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Health Literacy in Primary Care: Global Bibliometric Trends and Opportunities for Asian Low and Middle Income Countries

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ABSTRACT

This research aims to map the trends, collaborations, and thematic evolution of international health literacy in primary care research from 2000 to 2025 (March). Bibliometric analysis was conducted using the Scopus database. Relevant articles were obtained using the keywords "health literacy" and "primary care". Data were then analyzed using Microsoft Excel and VOSviewer 1.6.20 for trends of publications, country contributions, citation metrics, and co-occurrence networks of key terms. The results showed that a total of 178 publications met the inclusion criteria. After the year 2013, the number of publications increased drastically and peaked in 2024. The most productive countries include the United States, the United Kingdom, and Brazil, while developing countries in collaborative networks were Thailand, Malaysia, Korea, and Turkey. The five identified thematic clusters also include health promotion, chronic disease management, psychological factors, health care workers, and demographic-specific research. Research on health literacy in primary care is expanding, but remains mostly concentrated in developed countries. Asian low- and middle-income countries (LMICs) have the potential to facilitate and advance the field through cross-regional collaboration and culturally relevant practices.

Keywords: health literacy, primary care, bibliometric analysis, low and middle income countries, Asia

INTRODUCTION

Health literacy is the degree to which individuals are able to obtain, process, and understand basic health information and services needed to make appropriate health decisions. This concept is important for primary care, health outcomes, and costs. Low health literacy is particularly common in underserved populations and associated with poorer health outcomes.[1–3] Various interventions, including health education programs and personalized health coaching, have been developed to improve health literacy. However, these interventions pose challenges and are not widely adopted in primary care.[4,5] Previous research has reported a significant association between low health literacy and adverse health outcomes[6–8], underscoring the need for interventions targeted at improving health literacy.[9]

Although the application of health literacy principles has increasingly been advocated, implementation in primary care remains atypical among countries. Despite positive evidence, numerous interventions, including

personalized communication, education, and digital support applications, remain underutilized in practice[6,7]. Additionally, a significant proportion of existing evidence stems from high-income Western countries, creating a substantial knowledge gap about the progress and contextual barriers experienced by low- and middle-income countries (LMICs).[9]

MATERIALS & METHODS

Bibliometric analysis was conducted using the Scopus database to explore research on health literacy in primary care. Scopus is the largest abstract and citation database of literature in the scientific, technical, medical, and social sciences fields, covering research in life, health, and social sciences. The extensive and comprehensive coverage of SCOPUS allows for an excellent resource in understanding research trends across a large number of fields.[10] Database review and bibliometric analysis were carried out in March 2025. The search strategy used "article title" queries with the keywords "health literacy" and "primary care" or "health promote" and "primary care".

The analysis exclusively used research published in English. Screening was performed by evaluating titles, abstracts, and even the full texts where needed. The keyword search process produced a total of 201 publications, with 23 excluded due to not being written in English. The analysis reviewed all publications from the year 2000 to March, 2025. A total of 178 publications were studied. The team transferred the extracted information into Microsoft Excel using "csv" file format. Exported data contained document titles and abstracts along with information about authors countries of origin. The dataset featured annual publication quantities along with document types, while also showing citation counts and journal names. Furthermore, network maps were generated using VOSviewer software version 1.6.20 to visualize term networks derived from article titles and the collaboration between countries.[11] Using co-occurrence analysis, VOSviewer terms were grouped into different clusters, each represented by unique colors. Consequently, cluster analysis of research hotspots can be more effective by using a co-occurrence network of terms from titles, enabling the illustration and identification of a developing trend.[12]

RESULT

General description of the retrieved publications

A total of 178 publications on health literacy in primary care were found between 2000-2025, namely 159 (89,32%) original articles, 10 (5,61%) reviews, 3 (1,68%) editorials, and 6 (3,37%) other types.

Analysis of Publication Trends

Figure 1 shows the yearly global publication data. The early stage (2000-2012) had an average publication of 3.16, with consistent growth. Research on health literacy in primary care experienced an exponential increase starting from 2013 and peaked in 2024 with 17 publications. Only two articles had been published for 2025 at the time of analysis, as the year was still in the early months. Based on the results, linear regression analysis showed a positive correlation between the number of publications per year and the year of publication (R^2 =0,4571, $p < 0,001$).

