-specialized fields, specifically those in general internal medicine, such as hospitalists, family physicians, and primary care physicians. These professionals may have diverse backgrounds, including completion of specialized training in GM or FM, completion of internal medicine residency programs with a focus on general internal medicine (GIM) or specific subspecialties, or completion of surgical residency programs. The term "generalist" encompasses a highly diverse group. The lack of clear distinctions in the healthcare system between primary care clinics and hospital functions makes it challenging to form a clear image, especially in Japan, compared to that in other countries.[10] Consequently, the target population for research on generalists is unclear, making it difficult to conduct studies within the generalist practice framework. Therefore, considering the unclear definition of generalists, we conducted a literature search to explore how generalists are defined and classified in research. Subsequently, to clarify the research questions to be addressed in the future, experts interpreted and discussed the literature search results. Finally, as part of their expert opinion, they presented a statement.

Materials and Methods

A literature search of PubMed was conducted using a combination of keywords including "generalist", "family physician", "family medicine", "primary care", "hospitalist", "Japan", "definition", and "categorize". The keywords were used in combination or modified based on previous reviews on GM and FM.[11] All included studies were published in English; those published in other languages were excluded from the study.

This study aimed to understand how GM and FM are defined in studies targeting these fields and to find studies that clearly define generalists. One physician performed the literature search, while six physicians working in GM reviewed the findings. Subsequently, discussions were held regarding the identified issues and potential solutions.

Results

The results of the literature search are presented here. The definition of generalist varied in studies targeting GM, FM, and PC from several countries worldwide, including Japan. Definitions included physicians providing initial patient care,[12–16] those without organ-specific specialization,[17] those who completed specific certifications or training in FM or GM,[11,18–21] and physicians registered or affiliated with specific countries or regions.[22–28] Several studies focused on physicians affiliated with particular databases or organizations.[22–28] A survey conducted in Japan defined generalists as those belonging to the Hospital General Medicine Society and affiliated with university hospitals, handling outpatient care (48.1–53.6%), inpatient care (46.4–51.9%), and emergency care (15.9%).[3] Background diversity was evident even among generalists affiliated with the same society.[3] In the United States, hospitalists are defined as those primarily managing inpatient care.[29–32] However, no other studies provided a precise categorization or definition of generalist based on specific medical practices or roles.

Discussion

Various studies regarding generalists have been published. However, the definitions of generalists in each study (such as hospitalists, family physicians, and primary care physicians) are diverse, and the lack of uniformity in backgrounds has rendered the target population unclear. The lack of consistency in the generalists included in previous studies has led to an ambiguous target population. Consequently, in healthcare settings where medical systems vary by country or region, evidence from studies targeting generalists cannot readily apply to actual practices. Moreover, studies providing a standardized definition based on specific medical practices, namely clinical practice, have not been conducted for generalists, a term encompassing diverse meanings.

Global research revealed that generalists exhibit diverse subspecialty qualifications and training backgrounds. Even within hospitals of similar size, there are variations in actual clinical practices, leading to an unclear delineation of the target population for research. In Japan, physicians considered generalists hold qualifications in several areas, including FM, HM, and home medical care. Furthermore, as clinical practices vary based on the needs of the local community,[9] the roles expected of generalists differ depending on their work location. Therefore, the GM field in Japan is very diverse, and generalists assume diverse roles based on their workplace.

If classifications and definitions based on clinical practice can be established for homogeneous groups, it would be possible to accumulate evidence with a clear delineation of the target population, potentially contributing to the advancement of GM. One example is the emergence of hospitalists in the United States in 1996.[32] Hospitalists specialize in providing comprehensive medical care for inpatients,[29] and evidence of the benefits of hospitalists, such as cost reduction and improvement in the quality of care, have been reported.[33–35] Physicians working as hospitalists have diverse backgrounds, including those in FM, GM, GIM, and specialized organ-specific internal medicine departments.[36] Hospitalists function as generalists in inpatient care.[29,32] Defining generalists as hospitalists, family physicians, and primary care physicians based on core competencies is crucial. However, there is potential for meaningful research targeting generalists by defining homogeneous groups through their actual roles, such as inpatient care in hospitals, as observed in the case of hospitalists. Such a definition could clarify the target population and facilitate significant studies regarding generalists. Additionally, amidst the global aging trend accompanying advancements in healthcare, evidence from Japan, which has already entered a super-aging society, may become globally valuable.[37] While understanding Japanese generalists may be challenging due to their diverse nature, clarifying the definition of generalists may make Japanese evidence more accessible and applicable internationally.

This study had some limitations. First, the literature search conducted was not systematic. Second, the paper represents expert opinion, necessitating further research to confirm the need for the categorization of GM.

