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| Book Name: | [**Medical Science: Recent Advances and Applications**](https://bookstore.bookpi.org/product/medical-science-recent-advances-and-applications-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_5223** |
| Title of the Manuscript: | **AI-Powered Simulations for Medical Training: A Game-Changer in Skill Development** |
| Type of the Article | **BOOK CHAPTER** |

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | This work addresses the urgent need for creative and efficient teaching strategies by highlighting the revolutionary role of AI-powered simulations in medical education, which is of great significance to the scientific community. The research offers important insights into how medical practitioners might improve their clinical proficiency in a risk-free, immersive setting by investigating how AI-driven technologies affect the acquisition of cognitive and psychomotor skills. Additionally, by highlighting how AI has the potential to transform medical pedagogy, it adds to the continuing conversation about competency-based education and individualized learning. The review's conclusions will form the basis for future investigations, assisting technologists, educators, and legislators in refining AI applications for improved patient safety and medical education. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | YES |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | By addressing important topics including interaction, immersive learning, risk-free practice, and competency-based teaching, the abstract skillfully illustrates the value of AI-powered simulations in medical education. |  |
| **Is the manuscript scientifically, correct? Please write here.** | The manuscript's description of AI-powered simulations in medical training seems to be scientifically correct based on the abstract that was provided. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.**  **-** | **YES** |  |
| Is the language/English quality of the article suitable for scholarly communications? | YES |  |
| Optional/General comments | STRENGTHS  1. This manuscript presents a well-structured and insightful review of AI-powered simulations in medical training, effectively demonstrating their transformative impact on skill development, clinical proficiency, and patient safety.  2. It highlights key AI technologies such as machine learning, virtual reality (VR), augmented reality (AR), and deep learning, reinforcing their role in creating immersive, interactive learning environments.  3.The focus on competency-based education and real-time feedback aligns with modern educational paradigms, making the discussion relevant to medical educators, policymakers, and researchers.  4.Additionally, the manuscript emphasizes the scalability and cost-effectiveness of AI-driven simulations, positioning them as viable alternatives to traditional training methods.  5. By exploring both cognitive and psychomotor skill acquisition, the paper provides a comprehensive understanding of AI’s multifaceted role in medical education.  SUGGESTIONS  Expanding the discussion of difficulties and constraints, especially with relation to the cost and availability of AI-powered simulations in various healthcare contexts, would enhance the book. A more balanced analysis would be provided by including comparative data on AI-based simulations vs conventional training techniques. Furthermore, adding case studies, statistical data, or fresh research papers could strengthen the assertions' empirical backing. To provide a comprehensive viewpoint, ethical issues including data security, AI biases, and regulatory difficulties should also be investigated. Last but not least, a section on potential future developments—like incorporating real-time patient data or utilizing generative AI for customized training—could offer insightful information on how AI is developing in medical education. |  |

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| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in detail)* |  |

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