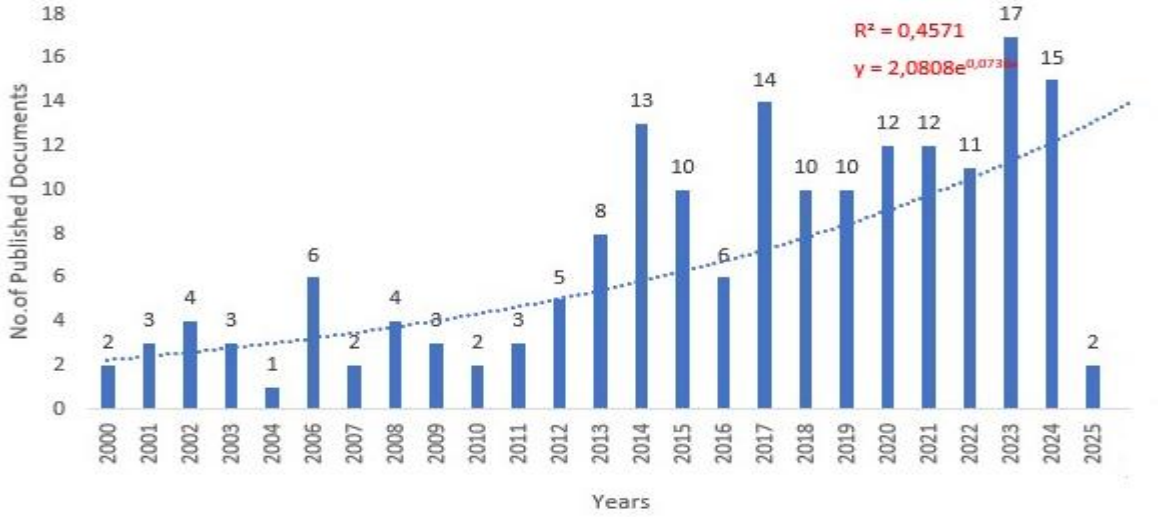

Fig 1. Trends in annual publications on research related to health literacy in primary care

Analysis of Country

A total of 44 countries contributed to scientific research on health literacy in primary care. USA (n=48; 23,76%) was identified as the most productive country, followed by the United Kingdom (n=26; 12,87%), and Brazil (n=22, 10,89%) (Table 1).

Table 1. Top 10 Countries with highest publication in health literacy in primary care

Ranking	Country	Number of Documents
1st	USA	48
2nd	United Kingdom	26
3rd	Brazil	22
4th	Spain	16
5th	Canada	16
6th	Australia	13
7th	Germany	9
8th	Denmark	6
9th	Netherland	6
10th	Switzerland	6

