

The Role of Interprofessional Education in Midwifery Training: a Narrative Review

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Running Title: Interprofessional Education in Midwifery Training

Abstract

Background: Interprofessional education (IPE) is increasingly recognised as essential for encouraging collaborative care practices among future healthcare providers. By fostering teamwork among different healthcare disciplines, IPE aims to improve patient care quality. However, while there is growing evidence of IPE's effectiveness in general healthcare education, its impact specifically on midwifery students remains underexplored. This study investigates the effectiveness of IPE in preparing midwifery students to provide enhanced maternity care through improved interprofessional collaboration as professionals.

Methods: Using the PICO framework, the research question was formulated, and a structured literature search was conducted in PubMed and the Cochrane Library for studies published up to March 2026. Twelve relevant studies were included in the review, which showed positive outcomes of IPE interventions for the various healthcare disciplines, including midwifery.

Results: The analysis revealed generally positive outcomes from IPE interventions. Participants across different healthcare disciplines, including midwifery, reported improved interprofessional competencies and positive experiences with IPE. However, a few studies also highlighted some critical issues, such as scepticism among participants and possible short-term effects of IPE, demonstrating the importance of ongoing integration of IPE into healthcare education.

Conclusions: Despite the overall positive outcomes of IPE interventions, the lack of specific data on midwifery students is evident. This gap in the literature underscores the need for future research to explore the unique effects of IPE for midwifery students. Continued investigation is crucial to ensure that IPE is effectively tailored to meet the needs of midwifery education, thereby enhancing collaborative maternity care practices in the long term.

Keywords: *Interprofessional Education; Midwifery; Midwifery Students; Professional Role; Professional Responsibility.*

Background

Interprofessional education (IPE) is an approach to education that takes students from different healthcare professions and has them learn together to strengthen collaborative care practices to improve patient outcomes. The World Health Organization (WHO) defines IPE as when “students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes”¹. One of IPE's aims is to break down professional barriers and encourage teamwork and communication among future healthcare providers inclu-

ding midwives, nurses, physicians, and other allied health professionals². The importance of interprofessional collaboration in the improvement of the quality of maternity care and maternity care outcomes has been noted by numerous national reports^{3,4}. This emphasis is further reinforced at the international policy level, as the International Confederation of Midwives (ICM), in collaboration with the International Federation of Gynecology and Obstetrics (FIGO), has recently highlighted interprofessional collaboration as a key strategy for strengthening sexual and reproductive healthcare systems, including through improved joint working and shared learning across professional groups, with a joint statement currently forthcoming⁵.

Midwifery and maternity care are often multidisciplinary practices, with midwives, obstetricians, paediatricians, nurses, and others working side-by-side, so for midwifery students, IPE can be of particular interest and use. Effective IPE interventions during midwifery education can help the midwifery student to integrate didactic material with practical skills, while at the same time promoting an understanding of roles and responsibilities across professions⁶. IPE implemented at the undergraduate level has been found to be helpful in developing interprofessional skills such as effective teamwork, communication, and leadership, all of which contribute to enhanced patient safety⁷. The objective of this review is to investigate the effectiveness of IPE for midwifery students by examining the currently available literature. This review contributes to the existing literature on IPE and midwifery by examining the current evidence and identifying directions for future research relevant to collaborative maternity care.

Methods

Study design

This study was designed as a narrative review with structured search elements to provide a broad interpretive synthesis of the literature on interprofessional education in relation to midwifery students. A narrative approach was considered more appropriate than a systematic review because of the heterogeneity of study designs, educational contexts, intervention formats, and reported outcomes. Although structured search procedures were used to enhance transparency in study identification and selection, no formal systematic review reporting framework was applied.

Research question

The research question was formulated using the PICO framework as follows:

Population (P): healthcare students, including midwifery students

Intervention (I): interprofessional education (IPE)

Comparison (C): not applicable

Outcome (O): interprofessional competencies, including teamwork, communication, and role understanding.

Search strategy

A literature search was conducted in PubMed and the Cochrane Library in March 2026. For PubMed, the following search strategy was used: (((“student midwi*” OR “students, midwi*”) OR (“midwifery” [MeSH] OR “midwi*” OR “nurse midwi*” OR “obstetrics”)) AND (“Interprofessional Education” [MeSH] OR “education, interprofessional” OR “interprofessional” OR “patient care team*” OR “intersectoral collaboration” OR “multidisciplinary team*” OR “care team*,”

multidisciplinary”)) AND (“professional role” [MeSH] OR “professional roles” OR “role*” OR “professional responsibilit*” OR responsibilit*). The search strategy was adapted as appropriate for the Cochrane Library. No language restrictions were applied during database searching. All studies identified as eligible for inclusion were published in English. No date restrictions were applied. Reference lists of included studies were also manually screened to identify additional relevant articles.

