



ABSTRACT

Title of Abstract	: Community Behavior, Health Education, and the Effectiveness of Dengue Prevention Programs in Endemic Areas: A Literature Review 2015–2025
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Background : Dengue Hemorrhagic Fever (DHF) remains a major public health challenge in Indonesia, with most districts experiencing moderate to high endemicity. Although vector control and public education programs such as 3M Plus, G1R1J, and school initiatives continue to be implemented, dengue cases remain fluctuating, especially in urban areas. Persistent transmission is strongly associated with community behavior, low risk perception, and irregular preventive practices. Studies consistently show a knowledge–practice gap—high awareness does not always translate into action—highlighting the need to strengthen motivation, behavior change interventions, and community participation.

Objective : To analyze how community behavior, health education, and community participation influence the effectiveness of dengue prevention in endemic areas; to summarize research findings from 2015–2025; and to identify gaps between knowledge and preventive practices to provide evidence-based recommendations for improving community-based dengue control strategies in Indonesia.

Research Methods / Implementation Methods : A systematic narrative literature review was conducted using articles from PubMed, ScienceDirect, Google Scholar, DOAJ, Garuda, and ResearchGate. Keywords included terms related to “Dengue,” “public health education,” and “community participation.” Studies published in English or Indonesian with quantitative, qualitative, mixed-method, or review designs were included. Of 132 articles identified, 15 met inclusion criteria. Each study was appraised using the JBI Critical Appraisal Tool. Data were synthesized thematically into three areas: community knowledge–attitudes–practices (KAP), educational effectiveness, and behavioral barriers, then compared with national and WHO reports.

Results : Across the 15 included studies (2015–2025), community knowledge about dengue was generally high, but preventive practices remained inconsistent, confirming the knowledge–practice gap. School-based and community education programs improved awareness and behavior, especially when using interactive and participatory methods rather than lectures. Community participation initiatives such as One House One Jumantik (G1R1J) increased household involvement but frequently faced challenges related to limited supervision, low motivation, and poor sustainability. Successful programs demonstrated strong community empowerment, ongoing education, and collaboration between local leaders, schools, and health authorities.

Conclusion / Lesson Learned : Effective dengue prevention requires behavioral change, continuous health education, and active community participation. Although public knowledge is high, preventive actions remain irregular. Strengthening motivation, sustaining cross-sector collaboration, and empowering communities are key to achieving long-term behavior change and sustainable dengue control in endemic regions.

Keywords : Dengue Hemorrhagic Fever; community behavior; health education; prevention; community participation.