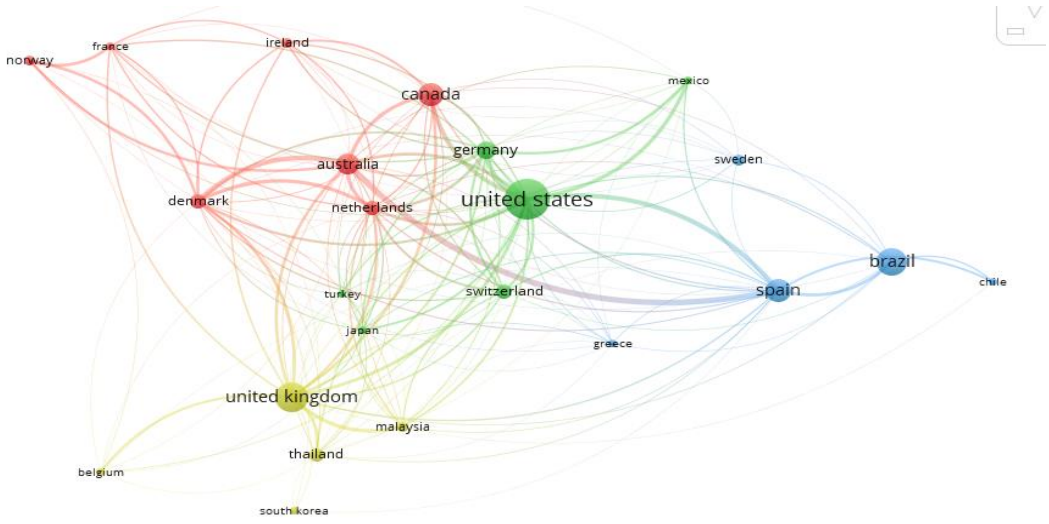

Fig.2 Visualization map of the international research collaboration network with a minimum contribution of 2 documents *per* country set as a threshold (n = 23). Countries with short distances and dense connections engage in extensive scientific collaboration. Countries in the periphery with tenuous ties to countries in the center engage in poor international research collaboration. The map was created using VOSviewer software 1.6.20

Analysis of citation

Based on the citation analysis, the retrieved publications have been cited an average of 18,16 times and had h-index of 29 with a total of 3233 citations. The citation counts range between 0 and 253. A total of 27 publications had no citations, while 12 received 50 or more citations. Table 2 shows the top 10 publications with the highest citations (Table 2).

Table 2 Top 10 articles with highest citations

Ranking	Author	Title	Journal	Type	Cites
1st	L. Hersh, et al (2015) [13]	Health literacy in primary care practice	American Family Physician	Article	253 (25.30 per year)
2nd	J. Taggart, A, et al(2012)[14]	A systematic review of interventions in primary care to improve health literacy for chronic disease behavioral risk factors	BMC Family Practice	Review	189 (14.54 per year)
3rd	M. Rubio-Valera et al(2014)[15]	Barriers and facilitators for the implementation of primary prevention and health promotion activities in primary care: A synthesis through meta-ethnography	PLoS ONE	Review	166 (15.09 per year)
4th	Jansen(2018)[16]	The role of health literacy in explaining the association between educational attainment and the use of out-of-hours primary care services in chronically ill people: A survey study	BMC Health Services Research	Article	159 (22.71 per year)
5th	R.J. Volk et al (2008)[17]	Entertainment education for prostate cancer screening: A randomized trial among primary care patients with low health literacy	Patient Education and Counseling	Article	105 (6.18 per year)
6th	Z. Walker et al (2002)[18]	Health promotion for adolescents in primary care: Randomised controlled trial	British Medical Journal	Article	93 (93.00 per year)
7th	S.V. Altin, S. Stock (2016)[19]	The impact of health literacy, patient-centered communication and shared decision-making on patients' satisfaction with care received in German primary care practices	BMC Health Services Research	Article	79 (33,20 per year)
8th	M. Inoue et al(2013)[20]	Impact of communicative and critical health literacy on understanding of diabetes care and self-efficacy in diabetes management: A cross-sectional study of primary care in Japan	BMC Family Practice	Article	74 (27,25 per year)
9th	V. Rodríguez et al (2013)[21]	Health literacy, numeracy, and graphical literacy among veterans in primary care and their effect on shared decision making and trust in physicians	Journal of Health Communication	Article	71 (27 per year)
10th	P. Touboul (2015) [22]	Identification of cultural determinants of antibiotic use cited in primary care in Europe: A mixed research synthesis study of integrated design "culture is all around us" Health behavior, health promotion and society	BMC Public Health	Article	68 (32,10 per year)

Co-occurrence analysis

The co-occurrence network was generated by assessing the number of publications in which terms appeared in titles simultaneously. The objective was to identify the hottest research directions and key issues relevant to monitoring growth in the field. As shown in Fig. 3, among the 1438 keywords, 114 met the threshold (the minimum number of occurrences of a term in titles was greater than 5) and were categorized into five clusters. The size of a circle corresponds to the frequency of a term occurrence, with larger circles showing greater significance. These clusters represent thematic groupings, including health promotion and primary care (green), psychological aspects and participation (red), chronic diseases and self-management (blue), healthcare personnel and attitudes (yellow), as well as demographic-specific research (purple).