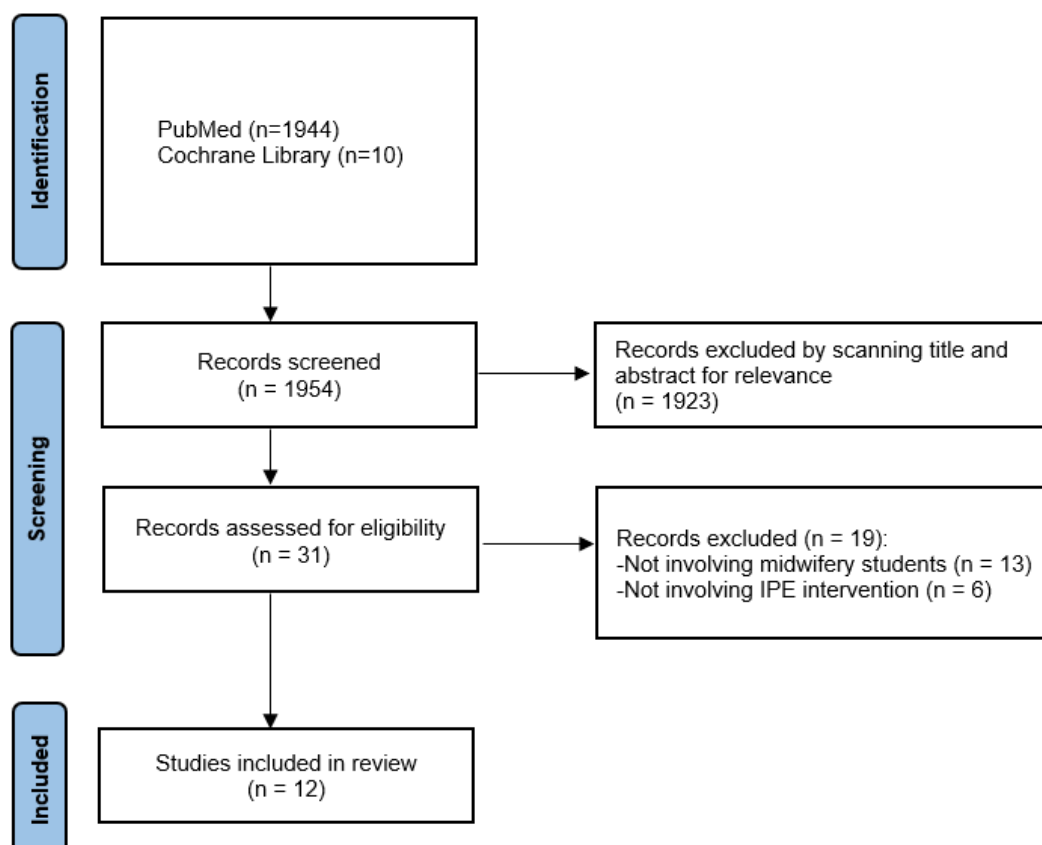
Eligibility criteria

Studies were included if they examined interprofessional learning involving midwifery students or multidisciplinary student groups including midwifery. Quantitative, qualitative, and mixed-methods studies were included. Articles not relevant to educational settings or not addressing interprofessional competencies were excluded.

Study selection

Titles and abstracts were screened, followed by a full-text review of eligible articles. Study selection was conducted by the authors, with disagreements resolved through discussion. A total of 1,954 records were identified through database searching and screened by title and abstract, of which 1,923 were excluded. Thirty-one full-text articles were assessed for eligibility, and 19 were excluded due to lack of relevance to midwifery education or failure to address interprofessional competencies. Twelve studies met the inclusion criteria and were included in the final analysis. The study selection process is illustrated in Figure 1, which provides a transparent overview of article identification, screening, and final inclusion.

Figure 1. Flow diagram illustrating the study selection process.



Data extraction and synthesis

Relevant data were extracted from each study, including study design, sample characteristics, context, data collection methods, and main findings. Given the heterogeneity of study designs and outcomes, findings were synthesised using a narrative approach.

