

Hurdles and Possible Solutions in Development and Implementation of Online Learning in Nursing Education- an Integrative Review

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Abstract

Background of the study: Presently, there are more than 3 million cases and one lakh deaths reported, and still counting.^[1] This has fetched essential changes in all aspects of our lives. Social distancing and preventive movement procedures have noticeably unbalanced traditional educational practices. The time course of these changes due to instability of pandemic is unspecified. The changeover from conventional to online learning is full of challenges. Escalating issues of time constraints and load are constantly to be found in almost all students and educators. It is really motivating the educational organizations to search new ideas of implementing custom-made, own-governing learning.

Objective: The purpose of the study is to appraise the available literature on perceived hurdles and possible solutions that are encountered by the teachers while executing e-learning for nursing students.

Material and Methods: An integrative review of the literature was performed keeping in mind the inclusion criteria of studies with varied methodologies and designs. A search strategy was devised and data was searched in the following databases like, Medline (Ebsco), Medline, Scopus, Science Direct, Biomedical Central, and Google Scholar. Boolean operators were used for searching the terms. Critical Appraisal Skill was used for data appraisal.

Results: A total of 56 articles were screened with 23 articles found appropriate for further review. Data was segregated as per the objectives of each study, sample characteristics, data collection methods and adopted approach for the analysis. Results suggested that the major constraints that affect the execution of e-learning include lack of skills, inadequate infrastructure, poor communication and negative attitude. A way forwarded solutions those include improved training and continuous commitment, redefining the cost, Team collaboration and developing positive attitude in all those who are stakeholders of the online content.

Conclusion: This is very much important that educational institutes, Nursing institutions and their stakeholders having insight of hurdles and barriers as well as solutions to the way it has to be developed and implement the kind of e-learning. There is the need for a culture to be in executed which should support and promote the use of online learning

Key words: *Educators, Online learning, digital learning, Barriers, solution*

Background of the Study

Presently, there are more than 3 million cases and one lakh deaths reported, and still counting.^[1]

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This has fetched essential changes in all aspects of our lives. Social distancing and preventive movement procedures have noticeably unbalanced traditional educational practices. The time course of these changes due to instability of pandemic is unspecified. These have affected conventional in-person Nursing education and training patterns.

Before the pandemic of COVID-19, various kind of teaching pedagogical tools had been used in institutes. During COVID-19, the need has been accelerated for more for innovative approaches to meet the educational requirements. Many programs tried to get along with new technologies like Cisco webex, zoom. Microsoft team google meets etc. From few last years there has been a shift in nursing education from conservative teaching to various other methods and ways for imparting online learning.³ Many education institutes adopted various electronic resources and strategies to sustain academics during this pandemic. The arranged necessary information Technology support for the execution of the online teaching methods. Whereas others deny the execution and showed a negative attitude towards the varieties. With adoption of innovative virtual ways, many technical issues are bit obvious expected but those can be easily handled with a due course of time as the students and teachers becomes more recognizable. The primary challenge of this approach depends on the motivation and

Willingness to accept the technology.²

Aims and Objectives: The purpose of this study is to analyze the existing literature on perceived hurdles and the solutions that are encountered by the teachers while executing online learning for nursing students.

Material and Methods: An exhaustive review of the literature was performed keeping in mind the inclusion criteria of studies with varied methodologies and designs

Search Strategies: A search technique was adopted and data was searched in the following databases like, Medline (Ebsco), Medline, Scopus, Science Direct, Biomedical Central, and Google Scholar. Boolean operators were used for searching the terms. Critical Appraisal Skill was used for data appraisal. Boolean operators search terms included “online learning”, “Online teaching strategies, distance learning”, “Nursing educators” and “digital learning”.

This review was finished in a two stages with a review of abstracts and titles. All full text articles which meets inclusion criteria and exclusion criteria were reviewed separately.

Inclusion and exclusion criteria

All research articles that from peer reviewed journals in last 10 year and targeted nursing online learning were part of study. Studies that displayed implementations with online learning, online content development and implementation were included.

Studies that were pertaining to online learning other than nursing educators were excluded.

Data appraisal

Critical Appraisal Skill was used for data appraisal, Qualitative Checklist for qualitative studies and quantitative research Quantitative and mixed method studies were ranked as Excellent, Good and Satisfactory.

Data analysis

Thematic analysis was the done for the data analysis under following headings.