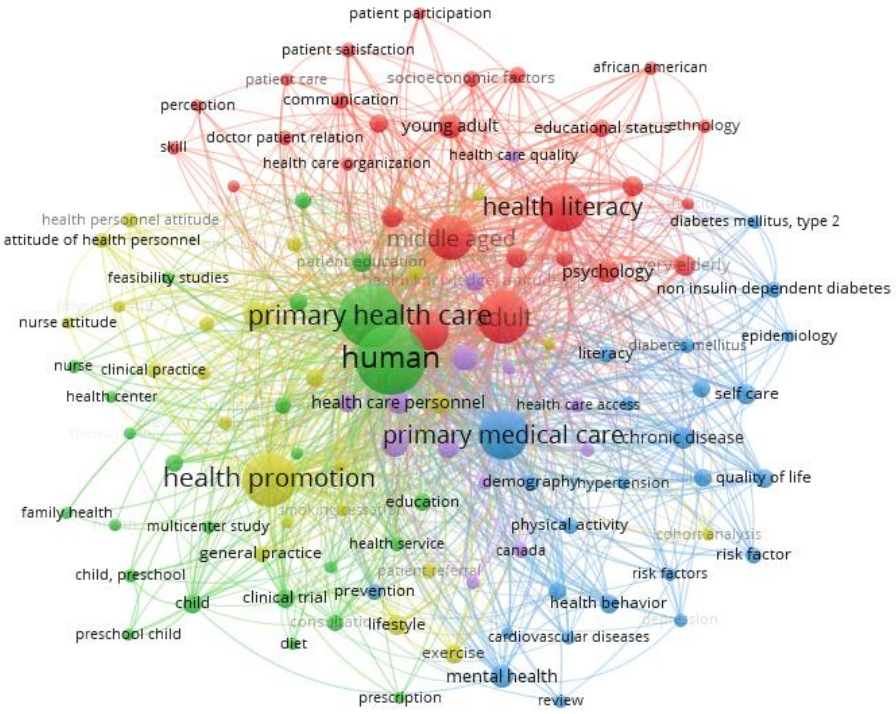

Fig. 3 Cluster map based on term analysis appearing in titles. The size of the circle indicates occurrences of the terms, and different colors indicate the variety of clusters. The map was created using VOSviewer software version 1.6.20

Future research direction analysis

As shown in Figure 4, the VOSviewer visualization uses a color-coded scheme to represent the temporal distribution of terms, where each color is determined by the average frequency across the dataset. The color yellow represents the terms that appeared most recently, while blue denotes the earliest occurrences. Up to 2018, most research predominantly focused on strengthening primary health care services through efforts such as health promotion, primary medical care, and the role of healthcare personnel. After 2018, the field expanded to explore a more holistic approach to primary health care, emphasizing health literacy, mental health, psychology, self-care, quality of life, physical activity, and family health.