Results

Characteristics of included studies

Of the 12 articles examined⁸⁻¹⁹, seven studies adopted a mixed methods study design^{8,11,13-15,17,19}, four used a quasi-experimental design^{10,12,16,18} and one employed the Q-methodology⁹. In terms of data collection, several studies used self-assessment questionnaires, either alone or in combination with pre- and post-intervention measures^{8,10,12,14,16,18}, while others incorporated qualitative methods such as focus groups or open-ended responses to capture students' experiences^{13,15,17,19}. Standardised tools to assess interprofessional competencies and attitudes were used in some studies^{11,18}, while others relied on study-specific instruments^{9,13}.

Participants typically consisted of multidisciplinary cohorts of healthcare students, including midwifery, nursing, and medical students, often alongside other allied health professions⁸⁻¹⁹. Across the studies, IPE interventions varied considerably in structure and duration, ranging from single-session workshops and short simulation exercises to longitudinal or curriculum-integrated programs⁸⁻¹⁹. The main characteristics of the included studies are summarised in Table 1, including study design, educational context, participant characteristics, intervention type, and main findings.

Impact of IPE on interprofessional competencies

The included studies reported improvements in collaborative skills among healthcare students, including midwifery students⁸⁻¹⁹. Several interprofessional competency domains showed improvements, including teamwork^{9,10,11,13}, roles and responsibility clarification^{11,15,17} and communication^{11,13,16}. IPE participation was associated with improvements in interprofessional scores⁸ and in additional competencies relevant to effective interprofessional collaboration such as breaking down prejudices¹³, social competence⁸, and self-confidence¹⁶.

Positive changes in attitudes toward interprofessional collaboration were also reported across different educational contexts, including community-based learning, simulation-based interventions, and virtual case-based activities^{11,12,16,19}. In addition, a recent quasi-experimental study involving midwifery, nursing, and medical students reported significant improvements in competence, autonomy, and perceptions of interprofessional collaboration following an IPE intervention¹⁸.

However, not all outcomes were uniformly positive. Some studies reported participant scepticism regarding the educational value of IPE or suggested that improvements might not extend to all dimensions of interprofessional identity^{8,9}.

Midwifery-specific findings

Findings related specifically to IPE and midwifery students were limited, as the majority of the included studies reported their data without subcategorising participants by health profession, instead presenting aggregated results across multidisciplinary student groups. Only a limited

number of studies reported findings specific to midwifery students^{14,18}. Where profession-specific data were available, midwifery students generally demonstrated positive responses to IPE interventions, including improvements in collaborative attitudes and perceived need for cooperation^{14,18}. However, some evidence suggested that attitudinal changes may vary across professional groups, with midwifery and medical students demonstrating lower levels of change in certain attitudinal domains in one study¹⁴.

Despite the lack of specific findings related to midwifery students, the broader evidence suggests that health professions students, including midwifery students, experienced improvements in collaborative competencies and attitudes across a range of educational formats^{10,11,18}. More recent evidence continues to support positive outcomes, although findings are still predominantly reported at an aggregate rather than profession-specific level¹⁸.

Critical issues and limitations of IPE

Although most studies reported positive outcomes, certain limitations and challenges were reported. While most students participating in IPE interventions expressed positive feedback, some participants were sceptical or disagreed as to the benefits of IPE⁹. In addition, some evidence suggests that despite the reported positive effects of IPE on students' perceptions of themselves and others, it does not necessarily affect a student's interprofessional identity⁸. The durability of IPE effects also remains uncertain. While some evidence suggests that positive perceptions may decline over time following isolated interventions⁸, other studies have reported sustained positive effects at follow-up¹⁶.

Discussion

The findings from all analysed studies included in this review suggest a generally positive effect for IPE's integration into healthcare education⁸⁻¹⁹. IPE studies that incorporate midwifery students have been reported to improve the interprofessional skills needed for effective care of a patient⁸⁻¹⁹. These findings align with those of Wakefield et al.¹⁰, who demonstrated through a series of interdisciplinary teaching sessions notable positive feedback from midwifery students in the areas of working as a healthcare team, understanding different perspectives of patient care and learning one's role in an interdisciplinary group, which are considered important for the healthy functioning of a multi-disciplinary medical team. In this context, the growing emphasis on interprofessional collaboration within global maternity care policy⁵ further underscores that the competencies gained through IPE are increasingly viewed not merely as educational outcomes, but as essential components of effective health system functioning.

