

Can Ethics Education Change Clinical Practice? A Systematic Review of Reasoning, Reflection, Behaviour, and Transfer in the Health Professions

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Abstract

Ethics education is widely expected to improve clinicians' capacity to recognise, analyse, and respond to ethically difficult situations, yet educational success is often inferred from proximal outcomes such as knowledge, moral sensitivity, reasoning scores, or learner perceptions. Whether such changes alter professional behaviour, transfer into clinical decision-making, or persist within practice remains less certain. This systematic review examined ethics education across four prespecified domains: moral reasoning; reflection and ethical sensitivity; behaviour and workplace performance; and clinical transfer and sustainability. The review used PRISMA 2020 reporting principles and predefined eligibility, extraction, risk-of-bias, outcome-classification, and synthesis procedures. Health-professions students and practicing professionals were eligible when an identifiable ethics-focused educational intervention assessed at least one prespecified outcome domain. Educational, simulation, clinical-placement, and workplace interventions were considered. Evidence was synthesized narratively because intervention designs, professions, outcome measures, and follow-up periods were not sufficiently uniform to justify assuming a common effect metric. Educational outcomes were explicitly distinguished from enacted workplace behaviour and sustained transfer. The evidence showed the clearest and most frequent signals at proximal educational levels, particularly ethical reasoning, reflection, moral sensitivity, and related learner outcomes. Findings were nevertheless heterogeneous, and some interventions produced little or no measurable change on formal competence measures. Behavioural evidence was less common and varied in its proximity to real practice. The strongest transfer-relevant studies embedded ethics support within clinical work or evaluated actual professional decision processes. Evidence for sustained practice change remained comparatively limited and context dependent. Ethics education can change ethically relevant learning outcomes, but the literature does not support treating such change as equivalent to altered clinical practice. The principal review finding is therefore a distinction in evidential directness: proximal educational improvement, enacted professional behaviour, clinical transfer, and sustained practice effects require separate demonstration. Stronger longitudinal, workplace-based, and implementation-sensitive research is needed before durable clinical impact can be inferred.

Keywords: Ethics education, Medical ethics, Moral reasoning, Ethical sensitivity, Professional behaviour, Clinical transfer

Introduction

Ethics education occupies a distinctive position in health-professions training because its intended consequences extend beyond acquisition of factual knowledge. Educational interventions commonly aim to improve recognition of ethically salient circumstances, deliberation about competing obligations, reflective capacity, judgment, communication, and professional action. Recent reviews nevertheless show substantial diversity in pedagogies, constructs, assessment instruments, and study designs, with the most consistent

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evidence concentrated on proximal measures such as ethical sensitivity rather than durable practice outcomes [1].

A similar pattern appears in educational interventions targeting ethical decision-making. Multiple strategies have been evaluated, but heterogeneity in methods and outcome measures prevents a simple conclusion that one pedagogical approach reliably produces superior ethical judgment across learners and settings [2]. Team-based approaches likewise appear capable of generating favorable educational outcomes, while evidence linking these gains to long-term clinical practice remains substantially thinner [3].

The resulting problem is not whether ethics education can produce any measurable change. It is whether changes demonstrated under educational conditions can be interpreted as changes in professional practice. This review therefore treats reasoning, reflection, behaviour, transfer, and sustainability as related but non-equivalent evidential levels.

Review objectives

The primary objective was to determine what the contemporary health-professions literature establishes about the effects of ethics education across four prespecified domains: moral reasoning; reflection and ethical sensitivity; behaviour and workplace performance; and clinical transfer and sustainability. The review was designed specifically to prevent improvement in one domain from being treated automatically as evidence of improvement in another.

This distinction is necessary because substantial educational exposure does not guarantee measurable improvement in formal moral-competence outcomes. A multimodal medical-ethics intervention, for example, did not produce a significant increase in measured moral competence, demonstrating the importance of retaining null and mixed findings rather than assuming educational benefit from intervention intensity alone [4].

Conversely, educational effects may emerge in enacted or reported behaviour without a parallel increase in another proximal construct. In clinical nurses, an ethics seminar improved ethical behaviour while moral-sensitivity findings did not follow the same pattern [5]. Accordingly, the review asked not merely whether an intervention “worked,” but what changed, how directly that outcome represented professional practice, whether change persisted, and which contextual or methodological conditions constrained interpretation.

