



Journal Homepage: - www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/17722

DOI URL: <http://dx.doi.org/10.21474/IJAR01/17722>



RESEARCH ARTICLE

“A STUDY TO ASSESS THE KNOWLEDGE REGARDING DIGITALIZATION IN HEALTH CARE AMONG STAFF NURSES IN SELECTED HOSPITALS OF GANDHINAGAR”

Dr. Hari Mohan Singh¹, Mrs. Priya Patel² and Group- F³

1. Principal, Apollo Institute of Nursing, Gandhinagar (A Unit of Apollo Hospitals).
2. Nursing tutor, Apollo Institute of Nursing, Gandhinagar (A Unit of Apollo Hospitals).
3. Final year B.Sc. Nursing students, Apollo Institute of Nursing, Gandhinagar (A Unit of Apollo Hospitals).

Manuscript Info

Manuscript History

Received: 19 August 2023

Final Accepted: 24 September 2023

Published: October 2023

Key words:-

Knowledge, Digitalization, EHR, Staff Nurses

Abstract

A Descriptive study was conducted “Study to assess the knowledge regarding digitalization in healthcare among staff nurses in selected hospital of gandhinagar” The ‘general system model’ was used as conceptual framework. A quantitative approach with descriptive study design was used to achieve the objectives of the study. The sample consisted of 120 from selected hospital of Gandhinagar. The Simple random sampling technique was used to collect the sample. In the descriptive study the mean of the study was 13.29 with standard deviation 3.57 at 0.05 level of significance. 0.05 level of significance.

Copy Right, IJAR, 2023.. All rights reserved.

Introduction:-

A Descriptive study was conducted to assess the knowledge regarding digitalization in healthcare among staff nurses in selected hospital of Gandhinagar. The study was conducted among the staff nurses in selected hospital of Gandhinagar.

Digitalization is the process of converting information into a digital format.

Health care digitalization use computing platforms, connectivity, software, and sensors for health care and related uses.

Background Of Study

Medical records have been around since the advent of healthcare. In the very early days, the medical Record was used to record the disease and the probable cause of that disease (National Institutes of Health, 2006). In The early part of the twentieth-century, medical records were kept on three by five cards (Hufford , 1999). The 1960’s and 1970’s saw a rapidly changing era in healthcare when the federal government passed legislation that Established Medicare (Hufford, 1999). At the same time, other third Party payers entered the healthcare market, Healthcare lawsuits starting immerging, healthcare quality became important, and the government passed more Stringent laws regulating the industry (Hufford, 1999). This is the time frame when medical records really became a necessity in healthcare, and the first electronic health record appeared (History of the Electronic Medical Record, The use of electronic health records was slow to catch on with physicians and healthcare providers. It was Estimated in 2009 that less than 8% of hospitals had an electronic health record (Ford, Menachemi, Huerta, Yu, 2010). Some of the reasons for the slow adoption of EHR are the immense cost of the systems, lack of national Standards, and because

Corresponding Author:- Dr. Hari Mohan Singh

Address:- Principal, Apollo Institute of Nursing, Gandhinagar (A Unit of Apollo Hospitals).

healthcare providers spend an immense amount of time and money complying with Government regulations and patient privacy requirements (Morissette, 2011).

Need For Study

For a health record of an individual to be clinically meaningful it needs to be from conception or birth, at the very least. As one progresses through one’s life, every record of every clinical encounter represents a health related event in one’s life. Each of these records may be insignificant or significant depending on the current problems that the person is suffering from. Thus, it becomes imperative that these records be available, longitudinally arranged as a time series, and be clinically relevant to provide a summary of the various healthcare events in the life of a person.

An Electronic Health Record (EHR) is a collection of various medical records that get generated during any clinical encounter or events. With rise of self-care and home care devices and systems, nowadays meaningful healthcare data get generated 24x7 and also have long-term clinical relevance. The purpose of collecting medical records, as much as possible, are manifold – better and evidence based care, increasingly accurate and faster diagnosis that translates into better treatment at lower costs of care, avoid repeating unnecessary investigations, robust analytic including predictive analytic to support personalized care, improved health policy decisions based on better understanding of the underlying issues, etc., all translating into improved Personal and public health. Without standards, a lifelong medical record is simply not possible, as different records from different Sources spread across 80+ years, potentially, needs to be brought meaningfully together. To achieve this, a set of per-defined standards for information capture, storage, retrieval, exchange, and analytic that includes Images, clinical codes and data is imperative.

According to the study conducted by Academy of medical science of bosnia and Herzegovina, Sarajevo, bosnia and Herzegovina (2015) asked staff nurse to fill the questionnaire to assess the knowledge regarding Electronic Health Record . Results indicated that the computer skills, knowledge, and attitude of nurses towards Electronic health record was 43.4%,51.2%and 65.2% respectively. so, this study concluded that it should be ensured the level of knowledge and attitude towards EHR.