While the results highlight that IPE has been associated with improvements in student scores across all interprofessional skills areas, these findings suggest that participating in IPE may improve students' perceptions of the usefulness of IPE in their preparation to work as professionals in the medical fields. This suggests that a future curriculum incorporating more IPE into medical health professionals' education may be well received by students. Recent quasi-experimental evidence further supports these findings, demonstrating significant improvements in competence, autonomy, and collaborative attitudes following structured IPE interventions invol-

ving midwifery, nursing, and medical students¹⁸. These findings are also consistent with previous reports suggesting that sustained interprofessional educational experiences may be mutually beneficial for midwifery and medical students, particularly in improving understanding of differing professional roles and values^{20,21}.

Despite the positive outcomes in all studies, certain negative feedback was noted, in particular that of some students who expressed scepticism that IPE would be helpful in their education^{7,9}. In addition, some evidence suggests that poorly designed IPE interventions may inadvertently reinforce negative professional stereotypes²². This suggests a need for caution during the planning and intervention phases of IPE.

Another issue reported by IPE participants that should be considered is the finding of a relatively short-term effect of IPE interventions, which was demonstrated by the waning of positive feedback several months after an IPE event⁸. Although this data set was not looked at in every study, it does suggest that ongoing IPE should be considered when designing curricula, as opposed to stand-alone events, so that the positive effects of IPE continue to inform the students throughout their years of health sciences education. Some evidence suggests that challenges associated with interprofessional learning between midwifery and medical trainees may be easier to address over time, particularly when differences in educational background and training levels are appropriately considered in intervention design²³.

From a systems perspective, this need for continuity in interprofessional learning reflects broader calls from organisations such as the ICM and the FIGO for sustained and integrated approaches to collaboration across professional groups, rather than isolated or episodic initiatives⁵. However, other evidence has reported sustained improvements in attitudes toward interprofessional education over longer follow-up periods²⁴.

Student participants from every study expressed the importance of interprofessional teamwork, interprofessional education, and social competencies for their future careers, but it should be noted that nearly all study results were generalised across the different student groups, instead of being categorised based on the individual health profession. Only a limited number of studies reported profession-specific findings, with few studies presenting results separately by health profession^{10,14}. In addition, recent educational interventions have highlighted how simulation-based IPE, particularly when incorporating ethical case discussions, can enhance students' awareness of ethical dimensions and further support the development of interprofessional attitudes and identity¹⁹. However, the lack of data specific to midwifery and IPE interventions highlights a gap in the body of research and limits the strength of conclusions regarding IPE integration within midwifery education.

Future research with the specific aim of reporting data on midwifery students' reactions to IPE is needed to move from the well-founded and studied concept that IPE is vital for preparing medical and health profession students to the specific positive effects of IPE on midwifery students. This finding is echoed by Abraha et al.²⁵ in their research, which emphasises the need for further research to improve IPE initiatives for midwifery students.

Limitations

This review has several limitations and potential sources of bias that should be considered when interpreting the findings. First, the narrative design, while appropriate for providing a broad interpretive overview of a heterogeneous body of literature, does not include a formal methodological quality assessment or risk-of-bias appraisal of the included studies. Second, the search was limited to two databases (PubMed and the Cochrane Library), which may have resulted in the omission of relevant studies indexed in other databases. Third, the relatively small number of included studies and the substantial heterogeneity in study designs, educational settings, intervention formats, and outcome measures limit the comparability and generalisability of the findings. In addition, many of the reported outcomes were based on self-reported perceptions and attitudes rather than objective measures of behavioural or clinical change. Finally, the majority of studies reported aggregated results across multidisciplinary student groups, with limited profession-specific data relating to midwifery students, which restricts the ability to draw conclusions about the unique impact of interprofessional education within midwifery training.

Conclusions

This review highlights the potential role of IPE in enhancing the skills necessary for collaborative practice among midwifery students and future maternity care professionals. The findings suggest that IPE may improve essential competencies such as teamwork, communication skills and understanding of one's role while working on a multi-professional care team, all of which may contribute to a more integrated maternity care model and potentially better patient outcomes. Integrating IPE more consistently into midwifery education may support improved collaboration across healthcare teams and contribute to the enhancement of professional practice. However, conclusions regarding the specific impact of IPE within midwifery education should remain cautious, given the limited profession-specific evidence and the predominance of self-reported outcome measures. Future research should focus on the long-term effects of IPE, including positive and potential negative impacts, and should incorporate more profession-specific and objective outcome measures. A specific emphasis on IPE in relation to midwifery students is needed to address the current gap in the literature and to better inform the development of interventions tailored to this population.