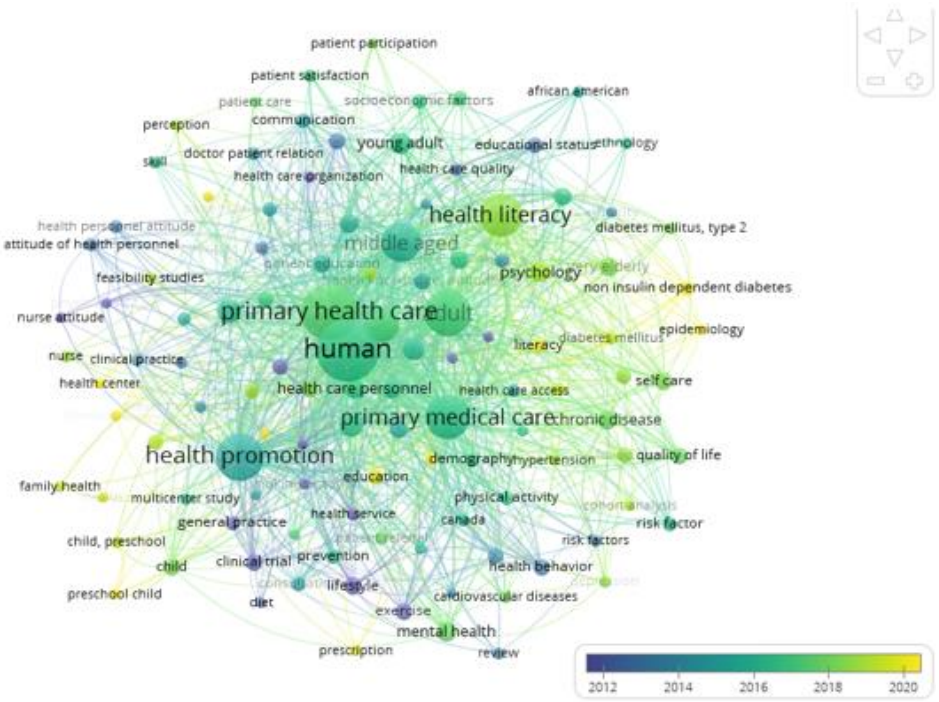

Fig 4. Network visualization map of the analysis of terms in titles according to the frequency of appearance. Blue denotes earlier occurrences of the terms, and yellow denotes later occurrences. The map was created using VOSviewer software version 1.6.20

DISCUSSION

This research examined the evolution and major focal areas of health literacy in primary care using data sourced from the Scopus database. A bibliometric analysis was conducted using VOSviewer as an auxiliary tool, focusing on research published between 2000 to 2025, and a total of 178 publications were retrieved. The results show an increasing trend in research exploring health literacy in primary care over the last two decades. This increase is expected to continue in the foreseeable future.

The most dominant countries were from the Western world, where the USA ranked first due to the high volume of publications. However, the United Kingdom has shown impressive growth recently and should capitalize on this trend to develop deeper research. A significant gap was also identified between research from lower-middle-income countries (LMICs) and the necessity of different designs to address the issue of health literacy in primary care on a global scale.

The analysis shows an opportunity for research development in LMICs, particularly for Asian countries fast-rising in the global collaboration map, including Thailand, Malaysia, Korea, and Turkey (Fig. 2). Despite the limited publications, these countries show a gradual upward trend of scholarly productivity and can be considered as promising places to extend health literacy initiatives in primary care.

Thailand has integrated health literacy into national health planning and is promoting health-literate organizations, including initiatives focused on health-literate hospitals and community health learning centres.[23] In Korea, health literacy has been incorporated into the National Health Plan 2030 (HP2030), and government-led efforts are underway to strengthen the role in chronic disease prevention and patient empowerment, specifically through primary care-oriented policies and measurement systems[24,25]. Recent research in Turkey has measured health literacy levels in community samples, reflecting ongoing national and sub-national research engagement.[26,27]

These examples show how LMICs in Asia have transitioned from serving as data

sources to contributing participants in global health literacy, particularly in areas including the adaptation of measurement tools, testing culturally relevant interventions, and integrating literacy into universal health coverage strategies. More multi-country collaboration between these middle-income countries and the higher-income partners could also increase both methodological range and contextual appropriateness in future bibliometric and empirical work. Therefore, advancing health literacy research in LMICs with consideration to the role of local health systems, socio-economic disparities, and digital inclusion represents a critical opportunity to diversify the global evidence base and ensure that health literacy remains equitable and contextually grounded.[25,27,28]

The occurrence analysis within the visualization shows how research areas change over time. Older research areas, represented by dark blue to blue shades, were mainly concentrated in the year 2012. Some of the prominent terms at the time were "primary health care," "human," and "health promotion,".[18,29,30] The terms show that there was indeed a concentration on the very basic elements of care for humans and an anthropocentric approach. On the other hand, lighter blue to yellow shades, representing newer research topics, started gaining attention toward the year 2018. The introduction of newer terms, such as "health literacy" and "mental health," shows a shift toward addressing contemporary societal demands. It also signals an increasing interest in specialized fields, particularly mental health awareness and literacy. [31,32]

The old topics, as well as new ones occupying spaces in this network, signify scientific progress over time along with maintenance.