The gap between health care delivery and Digitalization is narrowing daily, Global health system have continued to evolve especially in the area of health care recording and documentation.

Problem Statement

“A STUDY TO ASSESS THE KNOWLEDGE REGARDING DIGITALIZATION IN HEALTH CARE AMONG STAFF NURSES IN SELECTED HOSPITALS OF GANDHINAGAR. ”

Objectives:-

1. To assess the knowledge regarding digitalization in healthcare among staff nurses.
2. To provide E – information regarding digitalization in healthcare.
3. To find out association with their demographic variables.

Assumption

The staff nurse in involved in this study will have basic knowledge about EHR (electronic health record)

Operational Definitions

Assessment:-Assessment may be defined as an RN uses a systematic, dynamic way to collect and analyze data about a client, the first step in delivering nursing care.

Knowledge:-

Knowledge may be defined as information, understanding and skills that nurse have gained through learning or experience.

Health care Digitalization:-

Health care Digitalization use computing platforms, connectivity, software, and sensors for health care and related uses.

Staff nurses:-

Person who work in hospitals taking care of the ill and injured and who is responsible for overall planning of nursing care of patient.

Methodology:-

Methodology of research indicates the general pattern for organizing the procedure to gather valid and reliable data for the problem under investigation. This chapter deals with the methodology adapted for the study. Thus, the contents in this chapter will encompass the research approach, design, the setting, population, sample and sampling technique, pilot study, development and description of the tool, the data collection procedure and plan for data analysis. The present study was carried out to assess knowledge regarding digitalization in health care among staff nurses working in selected hospitals of Gandhinagar.

Table-1:- Findings Related To Mean, Median, And Standard Deviation.

GROUP	MEAN	MEDIAN	STANDARD DEVIATION	LEVEL OF SIGNIFICANCE
Staff nurses (n=120)	13.29	13.5	3.58	0.05

Table 1:-The data given in table 1 indicate that the mean value of total scores of knowledge regarding digitalization in health care as assessed by investigators of staff nurses was 13.29, median 13.5 and the standard deviation was 3.58.

Table-2:-

Analysis And Interpretation Of The Knowledge Of Digitalization In Healthcare.(n=120).

CATEGORIES ON EFFECT OF DIGITALIZATION IN HEALTH CARE AMONG STAFF NURSE	SCORE	FREQUENCY	PERCENTAGE
Poor knowledge	1-6	6	5%
Average knowledge	7-13	55	46%
Good knowledge	14-20	59	49%
Total	20	120	100%

Table 2:-The data in table 2 and figure 1 reveals that out of 120 staff nurses 59 had good knowledge of digitalization in healthcare, 55 had average knowledge of digitalization in healthcare, 6 had poor knowledge of digitalization in healthcare.

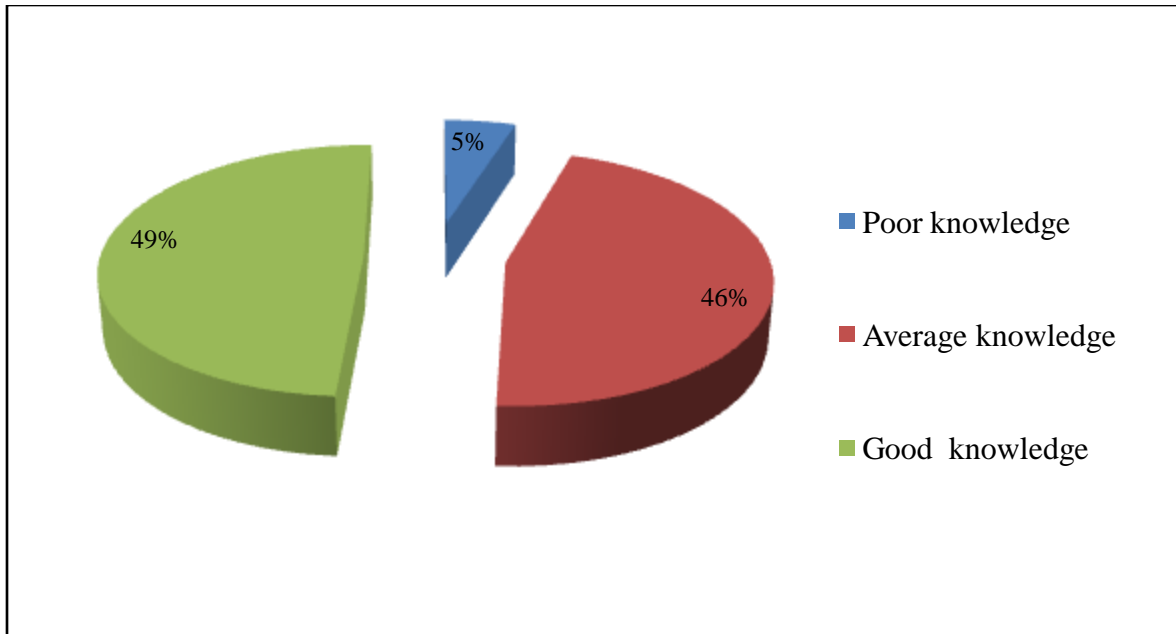


Figure 1:- A pie Diagram Showing Frequency Distribution of knowledge of digitalization in health care among staff nurses by their Response.