Declarations

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Artificial Intelligence (AI) – Assisted Technology Statement

No artificial intelligence (AI) tools or generative AI technologies were used in the preparation of this manuscript.

Authors' Contributions

All authors: 1) have made substantial contributions to the conception and design of the study, as well as to data collection, analysis, and interpretation; 2) have participated in drafting and revising

the manuscript; 3) have read and approved the final version of the manuscript submitted.

Conflict of Interest

The authors declare that they have no conflict of interest to disclose.

Data Availability Statement

Data sharing is not applicable to this article as no datasets were generated or analysed.

Ethics Approval

Not applicable.

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References

1. World Health Organization. Framework for action on interprofessional education and collaborative practice. Geneva: WHO; 2010.
2. Barr H, Koppel I, Reeves S, Hammick M, Freeth D. Effective Interprofessional Education: Argument, Assumption, and Evidence. Oxford: Blackwell Publishing Ltd; 2005.
3. Findings, conclusions and essential actions: From the independent review of maternity services at the Shrewsbury and Telford Hospital NHS Trust. 2022. Available from: https://www.ockendenmaternityreview.org.uk/wp-content/uploads/2022/03/FINAL_INDEPENDENT_MATERNITY_REVIEW_OF_MATERNITY_SERVICES_REPORT.pdf. Accessed April 2026.
4. The National Maternity Review. Better births: improving outcomes of maternity services in England: a five year forward view for maternity care. [2016]. Available from: <https://www.england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf>. Accessed April 2026.
5. International Confederation of Midwives. ICM and FIGO commit to interprofessional collaboration. International Confederation of Midwives. 2025. Available from: <https://internationalmidwives.org/icm-and-figo-commit-to-interprofessional-collaboration/>. Accessed April 2026.
6. Thistlethwaite J. Interprofessional education: a review of context, learning and the research agenda. *Med Educ*. 2012;46(1):58-70. doi:10.1111/j.1365-2923.2011.04143.x.
7. Kumar A, Ameh C. Start here: principles of effective undergraduate training. *Best Pract Res Clin Obstet Gynaecol*. 2022;80:114-125. doi:10.1016/j.bpobgyn.2021.11.010.
8. Bostedt D, Dogan EH, Benker SC, Rasmus MA, Eisner E, Simon NL, et al. Interprofessional socialization of first-year medical and midwifery students: effects of an ultra-brief anatomy training. *BMC Med Educ*. 2024;24(1):464. doi:10.1186/s12909-024-05451-w.
9. Mackinnon C, Akhtar-Danesh N, Palombella A, Wainman B. Using Q-methodology to determine students' perceptions of interprofessional anatomy education. *Anat Sci Educ*. 2022;15(5):877-885. doi:10.1002/ase.2109.
10. Wakefield A, Furber C, Boggis C, Sutton A, Cooke S. Promoting interdisciplinarity through educational initiative: a qualitative evaluation. *Nurse Educ Pract*. 2003;3(4):195-203. doi:10.1016/S1471-5953(02)00119-1.