The connection and relations between the old and new topics show how scientific questions have been passed on over time. For instance, early emphasis on “health promotion” may have laid the conceptual foundation for more recent developments such as “health literacy,” showing how new knowledge often arose from earlier research trajectories. The visualization also underscores the relative prominence of a topic through node size. Larger nodes such as “primary health care” or “mental health” show higher frequency and central relevance, signifying the crucial roles within the research landscape.[17–20]This visualization reflects the evolution of research from general, broad themes to more specific and targeted areas due to the change in society and science. It also shows the flexibility of research community, in light of new challenges and direction.[37]

CONCLUSION

Research on health literacy in primary care is expanding, but remains mostly concentrated in developed countries. Asian low- and middle-income countries (LMICs) have the potential to facilitate and advance the field through cross-regional collaboration and culturally relevant practices.

Declaration by Authors

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REFERENCES

1. Meherali S, Punjani NS, Mevawala A. Health literacy interventions to improve health outcomes in low-and middle-income countries. HLRP Heal Lit Res Pract. 2020;4(4):e251–66.
2. O’Conor R, Moore A, Wolf MS. Health literacy and its impact on health and healthcare outcomes. In: Health literacy in clinical practice and public health. IOS Press; 2020. p. 3–21.
3. Purnamasari DU, Briawan D, Kustiyah L, Hermadi I. Nutrition Behaviors of Mothers and Preschool Teachers and Their Supporting and Inhibiting Factors: Qualitative Research. Malaysian J Med Heal Sci. 2023;19(1):29–30.
4. Schaffler J, Leung K, Tremblay S, Merdsoy L, Belzile E, Lambrou A, et al. The

effectiveness of self-management interventions for individuals with low health literacy and/or low income: a descriptive systematic review. J Gen Intern Med. 2018; 33:510–23.
5. Faruqi N, Spooner C, Joshi C, Lloyd J, Dennis S, Stocks N, et al. Primary health care-level interventions targeting health literacy and their effect on weight loss: a systematic review. BMC Obes. 2015; 2:1–16.
6. Steinberg D, Kay M, Burroughs J, Svetkey LP, Bennett GG. The effect of a digital behavioral weight loss intervention on adherence to the Dietary Approaches to Stop Hypertension (DASH) dietary pattern in medically vulnerable primary care patients: results from a randomized controlled trial. J Acad Nutr Diet. 2019;119(4):574–84.
7. Ward ZJ, Bleich SN, Cradock AL, Barrett JL, Giles CM, Flax C, et al. Projected US state-level prevalence of adult obesity and severe obesity. N Engl J Med. 2019;381(25):2440–50.
8. Purnamasari DU, Proverawati A, Wardani WV. Teacher Perception and Experience of Nutrition Education in Primary School: A Qualitative Research Using Focus Group Discussion. Galore Int J Heal Sci Res [Internet]. 2025;10(June):141–7. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5364827
9. Pinheiro AKC, Raymundo CE, da Silva Santos EDS, Saldanha dos Santos MY, de Oliveira Sarefino A, do Nascimento Souza MH, et al. Factors associated with functional health literacy and the quality of life of riverside residents served by the primary care network in the Brazilian amazon: a cross-sectional study. BMC Prim Care [Internet]. 2024;25(1). Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85212666733&doi=10.1186%2Fs12875-024-02684-y&partnerID=40&md5=120137d40e592d2c4fe29bbb1da713cd
10. Zyoud SH, Shakhshir M, Abushanab AS, Koni A, Shahwan M, Jairoun AA, et al. Bibliometric mapping of the landscape and structure of nutrition and depression research: visualization analysis. J Heal Popul Nutr [Internet]. 2023;42(1):1–13. Available from: https://doi.org/10.1186/s41043-023-00378-2
11. Van Eck NJ, Waltman L. VOSviewer Manual for VOSviewer version 1.6.20 software documentation [Internet]. Univeristeit Leiden. Leiden: Univeristeit Leiden; 2023. 55 p. Available from: http://www.vosviewer.com/documentation/Manual_VOSviewer_1.6.1.pdf
12. Arruda H, Silva ER, Lessa M, Proença DJ, Bartholo R. VOSviewer and Bibliometrix. J Med Libr Assoc. 2022 Jul;110(3):392–5.
13. Hersh L, Salzman B, Snyderman D. Health literacy in primary care practice. Am Fam Physician [Internet]. 2015;92(2):118–24. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84937213180&partnerID=40&md5=1d69e28db630661a5c5b39105cf141e9
14. Taggart J, Williams A, Dennis S, Newall A, Shortus T, Zwar N, et al. A systematic review of interventions in primary care to improve health literacy for chronic disease behavioral risk factors. BMC Fam Pract [Internet]. 2012;13. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84861657205&doi=10.1186%2F1471-2296-13-49&partnerID=40&md5=22ccf2d595f4af1facc9e83188d74c00
15. Rubio-Valera M, Pons-Vigués M, Martínez-Andrés M, Moreno-Peral P, Berenguera A, Fernández A. Barriers and facilitators for the implementation of primary prevention and health promotion activities in primary care: A synthesis through meta-ethnography. PLoS One [Internet]. 2014;9(2). Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84896499086&doi=10.1371%2Fjournal.pone.0089554&partnerID=40&md5=6ee96f265abaf123b01d6e67ad238cb0
16. Jansen T, Rademakers J, Waverijn G, Verheij R, Osborne R, Heijmans M. The role of health literacy in explaining the association between educational attainment and the use of out-of-hours primary care services in chronically ill people: A survey study. BMC Health Serv Res [Internet]. 2018;18(1). Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-