Protocol and registration

The review methods were structured in accordance with PRISMA 2020 reporting principles, including explicit specification of eligibility criteria, information retrieval, screening, data extraction, synthesis, and the distinction between records, reports, and included studies [6]. The review question and four outcome domains were defined before interpretation of the outcome evidence so that studies would not be reorganized retrospectively around favorable findings.

PRISMA 2020 guidance also requires protocol and registration information to reflect the review’s actual history rather than imply prospective registration when none can be demonstrated [7]. No prospectively registered protocol record was available for this review. The methods reported here therefore constitute the prespecified review procedures used for the completed synthesis rather than a claim of prospective registry-based protocol publication. No protocol amendments are represented as prospectively documented unless they were present in the preserved review record.

Eligibility criteria

Eligible studies examined an identifiable educational intervention concerned with ethics, bioethics, professional ethical judgment, moral deliberation, or a closely aligned clinical-ethics construct in health-professions learners or practicing professionals. Interventions were not restricted to classroom teaching. Clinically integrated educational approaches were eligible when ethics content and an ethically relevant outcome were explicit, as demonstrated by ward-round teaching embedded within clinical nursing education [8]. Practicing professionals were also eligible because the review question concerned translation into clinical practice rather than student learning alone. Workplace educational interventions directly targeting ethical reasoning, including interactive education for hospital pharmacists, therefore met the conceptual scope [9].

Eligible studies had to report an outcome assignable to at least one prespecified domain. Studies limited to satisfaction, course acceptability, general professional knowledge without an ethics-specific outcome, or description of curriculum content without evaluated consequences were excluded from the effectiveness synthesis. Observational studies without an educational exposure could inform contextual interpretation but were not treated as intervention-effect evidence.

Information sources and search strategy

Evidence identification used structured combinations of ethics-education terms with health-professions, pedagogy, outcome, measurement, behaviour, transfer, implementation, and sustainability concepts. Searches were supplemented by journal-targeted, publisher, DOI, and citation-chaining approaches where necessary to verify directly relevant studies. Search reporting followed the principle that information sources, search concepts, platforms, and supplementary methods should be described sufficiently to permit critical appraisal of retrieval decisions [10].

Search sensitivity was intentionally broader than the phrase “ethics education.” Previous health-professions evidence syntheses demonstrate substantial variation in terminology surrounding ethical competence, moral sensitivity, ethical decision-making, reflection, moral action, and related educational constructs [11]. Terms representing these constructs were therefore searched alongside profession-specific terms for medicine, nursing, pharmacy, dentistry, and other health disciplines.

Only peer-reviewed journal articles published from 2017 through 2026 were eligible for the review evidence base. Searches were not narrowed toward predetermined table categories or conceptual-figure labels.

Screening and study selection

Potentially eligible reports were assessed against the predefined population, intervention, outcome, publication, and temporal criteria. Screening decisions distinguished intervention studies from methodological, measurement, review-level, and contextual papers so that supporting references used elsewhere in the manuscript would not automatically become included effectiveness studies.

The screening process was documented at the decision level rather than assuming that different screening workflows are methodologically interchangeable. Evidence on systematic-review study selection shows that prioritization and single-screening approaches can alter efficiency and error risk and therefore require transparent description of reviewer roles and verification procedures [12].

Likewise, no machine-assisted or prioritized screening process was considered complete solely because later records appeared unlikely to be eligible. Methodological evidence indicates that computer-assisted screening requires defensible stopping criteria if recall is to be

protected [13]. Final eligibility therefore depended on substantive application of the review criteria rather than an arbitrary saturation rule. Numerical study-flow information is reported only where supported by the preserved review ledger.

Data extraction

Extraction was organized around characteristics needed to distinguish educational exposure from practice transfer. For each eligible intervention, fields included profession and educational stage, clinical or educational setting, jurisdiction, pedagogical format, intervention intensity where reported, comparator, study design, outcome instrument, assessment timing, follow-up, and the relationship of each endpoint to real professional practice.

Intervention and comparator characteristics were retained separately because apparently similar ethics courses can differ materially in instructional structure. Comparative evaluations such as PAD-model versus lecture-based ethics teaching illustrate why pedagogy cannot be reduced to a generic intervention label when interpreting outcome differences [14].

Multiple outcomes within a single study were extracted independently rather than collapsed into a global ethics-effect judgment. This was especially important for interventions evaluating distinct constructs simultaneously. Simulated problem-based ethics education, for example, has been assessed using moral sensitivity, empathy, and critical-thinking outcomes within the same study [15]. Each measure was therefore assigned according to its construct and evidential directness rather than counted as an interchangeable indicator of clinical change.