11. Wong E, Leslie JJ, Soon JA, Norman WV. Measuring interprofessional competencies and attitudes among health professional students creating family planning virtual patient cases. *BMC Med Educ.* 2016;16(1):273. doi:10.1186/s12909-016-0797-8.
12. Keshmiri F, Barghi TS. Interprofessional education in a community-based setting: An opportunity for interprofessional learning and collaboration. *J Educ Health Promot.* 2021;10:298. doi:10.4103/jehp.jehp_1015_20.
13. Netherwood M, Derham R. Interprofessional education: merging nursing, midwifery and CAM. *Br J Nurs.* 2014;23(13):740-743. doi:10.12968/bjon.2014.23.13.740.
14. Selvakumaran K, Selvakumaran K, Norman G, Palombella A, Rockarts J, Wainman B. Assessment of attitudes and perceptions of health care students in an inter-professional cadaveric dissection elective. *FASEB J.* 2019;33(1_supplement):328.2. doi:10.1096/fasebj.2019.33.1_supplement.328.2.
15. Feltham C, Foster J, Davidson T, Ralph S. Student midwives and paramedic students' experiences of shared learning in pre-hospital childbirth. *Nurse Educ Today.* 2016;41:73-78. doi:10.1016/j.nedt.2016.03.020.
16. McLelland G, Perera C, Morphet J, McKenna L, Hall H, Williams B, et al. Interprofessional simulation of birth in a non-maternity setting for pre-professional students. *Nurse Educ Today.* 2017;58:25-31. doi:10.1016/j.nedt.2017.07.016.
17. Lee T, Yoon SW, Fernando S, Willey S, Kumar A. Blended (online and in-person) Women's Health Interprofessional Learning by Simulation (WHIPLS) for medical and midwifery students. *Aust N Z J Obstet Gynaecol.* 2022;62(4):596-604. doi:10.1111/ajo.13531.
18. Vermeulen J, Buyl R, Hubloue I, Pauwels S, Diltor M, Stas L, et al. A quasi-experimental study on the impact of interprofessional education on collaborative attitudes among midwifery, nursing, and medicine students in Brussels, Belgium. *Eur J Midwifery.* 2025;9:31. doi:10.18332/ejm/204273.
19. Vogel C, Schildmann J, Sommerlatte S, Schmidt E. "Well advised" - Simulation of an ethical case consultation with students of evidence-based nursing, midwifery, and human medicine as part of an interprofessional education course. *GMS J Med Educ.* 2026;43(3):Doc31. doi:10.3205/zma001825.
20. Furber C, Hickie J, Lee K, McLoughlin A, Boggis C, Sutton A, et al. Interprofessional education in a midwifery curriculum: the learning through the exploration of the professional task project (LE-APT). *Midwifery.* 2004;20(4):358-366. doi:10.1016/j.midw.2004.04.001.
21. Kaplan R, Shaw-Battista J, Stotland NE. Incorporating nurse-midwifery students into graduate medical education: lessons learned in interprofessional education. *J Midwifery Womens Health.* 2015;60(6):718-726. doi:10.1111/jmwh.12315.
22. Reid AM, Fielden SA, Holt J, MacLean J, Quinton ND. Learning from interprofessional education: A cautionary tale. *Nurse Educ Today.* 2018;69:128-133. doi:10.1016/j.nedt.2018.07.004.
23. Avery MD, Jennings JC, Germano E, Andrighetti T, Autry AM, Dau KQ, et al. Interprofessional Education Between Midwifery Students and Obstetrics and Gynecology Residents: An American College of Nurse-Midwives and American College of Obstetricians and Gynecologists Collaboration. *J Midwifery Womens Health.* 2020;65(2):257-264. doi:10.1111/jmwh.13057.
24. Beck Dallaghan GL, Hultquist TB, Nickol D, Collier D, Geske J. Attitudes toward interprofessional education improve over time. *J Interprof Educ Pract.* 2018;13:24-26. doi:10.1016/j.xjep.2018.08.007.
25. Abraha TA, W/Tensay KT, Gebre MB, et al. Opportunities and challenges in clinical learning of midwifery students in public Universities of Tigray Region, Ethiopia, 2020: a qualitative study. *BMC Med Educ.* 2023;23:801. doi:10.1186/s12909-023-04765-5.

Table 1. Characteristics of the included studies

Author(s) (year)	Study Design	Context	Sample	Study Scope	Data Collection Instruments	Results
Bostedt et al., 2024 [8]	Mixed methods	University of Münster, Germany	42 students: 24 students of midwifery sciences and 18 students of medicine	Determine whether an ultra-brief IP training in anatomy (a four- hour block) may be sufficient to promote key elements of inter- professionalism	Self-assessment questionnaires	Improvement in IP scores, IP identity unaffected, both sets of students considered IP, teamwork and social competencies to be of importance for their future careers
Mackinnon et al., 2022 [9]	Q - methodology	IPE Intervention in Anatomy at McMaster University, Canada	26 students in the course from the medical, nursing, midwifery, physician assistant, occupational therapy, and physiotherapy programs	Determine which aspects of the IPE Intervention in Anatomy at McMaster University contributed to the development of healthcare student's interprofessional skills	Q-sample of 43 statements about the IPE dissection course derived from previous qualitative studies of the program	3 groups of students emerged: IPE Enthusiasts, Practical IPE Advocates, Skeptical IPE Anatomists
Wakefield et al., 2003 [10]	Quasi - experimental study	University of Manchester, England	10- second year nursing, 17- third year midwifery and 13- fourth year medical students	Develop multi- professional education, provide further opportunities to explore problem- oriented professional task-based learning, foster collaborative working and learning	Pre- and post- study questionnaires	IPE has been described as an important component of midwifery, nursing and medical education
Wong et al., 2016 [11]	Mixed methods	University of British Columbia, Canada	26 undergraduate students of medicine, pharmacy, nursing, midwifery, dentistry, counselling, psychology and computer science	Evaluate the changes in perception towards IP collaboration, before and after the project	Surveys combining the CanMEDS and CIHC frameworks and the Memorial University IPA questionnaire	General improvement in the skills necessary for effective IP collaboration, especially observed within the areas of IP communication, team functioning, and role clarification
Keshmiri and Barghi, 2021 [12]	Quasi- experimental study	Shahid Sadoughi University of Medical Sciences Yaz, Iran	122 students of medicine, pharmacy, nursing, midwifery, public health, and nutrition	Assess the effect of IP community -based education on attitudes and performance of IP collaboration	Self-assessment questionnaires	IP education remarkably improves attitudes toward teamwork, readiness for IP learning, and IP collaboration