85047958852&doi=10.1186%2Fs12913-018-3197-4&partnerID=40&md5=7dae4efac5f8043145a2a5a35150522e

17. Volk RJ, Jibaja-Weiss ML, Hawley ST, Kneuper S, Spann SJ, Miles BJ, et al. Entertainment education for prostate cancer screening: A randomized trial among primary care patients with low health literacy. Patient Educ Couns [Internet]. 2008;73(3):482–9. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-55949083348&doi=10.1016%2Fj.pec.2008.07.033&partnerID=40&md5=efb116b83c0dd6059cf47b6938034edc
18. Walker Z, Townsend J, Oakley L, Donovan C, Smith H, Hurst Z, et al. Health promotion for adolescents in primary care: Randomised controlled trial. Br Med J [Internet]. 2002;325(7363):524–7. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-0037037079&partnerID=40&md5=8be2de5f938ddd552c5a78e9cecb7d64
19. Altin S V, Stock S. The impact of health literacy, patient-centered communication and shared decision-making on patients' satisfaction with care received in German primary care practices. BMC Health Serv Res [Internet]. 2016;16(1). Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84984794804&doi=10.1186%2Fs12913-016-1693-y&partnerID=40&md5=108586e1e434be61187122bcbd755446
20. Inoue M, Takahashi M, Kai I. Impact of communicative and critical health literacy on understanding of diabetes care and self-efficacy in diabetes management: A cross-sectional study of primary care in Japan. BMC Fam Pract [Internet]. 2013;14. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84875205579&doi=10.1186%2F1471-2296-14-40&partnerID=40&md5=1d69dd418bdae447d2c85f90984bc21c
21. Rodríguez V, Andrade AD, García-Retamero R, Anam R, Rodríguez R, Lisigurski M, et al. Health literacy, numeracy, and graphical literacy among veterans in primary care and their effect on shared decision making and trust in physicians. J Health Commun [Internet]. 2013;18(SUPPL. 1):273–89. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84885675547&doi=10.1080%2F10810730.2013.829137&partnerID=40&md5=7bbe455958d375ffd1626d14993a2e89
22. Touboul-Lundgren P, Jensen S, Drai J, Lindbæk M. Identification of cultural determinants of antibiotic use cited in primary care in Europe: A mixed research synthesis study of integrated design "culture is all around us" Health behavior, health promotion and society. BMC Public Health [Internet]. 2015;15(1). Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-84941915792&doi=10.1186%2Fs12889-015-2254-8&partnerID=40&md5=56fe51dd87639d88d4fd675dc32347f0
23. Mahidol University. Thai Health 2023 Report. Bangkok; 2023.
24. Choi S, Kang Y, Kim H, Oh K. Health literacy in Korea: findings from the 2023 Korea National Health and Nutrition Examination Survey. Epidemiol Health. 2025;47: e2025037.
25. Kim C nyun, Kim C nyun. Reinforcing Primary Care in Korea: Policy Implications, Data Sources, and Research Methods. 2025;40(8):1–20.
26. Okten MM, Yalcinoz Baysal H. Individuals' COVID-19 Awareness and Health Literacy Levels in Eastern Turkey: A Descriptive Correlational Design. Disaster Med Public Health Prep [Internet]. 2025/02/14. 2025;19: e30. Available from: https://www.cambridge.org/core/product/317611638AF720A8E1384652BA537E7C
27. Yiğitalp G, Bayram Değer V, Çifçi S. Health literacy, health perception and related factors among different ethnic groups: a cross-sectional study in southeastern Turkey. BMC Public Health [Internet]. 2021;21(1):1109. Available from: https://doi.org/10.1186/s12889-021-11119-7
28. Ji S, Kwon YG, Lee H, Shin C, Sohn M, Choi M. Regional disparities in health literacy for chronic diseases: focusing on healthcare resources and local extinction index. Front public Heal. 2024; 12:1423645.

