

Reviewer 1 Report

Manuscript title: Modern Radiography Education: Clinical Competence, Simulation, and AI
Version: 1

Comments:

This manuscript tackles a timely and critical intersection in radiography education: the balance between traditional clinical formation and the rapid influx of digital technologies. The topic is well-suited for the journal. However, the current draft reads largely as a description of challenges rather than a synthesis of solutions. The author needs to pivot the argument away from "student satisfaction" and towards "patient safety" and measurable "clinical outcomes" to make a stronger impact.

Major

1. The paper currently mentions that placements vary, but it lacks specificity regarding why this matters for competency. The author should expand on the "supervision culture" rather than just the number of hours spent. Please explicitly discuss how inequities in site quality such as differences in equipment age or teaching culture lead to unequal competence development among students. The argument needs to be made that relying on "goodwill alone" for preceptorship is a systemic failure.
2. The section on assessment criticizes logbooks but does not offer a robust alternative framework. I suggest incorporating Miller's (1990) framework to distinguish between "knowledge" and "performance". Furthermore, the manuscript needs to address the danger of assessments that prioritize task completion over judgment and adaptability.
3. A recurring weakness in the manuscript is the reliance on literature that reports "confidence" or "readiness." The author must critically evaluate this limitation. Please add a section or strong paragraph emphasizing that high-impact research must link educational changes (like VR or new assessment tools) to actual clinical performance indicators, such as repeat rates or patient safety outcomes, rather than just student perception.

Minor

1. The abstract is currently a bit disjointed. Please ensure it covers the three main pressure points: clinical capacity, assessment consistency, and digital transformation.
2. When discussing competence, please ensure radiation protection is framed as a "longitudinal competence" involving decision-making, rather than just a module on physics.
3. Please standardize the use of "Digital Professionalism" as a key concept, particularly regarding how students behave in online and AI-driven environments.

Overall recommendation: Accept with major revisions.

Reviewer 2 Report

Manuscript title: Modern Radiography Education: Clinical Competence, Simulation, and AI
Version: 1

Comments:

The author presents a coherent review of modern radiography education. The integration of AI and simulation is promising. However, the manuscript requires better alignment between the technology sections and the clinical reality. The discussion on simulation and AI feels slightly disconnected from the "human" element of radiography specifically patient communication and care.

Major

1. The section on simulation focuses heavily on technical skills. The author needs to address the "transfer gap." Please revise to emphasize that simulation is not just about equipment manipulation but must include "patient handling, consent communication, reassurance, and pain management" to be effective. If simulation does not align with these authentic tasks, its value is limited.
2. The discussion on Artificial Intelligence is too generic. It is not enough to say students need to know AI; the author needs to specify what they need to know. Please include specific competencies such as "bias identification," "governance reasoning," and "safe escalation decisions". Additionally, the paper should address the academic integrity issues posed by AI (e.g., students using it for writing support) and the need for policies on acceptable use.
3. The manuscript would benefit from discussing peer-supported assessment. This is a growing area in medical education. Please include evidence on how peer assessment can improve "criteria awareness" and help students understand what competent performance actually looks like.

Minor

1. The introduction should set the stakes higher. Please explicitly state that competence is visible at the "point of care" and involves immediate consequences for patients, differentiating it from purely academic fields.
2. Please ensure recent literature regarding the "digital transformation" post-pandemic is included to show that online delivery is now a baseline, not an emergency measure.
3. Briefly mention the specific barriers preceptors face, such as time constraints and lack of coordination, to contextualize the supervision crisis

Overall recommendation: Accept with major revisions.

Reviewer 1 Report

Manuscript title: Modern Radiography Education: Clinical Competence, Simulation, and AI
Version: 2

Comments:

Revisions are substantially complied. The paper is now recommended for publication.

Reviewer 2 Report

Manuscript title: Modern Radiography Education: Clinical Competence, Simulation, and AI
Version: 2

Comments:

Revisions are substantially complied. The paper is now recommended for publication.