Author(s) (year)	Study Design	Context	Sample	Study Scope	Data Collection Instruments	Results
Netherwood and Derham, 2014 [13]	Mixed methods	University setting (not specified), United Kingdom	Third-year students enrolled in nursing, midwifery, homeopathy and complementary therapies degree courses	Determine the value of IPE and ascertain what each group could learn from the other	Focus- group discussions	Six themes emerged: interaction; breaking down prejudices; knowledge of self; knowledge of others; common aims; and organizational limitations. Common aims allow students to recognize the benefits of integrated care
Selvakumaran et al., 2019 [14]	Mixed methods	McMaster University, Canada	Eight cohorts of 28–35 first year students in medicine, midwifery, nursing, physician's assistant, physiotherapy, and occupational therapy programs, over eight years	Assess the attitudes and perceptions of healthcare students towards inter-professional (IP) learning, at the entire cohort and at the professional group level	Pre- and post-study self-assessment scales	All groups saw improvements in numerous categories, midwifery students saw marked improvement in “perceived need for cooperation”, and were resistant to changes of attitudes across 5-7 categories
Feltham et al., 2016 [15]	Mixed methods	University of Cumbria, Carlisle, England	Twenty-five midwifery students and thirty-one paramedic students	Explore the experiences of midwifery and paramedic students with IPE	Focus group sessions	4 main themes were identified, benefits of IPE in the areas of professional practice, professional governing bodies, professional codes and scope of practice were seen
McLelland et al., 2017 [16]	Quasi-experimental study	Unnamed university in Victoria, Australia	10 paramedics, 10 nursing, and four midwifery students	Determine effect of an IPE simulated birth scenario on self-efficacy scores and clinical knowledge and assess students' satisfaction	Satisfaction with simulation survey, serial surveys of clinical knowledge and self-efficacy	Self-efficacy and confidence significantly improved at 1 month and 4 months, clinical knowledge significantly increased in only the nursing group, students' satisfaction high
Lee et al., 2022 [17]	Mixed methods	Monash University Melbourne, Australia	98 medical students and 39 midwifery students	Evaluate the IPE simulation teaching intervention and explore how it contributes to learning	Post workshop surveys	Benefits of IPE across 5 themes emerged including 'low- pressure simulation environments' and 'peer- assisted learning'

Author(s) (year)	Study Design	Context	Sample	Study Scope	Data Collection Instruments	Results
Vermeulen et al., 2025 [18]	Quasi-experimental study	University-based IPE simulation (Belgium)	269 students (midwifery, nursing, medicine)	Evaluation of IPE impact on interprofessional collaboration and attitudes	Interprofessional Education Perception Scale (IEPS); open-ended question	Significant improvements in competence, autonomy, and perception of collaboration ($p < 0.001$); positive attitudes consistent across groups; supportive qualitative feedback
Vogel et al., 2026 [19]	Mixed methods	Simulation-based ethical case discussions in interprofessional setting (Germany)	96 healthcare students (midwifery, nursing, medicine)	Exploration of interprofessional collaboration and ethical awareness	Questionnaires and qualitative feedback	Positive changes in attitudes toward interprofessional collaboration; increased awareness of ethical dimensions; qualitative findings highlighted value of experiential and interprofessional learning