Risk-of-bias and quality assessment

Risk of bias was evaluated according to study design rather than through a single generic numerical quality score. Randomized and cluster-randomized intervention studies were assessed using domains appropriate to randomized allocation, whereas nonrandomized intervention studies required explicit consideration of confounding, participant selection, intervention classification, missing data, outcome measurement, and selective reporting. Methodological work on risk-of-bias instruments supports matching the assessment framework to the causal structure and design of the study being evaluated [16].

For nonrandomized interventions, ROBINS-I principles were applied only where a defensible target effect and plausible confounding structure could be specified. This restriction was important because methodological review has shown that ROBINS-I is frequently misapplied when reviewers treat it as a conventional checklist rather than a causal bias-assessment framework [17].

Quality judgments were retained at domain level. No study was assigned an invented summary grade, and methodological limitations were carried forward into synthesis rather than being erased by a single score.

Outcome classification and synthesis

Outcomes were synthesized within four prespecified domains. Moral reasoning included ethical judgment, structured deliberation, moral competence, and decision-making measures. Reflection and ethical sensitivity included recognition of ethical issues, reflective processing, moral sensitivity, and closely aligned constructs. Behaviour and workplace performance required an enacted, performance-based, advocacy, documentation, or professional-action endpoint rather than knowledge alone. Clinical transfer and sustainability required evidence that educational effects were expressed

in real clinical work, implementation activity, repeated practice, or maintained outcomes beyond immediate instruction.

Because interventions, professions, measurement instruments, and assessment periods were heterogeneous, the synthesis did not assume that a common quantitative effect could be estimated. Instead, findings were organized using structured synthesis principles appropriate when meta-analysis is not justified, with attention to outcome direction, study design, measurement directness, and limitations [18].

This approach also addresses a recurrent problem in health-professions education evaluation: measurement of an educational outcome is not, by itself, evidence explaining how a program works or whether its effects transfer into practice [19]. The review therefore uses evidential directness to practice as an interpretive distinction rather than a validated scale. Higher directness indicates that the measured endpoint occurs closer to actual professional action; it does not imply greater effect magnitude or educational superiority.

The resulting eligibility boundaries and outcome-classification rules are summarized in **Table 1**.

Table 1. Eligibility boundaries and outcome coding rules used to distinguish educational change from clinical transfer

Review decision	Operational rule	Interpretive purpose
Population	Health-professions students, trainees, or practicing professionals	Permits comparison across learner stages without assuming equivalent contexts
Intervention	Explicit ethics, bioethics, moral-deliberation, or clinical-ethics educational component	Excludes general professionalism teaching without an identifiable ethics focus
Setting	Classroom, simulation, clinical placement, or workplace	Allows practice-embedded education while preserving setting differences
Eligible outcome	At least one measure assignable to a prespecified outcome domain	Prevents satisfaction alone from being interpreted as ethics effectiveness
Moral reasoning	Judgment, moral competence, ethical decision-making, or structured deliberation	Represents cognitive-deliberative change rather than clinical action
Reflection/sensitivity	Ethical recognition, reflection, moral sensitivity, or closely aligned awareness constructs	Represents ethically attentive or reflective change
Behaviour/workplace performance	Enacted, performance-based, advocacy, documentation, decision-process, or professional-action endpoint	Requires greater proximity to action than knowledge or attitude
Clinical transfer/sustainability	Expression in real practice, implementation, repeated professional use, or maintained follow-up	Separates immediate educational gain from transfer and persistence
Synthesis rule	Interpret by domain, design, measurement validity, follow-up, and directness to practice	Avoids treating heterogeneous outcomes as one common effect

Excluded inference	Proximal improvement alone is not classified as demonstrated clinical transfer	Protects against upward inference from learning to practice
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Note: The four outcome domains are review-defined analytical categories. “Evidential directness to practice” is a proposed interpretive distinction used in this review; it is not a validated measurement instrument, effect-size hierarchy, or causal model.

Study-selection results

The eligible evidence extended beyond student classrooms to practicing clinicians and clinically embedded education. Ethics teaching for NICU and PICU nurses assessed moral sensitivity and moral distress after a flipped-classroom intervention [20]. Interactive ethics education for practicing nurses likewise evaluated moral sensitivity as a proximal professional outcome rather than assuming that participation itself represented changed practice [21]. This breadth mattered

because the review concerns movement from education toward clinical action.