Conclusion

The definition of GM was unclear from the results of the literature search. A clear definition of generalists based on clinical practice will allow the identification of a precise target population for research on generalists. This clarification will allow for the accumulation of evidence related to well-defined groups of generalists and contribute to the advancement of GM. Therefore, future research is necessary to develop new indicators for the precise classification and definition of generalists.

Acknowledgments

We would like to thank Editage for English language editing.

Author Contributions

All authors contributed significantly to the work reported from the concept and design to the execution, data collection, analysis, and interpretation. They participated in drafting, revising, or critically reviewing the article, approved the final version to be published, and agreed on the journal to which the article has been submitted. Furthermore, all the authors are committed to being accountable for all aspects of the work.

Funding

There is no funding to report.

Disclosure

The authors declare no conflicts of interest related to this work.

References

1. Otsuka Y, Obika M, Otsuka F. Inconsistency of the "Sogo-Shinryo" department in Japanese hospitals. *J Gen Fam Med*. 2022;23(3):201–202.
2. Tsunoda H, Kuroda K. Inconsistency in English translation of our generalist specialty "Sogo-Shinryo" among university hospitals in Japan. *J Gen Fam Med*. 2021;23(3):199–200. doi:10.1002/jgf2.514
3. Miyagami T, Yamada T, Kanzawa Y, et al. Large-scale observational study on the current status and challenges of general medicine in Japan: job description and required skills. *Int J Gen Med*. 2022;15:975–984. doi:10.2147/IJGM.S336828
4. Ministry of Health. Labour and Welfare. Japanese. Available from: https://www.mhlw.go.jp/stf/shingi/2r985200000300ju-att/2r985200000300lb.pdf. Accessed February 16, 2024.
5. Japanese Medical Specialty Board. Standards for the development of general practice specialty training programs. Japanese. Available from: https://jmsb.or.jp/wp-content/uploads/2020/12/comprehensive_20201120.pdf. Accessed February 16, 2024.

