

VSPM

Madhuribai Deshmukh Institute of Nursing Education,
Digdoh Hills, Hingna Road, Nagpur - 440019

NATIONAL CONFERENCE

"DIGITAL TRANSFORMATION IN NURSING:
CLINICAL JUDGEMENT & DOCUMENTATION"



27th & 28th June 2024

SOUVENIR



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RESEARCH JOURNAL

Lata Mangeshkar Hospital, Digdoh Hills, Nagpur





VSPM

Madhuribai Deshmukh Institute of Nursing Education

Lata Mangeshkar Hospital, Digdoh Hills, Hingna Road, Nagpur-440019

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NATIONAL CONFERENCE Souvenir

27th & 28th June 2024

Theme –

DIGITAL TRANSFORMATION IN NURSING:

Clinical Judgement & Documentation

ISBN :

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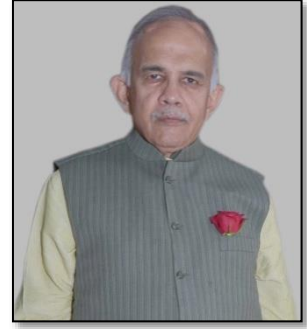
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**Articles on
Theme**

Shri. Ranjeet Deshmukh,
Chairman,
VSPMAHE, Nagpur



*It gives me immense pleasure to note that VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur is organizing a National Conference under the Theme "**Digital Transformation in Nursing: Clinical Judgement & Documentation**" (In collaboration with MUHS, Nashik) On 27th & 28th June 2024*

The institute has upgraded the Education in Academic, Research, Cultural & Digital Transformation activities etc., Our Dedication is to maintaining high Standards and Providing Quality Education in Nursing.

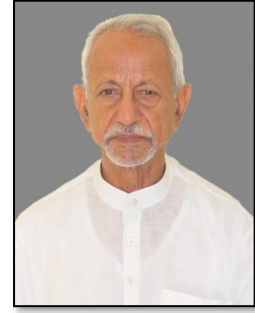
I wholeheartedly wish the success to Editorial Committee for Souvenir of VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur

Best wishes.

Shri. Bhausahab Bhoge

Founder

VSPM AHE, Nagpur



*It is a pleasure to know that VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur is organizing a National Conference on **"Digital Transformation in Nursing: Clinical Judgement & Documentation"** from 27th June to 28th June 2024*

The institute has progressed day by day, the Institute has upgraded the Education and Research work. It is a matter of joy and honour that a large number of eminent nursing experts from all over the India are participating in the conference and will have fruitful discussions in the field of Nursing education, practice and research.

I wholeheartedly wish the success to Editorial Board for publishing this Souvenir. And Best Wishes for the National Conference.

Dr. Ashish Deshmukh
Vice Chairman, VSPM AHE
Nagpur



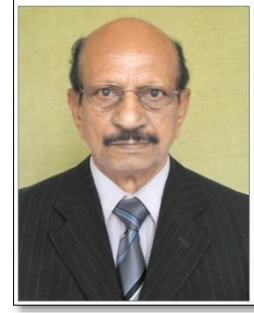
*It is indeed a matter of pleasure to note that VSPM Madhuribai Deshmukh Institute of Nursing Education, Digdoh hills, Nagpur is organizing National Conference on "**Digital Transformation in Nursing: Clinical Judgement & Documentation**" from 27th June to 28th June 2024*

Nursing is a unique profession because it caters towards the most important aspects of life. The rapid advances in technology during the twentieth century have changed the main focus of the Nursing Profession towards Science and Digital Technology.

I wholeheartedly wish success to the Editorial Board and those involved in publishing this Souvenir for National Conference (27th June to 28th June 2024).

I wish VSPM MDINE all the best for such Endeavour in future and take the name of Institutions on high in future.