The preserved review record did not contain an auditable database-native count ledger sufficient to reconstruct exact source yields, duplicate removals, screening exclusions, reports sought, or full-text exclusion counts. Numerical PRISMA values were therefore not reconstructed retrospectively. **Figure 1** reports the selection pathway and this reporting boundary rather than supplying estimated values.

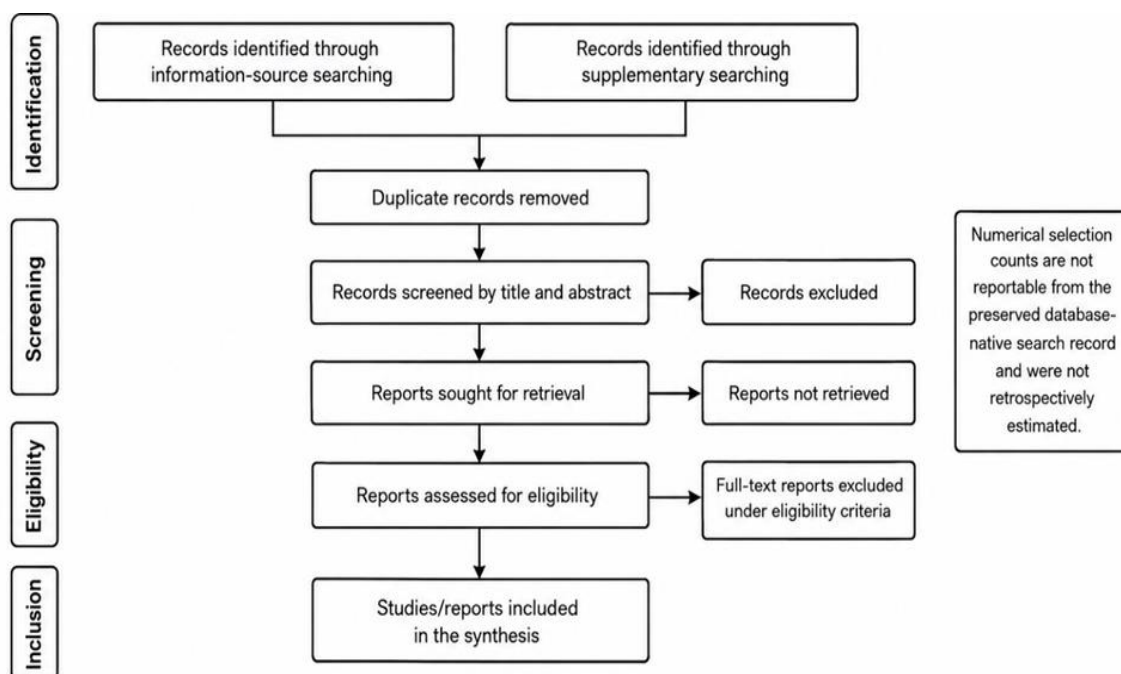


Figure 1. PRISMA 2020 study-selection pathway with preserved-count boundary

Characteristics of included studies

The intervention literature was heterogeneous in profession, learner stage, setting, and pedagogical form. Debate-based nursing ethics education targeted moral sensitivity and judgment, illustrating a deliberative pedagogy centered on argument and counterargument [22]. Recent curricula also addressed generative-AI ethics, measuring awareness, sensitivity, attitudes, and adoption intentions and thereby sharpening the distinction between intention and enacted behaviour [23].

Interventions included lectures, role-play, cases, problem-based and simulated learning, flipped formats, team or debate-centered learning, workshops, coaching, and moral case deliberation. Settings ranged from undergraduate classrooms to clinical placements and professional workplaces. Outcomes were measured immediately after teaching in many studies, whereas fewer designs examined follow-up, implementation, or actual clinical decisions. **Table 2** summarizes characteristics that materially affected interpretation.