6. Japan Primary Care Association [homepage on the Internet] competency. New family medicine specialist system. Japanese. Available from: https://www.shin-kateiiryo.primary-care.or.jp/competency. Accessed February 16, 2024.
7. Japanese Society of Hospital General Medicine What is the fellow of hospital general medicine? Japanese. Available from: http://hgm-japan.com/process04_2. Accessed February 16, 2024.
8. Japan Primary Care Association. What is primary care? Japanese. Available from: https://www.primarycare-japan.com/primarycare.htm. Accessed February 16, 2024.
9. Yokota Y, Watari T. Various perspectives of "General Medicine" in Japan-Respect for and cooperation with each other as the same "General Medicine Physicians". *J Gen Fam Med*. 2021;22(6):314–315. doi:10.1002/jgf2.500
10. Kato D, Ryu H, Matsumoto T, et al. Building primary care in Japan: literature review. *J Gen Fam Med*. 2019;20(5):170–179. doi:10.1002/jgf2.252
11. Diep AM, Thoppe HS, Yang A, Agnani AS, Phillips WR. Accuracy of reporting primary care specialty status in medical research. *J Am Board Fam Med*. 2019;32(6):941–943. doi:10.3122/jabfm.2019.06.190141
12. Irvine A, van der Pol M, Phimister E. A comparison of professional and private time preferences of General Practitioners. *Soc Sci Med*. 2019;222:256–264. doi:10.1016/j.socscimed.2019.01.014
13. Peurois M, Chopin M, Texier-Legendre G, et al. To which non-physician health professionals do French general practitioners refer their patients to and what factors are associated with these referrals? Secondary analysis of the French national cross-sectional ECOGEN study. *BMC Health Serv Res*. 2022;22(1):25. doi:10.1186/s12913-021-07285-4
14. Hansen RP, Vedsted P, Sokolowski I, Søndergaard J, Olesen F. General practitioner characteristics and delay in cancer diagnosis. a population-based cohort study. *BMC Fam Pract*. 2011;12:100. doi:10.1186/1471-2296-12-100
15. Slatman S, Mossink A, Jansen D, et al. Factors used by general practitioners for referring patients with chronic musculoskeletal pain: a qualitative study. *BMC Prim Care*. 2022;23(1):126. doi:10.1186/s12875-022-01743-6
16. Bowie AC, Tadrous M, Thiruchelvam D, et al. A comparison of family physician and dermatologist topical corticosteroid prescriptions: a population-based cross-sectional study. *J Am Acad Dermatol*. 2023;88(6):1291–1299. doi:10.1016/j.jaad.2023.01.036
17. Edwards ST, Mafi JN, Landon BE. Trends and quality of care in outpatient visits to generalist and specialist physicians delivering primary care in the United States, 1997-2010. *J Gen Intern Med*. 2014;29(6):947–955. doi:10.1007/s11606-014-2808-y
18. Sargent L, Taylor J, Lowe J. Barriers and facilitators to general practitioners participating in implementation research: a mixed methods systematic review protocol. *JBI Evid Synth*. 2021;19(6):1354–1361. doi:10.11124/JBIES-20-00187
19. Liu Y, Chen C, Jin G, et al. Reasons for encounter and health problems managed by general practitioners in the rural areas of Beijing, China: a cross-sectional study. *PLoS One*. 2017;12(12):e0190036. doi:10.1371/journal.pone.0190036
20. Ribeiro JF, Baptista S, Pinto M, et al. Portuguese family physicians' perceptions on pain management-a qualitative study protocol. *Int J Environ Res Public Health*. 2022;19(22):14792. doi:10.3390/ijerph192214792
21. Phillips WR, Dai M, Frey JJ, Peterson LE. General practitioners in US medical practice compared with family physicians. *Ann Fam Med*. 2020;18(2):127–130. doi:10.1370/afm.2503
22. Chilvers R, Richards SH, Fletcher E, et al. Identifying policies and strategies for general practitioner retention in direct patient care in the United Kingdom: a RAND/UCLA appropriateness method panel study. *BMC Fam Pract*. 2019;20(1):130. doi:10.1186/s12875-019-1020-x
23. Pedersen AF, Vedsted P. Burnout, coping strategies and help-seeking in general practitioners: a two-wave survey study in Denmark. *BMJ Open*. 2022;12(2):e051867. doi:10.1136/bmjopen-2021-051867
24. van Leeuwen GJ, de Schepper EIT, Bindels PJE, Bierma-Zeinstra SMA, van Middelkoop M. Patellofemoral pain in general practice: the incidence and management. *Fam Pract*. 2023;40(4):589–595. doi:10.1093/fampra/cmad087
25. Pohontsch NJ, Zimmermann T, Jonas C, Lehmann M, Löwe B, Scherer M. Coding of medically unexplained symptoms and somatoform disorders by general practitioners - an exploratory focus group study. *BMC Fam Pract*. 2018;19(1):129. doi:10.1186/s12875-018-0812-8
26. Atmann O, Torge M, Schneider A. The "General practitioner learning stations"-development, implementation and optimization of an innovative format for sustainable teaching in general practice. *BMC Med Educ*. 2021;21(1):622. doi:10.1186/s12909-021-03057-0
27. Rachamin Y, Meier R, Grischott T, Rosemann T, Markun S. General practitioners' consultation counts and associated factors in Swiss primary care - A retrospective observational study. *PLoS One*. 2019;14(12):e0227280. doi:10.1371/journal.pone.0227280
28. Pochert M, Voigt K, Bortz M, Sattler A, Schübel J, Bergmann A. The workload for home visits by German family practitioners: an analysis of regional variation in a cross-sectional study. *BMC Fam Pract*. 2019;20(1):3. doi:10.1186/s12875-018-0891-6
29. Hudali T, Papireddy M, Bhattarai M, Deckard A, Hingle S. Evaluating youtube as a source of patient education on the role of the hospitalist: a cross-sectional study. *Interact J Med Res*. 2017;6(1):e1. doi:10.2196/ijmr.6393
30. Wachter RM, Goldman L. Zero to 50,000 - The 20th Anniversary of the Hospitalist. *N Engl J Med*. 2016;375(11):1009–1011. doi:10.1056/NEJMp1607958
31. Burden M, Patel M, Kissler M, Harry E, Keniston A. Measuring and driving hospitalist value: expanding beyond wRVUs. *J Hosp Med*. 2022;17(9):760–764. doi:10.1002/jhm.12849
32. Wachter RM, Goldman L. The emerging role of "hospitalists" in the American health care system. *N Engl J Med*. 1996;335(7):514–517. doi:10.1056/NEJM199608153350713
33. Auerbach AD, Wachter RM, Katz P, Showstack J, Baron RB, Goldman L. Implementation of a voluntary hospitalist service at a community teaching hospital: improved clinical efficiency and patient outcomes. *Ann Intern Med*. 2002;137(11):859–865. doi:10.7326/0003-4819-137-11-200212030-00006
34. Meltzer D, Manning WG, Morrison J, et al. Effects of physician experience on costs and outcomes on an academic general medicine service: results of a trial of hospitalists. *Ann Intern Med*. 2002;137(11):866–874. doi:10.7326/0003-4819-137-11-200212030-00007
35. White HL, Glazier RH. Do hospitalist physicians improve the quality of inpatient care delivery? A systematic review of process, efficiency and outcome measures. *BMC Med*. 2011;9:58. doi:10.1186/1741-7015-9-58
36. Association of American Medical Colleges. Estimating the number and characteristics of hospitalist physicians in the United States and their possible workforce implications. Available from: https://www.aamc.org/media/5956/download?attachment. Accessed February 16, 2024.
37. United Nations. World population prospects 2022 summary of results. Available from: https://www.un.org/development/desa/pd/sites/www.un.org.development.desa.pd/files/wpp2022_summary_of_results.pdf. Accessed February 16, 2024.