1. Hurdles in the online learning
2. Solutions for the hurdles in e-learning.

Results

A total of 56 articles were screened with 23 articles found appropriate for further review. Data was segregated as per the objectives of each study, sample characteristics, data collection methods and adopted approach for the analysis. Results showed that the major constraints which affect the execution of online learning include lack of skills, inadequate infrastructure, poor communication and negative attitude.

Coding

After the exhaustive analysis process four main themes emerged. The following hurdles and solutions are identified.

Hurdles – lack of skill for online teaching

Lack of technical skills, was found to be one of the hitch faced by the users, developing and implementing the content, inadequate technical skills a feeling of fear or phobia to engage with the implementation of content.

Solution – training and continuous Commitment

To attain the adequate skills, it was suggested that engagement with online learning, and the development of content and trying to implement as practice sessions can be done to gain skills.

“I participated so that I could learn a little bit more about teaching in an electronic environment. I think I learned quite a bit”⁶

Perlman et al.⁷ emphasized on the value and strong need to provide the faculty with training skills to gain confidence. Workshops must be arranged which help the teachers to learn and practice this new skill and gain acquaintance with these kind of tool

Hurdle – Logistics infrastructure

In many cases and scenarios, lack of logistic facilities, inadequate technology were acted as hurdle especially in the under developed countries⁸. They lack technological support like continuous web and internet, and other e resources. These limitations are the hurdles for online learning. Attardi & Rogers⁹ found technical lacking like lack of internet supply for broadcasting lectures.

Solution – cost redefining

Maloney et al.¹⁰ found that there is need to redefine and establish the cost of online education’. Though it seems very tough in case of medical and nursing, it is still suggested as one of the idea where one can relook the cost of correct infrastructure as a hurdle as well as possible solution.

Hurdle –poor communication

Very less or no institutional handholding, lack of guidance regarding implementation of the specific online seems to be the reason of unsuccessful approach¹¹

“I have found it difficult at times to have a ‘discussion’ online as you are never quite sure about the exact meaning of what people are saying.”¹²

Solution –Team collaboration

Bediang et al.¹³ stated one significant way for the successful implementation of online learning is to include all concerned faculty to facilitate collaboration.

They also suggested to appoint online learning managers to manage the system according to the needs and requirements of novice faculty’.

Hurdle – Attitude

Negative and passive attitude in the faculty in adapting the new ways and e- technologies was seen as hurdle. Faculty was feeling besieged with the adaptation and engagement with new tools and have very less endurance for solving even very minute technical problems¹⁴

“If you ask me to peer-review something that I have no expertise in I’m reluctant to do that”¹⁵

Solution – Positive culture

A culture need to be developed to attain the positive attitude for managing and using e-learning tools and technologies. It was significant to have a positive attitude and endurance¹⁶

“Try to maintain a positive attitude and assume that any slights or overly harsh criticism is due to the asynchronous communication and to not take it personally”¹⁶

Discussion

This study has come up with facts of major hurdles and solutions towards the development and implementation of online learning from the Nursing faculty viewpoint. These were skills, resources, and support and attitude and institutional strategies which found common in many studies. There was positive experiences with many faculty, where they found it enjoyable to adopt new tools and technologies^{8,16} There was a strong need for institutional support to help the faculty technically. In cases where there is no institutional support and guidance regarding the use of tools and other intricacies the programs were quite unsuccessful or rarely successful¹⁷ There is a need of clear ins for online learning with proper guidelines.⁸ There is also a well-built cross collaboration to make sure that consistent education for the e- learners^{8, 12} Many of the codes identified in this review referred the old studies in nursing profession education. Childs et al.¹⁸ focused on the hurdles and solutions as successful online learning skills as both a problem as well as solution. Lack of teaching skills was

seen as one of the problem er by Pettersson&Olofsson¹⁹
One of the solutions to the lack of training was proposed
by Childs et al. ¹⁸is good quality based trainings.

Conclusion

Online education in nursing is a comparatively new idea and is expanding very quickly. Therefore It is important that Nursing training institutes and colleges should be aware of the problems seems to be encountered and solutions towards those in the process of online learning. There is strong need for a culture to be in place which motivates the use of online learning among faculty. That is the only way to stand steadily in the nursing education to face the challenges in this digital era.

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Conflict of Interest: Nil

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