Table-3:- The Association Between The Knowledge Of Digitalization In Healthcare Among Staff Nurses And Age Of Staff Nurse.

Category	Poor	Average	Good	Calculated X ² Value	df	Tabulated X ² Value	P Value	Remarks
1.Age								
21-25yrs	2	29	20	1.63	4	9.49	0.80	NS
26-30yrs	3	23	31					
31-35yrs	1	3	8					
2.Gender								
Male	3	18	12	0.14	1	3.84	0.70	NS
Female	3	37	47					
3.Qualification								
GNM	21	27	3	0.35	4	9.49	0.99	NS
B.Sc. Nursing	38	28	3					
M.Sc. Nursing	-	-	-					
4.Year of experience								
<5 years	4	42	21	14.92	4	9.49	0.0049	S
5-15 years	1	11	18					
>15 years	1	2	20					

S= Significant NS = Non Significant P= <0.05

Table 3:- The data presented in table 3 shows that the calculated X² value is more than the tabulated X² value therefore, this indicates that there is significant association between the knowledge of digitalization in health care and year of experience of the staff nurses.

Summary

The aim of the study and its association with selected variable in terms of knowledge of digitalization in healthcare among staff nurses.

Based on the objective extensive research for literature was needed to determine and develop the conceptual framework, research approach and methodology to conduct the study. Conceptual framework based on general system model was used to assess the knowledge of digitalization among staff nurse

Research approach used for the descriptive study. Present study was undertaken at Gandhinagar. digitalization in healthcare was used by reviewing the literature and under the expert guidance of lecturers from Apollo Institute of Nursing, Gandhinagar.

Conclusion:-

The study intends to assess the knowledge regarding digitalization in health care among staff nurses in selected hospitals of Gandhinagar. The study reveals that the year of experience of nurses affects the knowledge regarding digitalization in healthcare in selected hospitals of Gandhinagar.

Bibliography:-

1. Santosh G Honavar, Electronic health records - The good, the bad and the ugly, Indian journal ophthalmol, 2020, P.G. no:- 427-432, Available from :- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7043175/>
2. Mahdi Habibi-Kooalae, et, Nurses readiness and electronic health records, Acta informatica medica, 2015, P.G. no:- 105-107, Available from:- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4430005/>
3. Hitesh bhasin, Target population ,2023, Available from:- <https://www.marketing91.com/target-population/>
4. Elizabeth Borycki, Digital technologies and the role of health care professionals: scoping review exploring nurses' skills in the digital era and in the light of the COVID-19 pandemic, JMIR nursing, 2022, Available from-<https://www.scribbr.com/methodology/types-of-variables/> & <https://www.slideshare.net/devapushpa/validity-reliability-238719630>
5. Let's talk science, Available from:- <https://letstalkscience.ca/educational-resources/teaching-stem/analyzing-interpreting#:~:text=Definition-.Analyzing%20data%20is%20a%20process%20of%20looking%20for%20patterns%20in,be%20a%20simple%20linear%20process>
6. **2016 Medicare Electronic Health Record (EHR) Incentive Program Payment Adjustment Fact Sheet for Critical Access hospitals, 2018** ,(cited on 23th Jan 2023), Available from:- <https://www.cms.gov/newsroom/fact-sheets/2016-medicare-electronic-health-record-ehr-incentive-program-payment-adjustment-fact-sheet-critical>
7. American Nurses Association, The nursing process, Available from:- <https://www.nursingworld.org/practice-policy/workforce/what-is-nursing/the-nursing-process/>
8. Angela Hall, Nursing times , Vol:-101, 2005, P.G. 34, Available from:- <https://www.nursingtimes.net/roles/nurse-educators/defining-nursing-knowledge-29-11-2005/>
9. Conceptual frame work, Grant, et, **Understanding, Selecting, and Integrating a Theoretical Framework in Dissertation Research: Creating the Blueprint for Your "House."** Administrative Issues Journal: Connecting Education, Practice, and Research, 4(2), 12–26 , Available from: - <https://www.coursehero.com/file/109902127/electronic-health-recorddocx/>
10. Indeed editorial team, 13 important nursing responsibilities, (cited on 24th Jan 2023) , Available from:- <https://www.indeed.com/career-advice/career-development/nursing-responsibilities#:~:text=A%20nurse%20is%20a%20medical.hospitalss>