Table 2. Study characteristics that determined interpretability of ethics-education outcomes

Characteristic	Variation represented in the included evidence	Why it matters for synthesis
Learner stage	Undergraduate students, trainees, practicing clinicians	Educational exposure and workplace responsibility are not equivalent
Professional group	Nursing, medicine, pharmacy, dentistry and related health professions	Ethical tasks, authority, and clinical opportunities differ
Educational setting	Classroom, simulation, clinical placement, workplace	Proximity to real practice varies substantially
Pedagogy	Lecture, role-play, cases, debate, problem learning, flipped learning, workshops, coaching, moral case deliberation	Similar “ethics education” labels conceal different learning activities
Comparator	Usual teaching, alternative pedagogy, pre-intervention baseline, or no concurrent comparator	Causal interpretability depends on design
Outcome timing	Immediate post-course assessment through limited follow-up	Immediate change cannot establish durability
Endpoint type	Reasoning, sensitivity, reflection, performance, advocacy, clinical decision process, implementation	Different endpoints support different levels of inference
Measurement source	Test, scale, self-report, performance task, practice-linked process measure	Measurement directness affects confidence about transfer
Context	Institution, specialty, ethical climate, jurisdiction, technology domain	Effects may depend on where and how learning can be enacted

Note: The table is an analytical summary of characteristics extracted from the included intervention evidence. It does not imply that each characteristic occurred in every study or that categories are quantitatively balanced.

Effects on ethical reasoning

Evidence for ethical reasoning was mixed rather than uniformly positive. An early pilot of principle-based structured case discussions in medical students did not establish a clear generalizable improvement in moral competence, illustrating both the potential limits of brief interventions and the dependence of conclusions on the competence measure selected [24]. Formal reasoning scores may nevertheless capture only part of what learners acquire through discussion, argument, or case analysis.

A later quasi-experimental comparison of three ethics-education approaches similarly found no clear superiority between pedagogies on the formal ethical-dilemma test despite differences in learners’ perceptions of effectiveness or satisfaction [25]. These studies do not show that active methods are ineffective; they show that improvement cannot be inferred from intensity, preference, or theoretical plausibility alone.

Reasoning outcomes should therefore be interpreted at the level actually measured, with attention to instrument sensitivity, baseline competence, comparator quality, and whether the assessment resembles ethical decisions encountered in clinical work. The evidence supports educationally meaningful reasoning as an outcome

domain, but not a presumption that every structured ethics intervention improves it.

Effects on reflection and ethical sensitivity

Reflection and moral sensitivity showed more frequent favorable signals, but their interpretation remained proximal. A comparison of problem-based learning and reflective practice reported improvement in nursing students’ moral sensitivity, with follow-up extending beyond the immediate post-intervention assessment [26]. That persistence strengthens the claim that the measured educational effect was not purely momentary, but it still does not demonstrate that participants subsequently recognized or managed ethical problems differently in independent clinical practice.

Divergence between related outcomes further cautioned against construct collapse. Ethics education in nursing students has been associated with changes in ethical sensitivity and patient-advocacy measures that did not behave as a single interchangeable outcome [27]. Sensitivity concerns noticing and interpreting ethically salient features; advocacy concerns willingness or reported propensity to act for patients. Either may be educationally valuable, but movement in one does not establish movement in the other.

The synthesis therefore treats reflection and sensitivity as important enabling capacities rather than surrogate clinical outcomes. Their strongest evidential role is to show that ethics education can alter how learners attend to and process ethically relevant situations. Whether those capacities are enacted depends on later behavioural, organizational, and opportunity structures.

Effects on behaviour and workplace performance

Behavioural outcomes were less straightforward because studies used different meanings of “performance.” Role-play and lecture-based ethics education have been evaluated using ethical-performance measures in nursing students alongside sensitivity outcomes [28]. Such measures are closer to action than knowledge tests, but performance under educational conditions remains different from behaviour undertaken amid real

professional hierarchy, workload, uncertainty, and consequences.

More direct evidence came from interventions embedded in actual clinical work. The CODE stepped-wedge cluster randomized trial evaluated coaching physicians around ethical decision-making for hospitalized adults potentially receiving excessive treatment, thereby linking an ethics intervention to real clinical decision processes rather than learner perceptions alone [29]. Its design gives the evidence greater directness to workplace practice, although the complex intervention and hospital context still constrain generalization.

Table 3 synthesizes the outcome pattern reached at this point in the Results: educational effects become more clinically informative as endpoints approach enacted practice, but increasing directness generally coincides with thinner and more context-dependent evidence.