29. Gamelia E, Anandari D, Purnamasari DU. Rural-based Health Promotion Model for Pregnant women in Banyumas district. Kesmas. 2016;11(1):7–13.
30. Klein D, Kallio M, Humphries S, Mueen M. Collaborative team-based health promotion in a primary care setting: The MOVE program. Can Fam Physician [Internet]. 2017;63(2):e123–7. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85013428280&partnerID=40&md5=dc0d377e6300e8157e776755d1f4578e
31. Mertens L, Dewitte H, Seuntjens L, Vanobberghen R, Aertgeerts B. The guided use of an e-health tool to strengthen health literacy. A pilot study in a multicultural diabetes population in a primary care clinic in Brussels. PEC Innov [Internet]. 2022;1. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85152896534&doi=10.1016%2Fj.pecinn.2022.100056&partnerID=40&md5=56740707141e997097eb662b526a1b13
32. Guden E, Borlu A, Olguner Eker O, Ozsoy S, Baykan Z. The effect of mental health literacy training given to primary care physicians on beliefs and attitudes towards mental illnesses: A randomized controlled trial. Klin Psikiyatr Derg [Internet]. 2024;27(4):273–84. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85214449392&doi=10.5505%2Fkpd.2024.28445&partnerID=40&md5=91516f93fb6f14f8c6af9790bfde4185
33. Cho HJ, Sunwoo S, Song YM. Attitudes and Reported Practices of Korean Primary Care Physicians for Health Promotion. J Korean Med Sci [Internet]. 2003;18(6):783–90. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-0347064114&doi=10.3346%2Fjkms.2003.18.6.783&partnerID=40&md5=2cd28dd17cac03b54f022d8bc4584cc6
34. Abdullah ASM, Simon JL. Health promotion in older adults: Evidence-based smoking cessation programs for use in primary care settings. Geriatrics [Internet]. 2006;61(3):30–4. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-33645095438&partnerID=40&md5=b169952bee7bccbcef911c8cb88d71c0
35. Mor-Anavy S, Lev-Ari S, Levin-Zamir D. Health Literacy, Primary Care Health Care Providers, and Communication. Heal Lit Res Pract [Internet]. 2021;5(3):e194–200. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85111729931&doi=10.3928%2F24748307-20210529-01&partnerID=40&md5=c6ac37602556c3ccb3f15977f8be1593
36. Sprogell A, Casola AR, Cunningham A. Health Literacy in Primary Care: Reflections and Suggestions for Physicians, Researchers, and Administrators. Am J Lifestyle Med [Internet]. 2022;16(3):408–11. Available from: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85114111388&doi=10.1177%2F15598276211041283&partnerID=40&md5=0db12ae53724844e735e67073dc543ca
37. Torres-Calixto MG. Trends and challenges of medical education. Rev la Fac Med. 2021;69(3).

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