ABSTRACT

Spiral and Progressive Curricula for Clinical Reasoning in Health Professions Education: A Systematic Review

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Background : Clinical reasoning and clinical decision-making are core competencies in health professions education, including midwifery, as they determine the quality and safety of care. Spiral and progressive curricula are proposed to strengthen these competencies through longitudinal reinforcement, but the evidence remains fragmented.

Objective : To synthesise evidence on the effectiveness of spiral and progressive curriculum approaches in developing clinical reasoning and decision-making among health professions students, and to identify their underlying pedagogical mechanisms, with implications for midwifery education.

Research Methods/ Implementation Methods : A systematic review following PRISMA 2020 was conducted in PubMed/MEDLINE, Scopus, EBSCO, ScienceDirect, and Google Scholar for English-language studies published from 2021 to 2026. Two reviewers independently screened studies, extracted data, and appraised quality using Joanna Briggs Institute tools. Findings were synthesised narratively with an effect-direction summary.

Results : Of 344 records, 19 studies from 11 countries were included. Four themes emerged: longitudinal reinforcement through spiral design; experiential and simulation-based learning; reflective feedback and collaborative learning; and integration of digital technology and artificial intelligence. Interventions were consistently associated with improved clinical reasoning, critical thinking, clinical judgement, and decision-making confidence compared with lecture-based instruction, although heterogeneity precluded meta-analysis.

Conclusion/Lesson Learned : Longitudinally reinforced case-based, simulation-based, and collaborative learning appears effective in strengthening clinical reasoning and decision-making. Midwifery-specific evidence remains limited, warranting dedicated empirical studies to guide curriculum reform.

Keyword : clinical reasoning; clinical decision-making; spiral curriculum; progressive curriculum; midwifery education; systematic review