Table 3. Outcome synthesis from proximal learning to enacted professional performance

Outcome domain	What counted as evidence	Pattern in the reviewed literature	Inference permitted
Moral reasoning	Judgment, competence, structured deliberation, ethical-decision measures	Mixed; favorable and null findings both occurred	Education may change reasoning, but no uniform effect is established
Reflection and ethical sensitivity	Recognition, reflection, moral sensitivity	Favorable signals occurred, including limited follow-up	Proximal ethically attentive capacities can change
Behaviour or educational performance	Performance tasks, advocacy, reported ethical behaviour	Some improvement, but ecological directness varied	Behavioural change is supportable only at the level measured
Workplace clinical processes	Decisions or actions embedded in real care	More direct but less broadly represented evidence	Stronger evidence of practice transfer within studied contexts
Cross-domain interpretation	Endpoint directness, timing, and setting considered together	Outcomes become less interchangeable as proximity to practice increases	No upward inference from learning outcome to sustained clinical change

Note: This table presents a review-derived proposed analytical synthesis, not an effect-size ranking or validated hierarchy. “Directness” refers to proximity of the measured endpoint to actual professional practice.

Evidence of clinical transfer and sustainability

Evidence of transfer was strongest when ethics education was attached to actual professional dilemmas or implementation roles. Moral case deliberation using the dilemma method among community pharmacists engaged participants with real practice problems and was associated with enhanced moral reflectivity; some participants reconsidered their decisions after deliberation [30]. This provides more direct evidence of transfer than a classroom score because the educational activity is connected to authentic professional judgment. The small practice-based design, however, cannot establish durable organizational change.

Implementation-oriented training provides a second form of transfer evidence. A blended program preparing nurses

to facilitate and implement CURA in palliative-care institutions developed facilitator competency, ownership, and responsibility for using the approach [31]. This indicates that ethics education can build local implementation capacity, but capacity is not the same as sustained institutional embedding. Maintenance depends on time, managerial support, repeated use, role legitimacy, and integration with ordinary work.

Accordingly, clinical transfer should be treated as demonstrated only where educational effects appear in actual practice processes, while sustainability requires additional temporal and organizational evidence.

Quality and certainty of evidence

Confidence in the synthesis was limited not only by study design but also by measurement. Development of a multidimensional nursing ethical decision-making scale illustrates that ethical decision-making can encompass sensitivity, motivation, judgment, and action rather than a single undifferentiated competence [32]. Studies that measure only one component therefore cannot be assumed to establish change across the whole ethical-decision process.

Measurement heterogeneity was especially important for moral sensitivity. Reviews of ethical-sensitivity assessment in nursing students identify multiple tools and operationalizations, limiting straightforward comparison across interventions [33]. The same nominal outcome

may therefore represent somewhat different constructs across studies, cultures, and educational settings.

No formal GRADE certainty categories were assigned. Instead, interpretive confidence was calibrated according to study design, risk of bias, outcome-measure validity, directness to clinical practice, consistency of findings, comparator quality, and duration of follow-up. On that basis, evidence was more convincing for the existence of some proximal educational change than for generalized, durable clinical-practice effects.

Figure 2 maps where the reviewed evidence becomes progressively less direct as claims move from educational change toward sustained clinical practice.

