Technology paper

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**Introduction**

Artificial intelligence became integral part of daily life for people around the globe. Machines run algorithms to identify consumer’s preferences, robots produce industrial products and operating systems manage nearly every aspects of daily business. Artificial intelligence became import part of healthcare as well, from robots assisting surgeons to electronic medical record, machines become more and more influential part of health delivery system. This paper will examine role of artificial intelligence in nursing practice and potential ethical problems from integration of machines in health delivery system.

Technological advancement in medicine occur at fast pace and revolutionize healthcare industry. The structure and organization of nursing practice was drastically changed over last few decades with new artificial intelligence applications. For instance, Electronic Medical Record almost entirely replaced paper documentation and data storage, robot DaVinci assist surgeons and nurses in operating room, companion robots such as Jibo and Buddy assist disabled autistic kids and Veebot has 83 percent accuracy in selecting suitable vein (Pepito, Locsin, 2019). In addition, artificial intelligence technology help to determine clinically important information among massive amount of data and assist nurse in clinical decision making. However, besides numerous benefits of artificial intelligence bring to nursing practice, some experts think machines might replace human nurses to certain extant. “A report by McKinsey Global Institute estimates that 800 million workers worldwide could be replaced by robots by the year 2030” (Pepito, Locsin, 2019). Another challenge for artificial intelligence implementation in daily nursing practice is ethical considerations. One of main concern is managing bias when computer originally learn bias input, it is more likely to give bias results. According to the study conducted by Massachusetts Institute of Technology “  three areas where bias can creep into an AI project: framing the problem or task to be solved, selecting flawed data to train the system (the data don't reflect current reality or the data represent existing biases), and selecting data that include attributes that will skew the algorithm results” (Robert, 2019). Another aspect of bias is lack of algorithm transparency. For instance, user might do not understand how computer bring to certain conclusion as result unable to evaluate the quality given decision.

**Summary**

In conclusion, artificial intelligence became integral part of healthcare industry and continue to reshape nursing practice and delivery of care. Integration of artificial intelligence benefits nurses’ practice by letting nurses focus on more complicated tasks, assist in clinical decision making and efficiently utilize large number of data. On opposite site artificial intelligence might endanger clinical workforce by replacing humans with machine. In addition, numerous ethical considerations such as algorithm bias and lack of algorithm transparency need to be taken into account while integrate artificial intelligence in daily clinical practice.

References

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