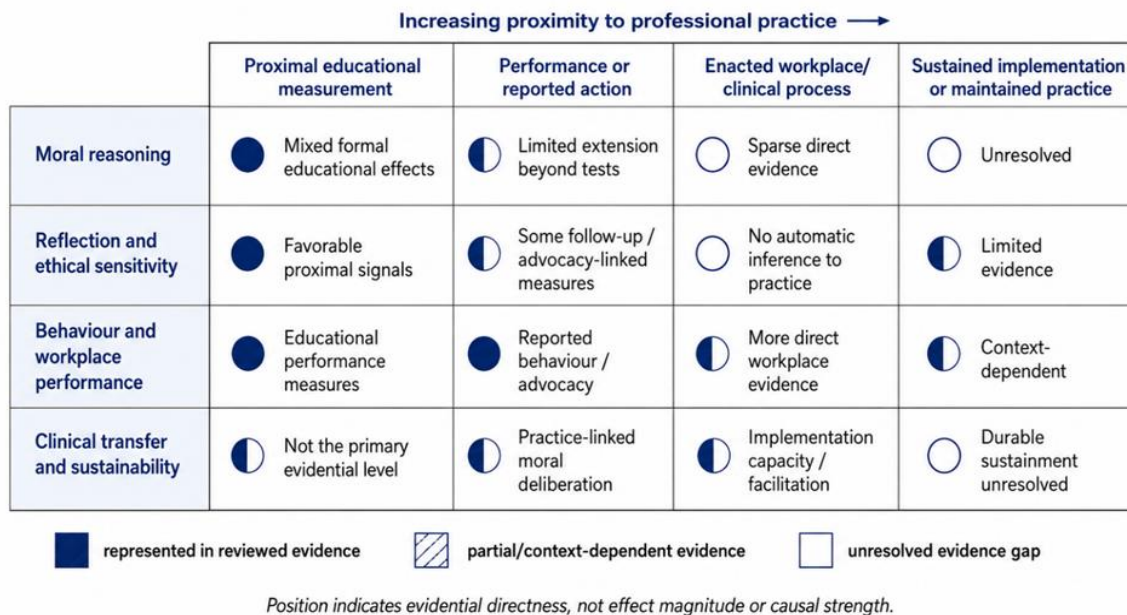


Figure 2. Evidence-gap matrix for ethics-education outcomes and clinical transfer

Discussion

The central finding is not that ethics education fails to influence practice, nor that educational outcomes are unimportant. Rather, the evidence supports a graded claim about what has actually been demonstrated. Reasoning, reflection, and moral sensitivity can change following educational interventions, but these outcomes should not be treated as automatic proxies for clinical behaviour. Practice-linked studies show that movement beyond the classroom is possible, yet evidence becomes more context dependent as endpoints approach real clinical decisions and implementation.

An important explanation is that ethical action is not generated by individual competence alone. Hospital ethical climate has been associated with moral sensitivity and ethical decision-making ability among nurses [34]. Although cross-sectional mediation cannot establish a causal pathway, the finding is consistent with the proposition that organizational conditions may enable or constrain whether learned ethical capacities are expressed.

The review therefore proposes a transfer-sensitive interpretation of ethics education: educational success should be stated at the most distal outcome actually demonstrated. A reasoning gain is a reasoning gain; a

sensitivity gain is a sensitivity gain; a workplace decision change is stronger evidence of transfer. This vocabulary reduces overstatement without denying the educational significance of proximal outcomes.

Educational and research implications

Curricula should be designed backward from the ethical capacity educators intend learners to enact. If the goal is structured reasoning, assessment should use defensible reasoning tasks. If the goal is clinical advocacy or deliberative behaviour, evaluation should include performance or workplace-linked endpoints rather than relying solely on knowledge or satisfaction. If sustainability is claimed, follow-up and organizational implementation must be measured explicitly.

Measurement development should also become more closely integrated with intervention design. Intermediate-concept approaches to medical ethics reasoning illustrate attempts to assess contextually specific ethical reasoning rather than relying exclusively on global moral-development measures [35]. Future studies should test whether such measures are responsive to education and predictive of later professional action rather than assuming either property.

Priority designs include multicentre randomized or cluster-randomized trials where feasible, strong quasi-experiments where randomization is impractical, longitudinal follow-up, independent observation or record-based behavioural outcomes, implementation-fidelity measures, and mixed-method process evaluation. Research should also examine profession, ethical climate, jurisdiction, specialty, learner stage, and opportunity to act as moderators. Patient-relevant outcomes may ultimately matter, but their distance from educational exposure requires especially careful causal reasoning.

Limitations

The evidence base was heterogeneous in profession, pedagogy, outcome measure, follow-up, and proximity to practice, preventing defensible quantitative pooling. Nursing studies were prominent, limiting confidence that the same patterns apply unchanged across professions. Cross-sectional comparisons of dentistry students and orthodontic clinicians illustrate why career-stage differences cannot be interpreted as educational effects without longitudinal evidence [36].

The review also could not reconstruct numerical PRISMA counts because an auditable database-native

count ledger was not preserved. This limits reproducibility of the study-flow quantities, although no counts were estimated. Finally, the proposed directness-to-practice interpretation is an analytical synthesis intended to discipline inference; it requires prospective testing rather than being treated as a validated outcome hierarchy.

Conclusion

Ethics education can alter ethically relevant reasoning, reflection, sensitivity, and some forms of professional performance, but the evidence does not justify equating these outcomes with durable clinical-practice change. The most defensible conclusion is outcome-specific: proximal learning, enacted behaviour, clinical transfer, and sustainability require separate evidence. Future evaluation should match claims to measures, follow learners into real practice, and examine the organizational conditions under which ethical capacities can be expressed and maintained.

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