Prof. Yuvraj Chalkhor
Secretary
VSPM AHE, Nagpur



*It's a matter of great pleasure to inform you that VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur is organizing a National Conference under the Theme "**Digital Transformation in Nursing: Clinical Judgement & Documentation**" (In collaboration with MUHS, Nashik) on 27th & 28th June 2024. The institute had made a fruitful achievement in academic, Research, Cultural and Digital Transformation activities etc. our institute's progress is a joint effort, and we aim to achieve global recognition in the fields of Nursing.*

I congratulate to the Editorial Committee for Souvenir of VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur who were involved.

I wish them all the best in future.

Dr. Sajal Mitra
Dean NKPSIMS
Nagpur



*I am happy that Madhuribai Deshmukh Institute of Nursing education(MDINE) is organizing A National Conference on “ **Digital Transformation in Nursing: clinical Judgement & Documentation (in collaboration with MUHS,Nashik)** on 27th & 28th June 2024.I am sure that this conference will focus on sharing new ideas,best practices and hopes for improvement. The faculty of Madhuribai Deshmukh Institute of Nursing education has always tried to be the changing scenario in nursing care.*

The adoption of digital health solutions has been accelerated by COVID-19 pandemics and are now essential for delivery of care at all levels. It not only facilitates the assessment and diagnosis for health problems, but also in the effective nursing care and treatment of patients.

The conference will surely enlighten the participants about digital transformation in the field of nursing and also educate them about the regulatory and normative aspects in digital health. I also hope that it will be a forum for the participants to exchange ideas and results of their research.

I congratulate all the members of the organizing Committee of this relevant and all important conference. I commend them for their hard work and wish them success.

Hon'ble Lt. Gen. Madhuri Kanitkar

Vice Chancellor,

MUHS, Nashik



*It is a matter of great pleasure that, VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur is organizing National Conference on “**Digital Transformation in Nursing: Clinical Judgement & Documentation**”*

Nursing is one of the Noble profession which is considered to be an emotionally fulfilling and personally rewarding career. The topic chosen for the National Conference is very Timely and relevant. With the outbreak of new information and communication technologies, the knowledge in every field is increasing at astonishing rate.

I'm sure that the resource person specialized in the area of Nursing will enlighten the participant on the advanced knowledge in the area of their specialization. MUHS has developed an online program - Digital Health Foundation course and is now working to develop modules especially curated for the nursing profession.

I wish the National Conference a Grand Success.

Mrs. Rita John
Nursing Superintendent
NKP Salve, Research Centre
& Lata Mangeshkar Hospital
Digdoh Hills, Hingna, Nagpur.



VSPM, Madhuribai Deshmukh College of Nursing, Nagpur has carved out a niche in the field of Nursing Education and Research in India. To add another milestone in the journey, here they are presenting National Conference of Digital Transformation in Nursing: Clinical Judgement and Documentation being organized on 27th & 28th June 2024. This conference will provide an excellent opportunity for delegates to share the platform with renowned national experts. Nurses are the primary members who records patient data. Digital transformation in Nursing is such a complex area where the nursing required knowledge regarding technology.

This conference will provide an excellent opportunity for delegates to share the platform with renowned nursing experts. The two days' event of academic extravaganza will enlighten the nursing fraternity about the expanding horizons in Digital transformation nursing

“Coming together is a beginning; keeping together is progress; Working together is success.”

Henry Ford.... Jai Hind!

Dr. Asha Shingekar
Nursing Director
VSPM MDINE, Nagpur



I feel privileged to take the responsibility as a Nursing Director of an Esteemed Institutions. I am fully aware of the responsibilities to maintain in upward trajectory growth in all corners of the activities especially UG & PG Education, health care facilities, outreach Community Activities, etc.

I wish to see this Institution attain the status of Centre of Excellence in every field. We have come a long way, but we must realize that we have still to go further.

*VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur is organizing the National Conference with the theme **“Digital Transformation in Nursing: Clinical Judgement & Documentation”** (In collaboration with MUHS, Nashik) on 27th & 28th June 2024. the responsibilities of each one of us Become many folds, setting the new standards in profession as well as personal in front of National and International levels in bringing laurels to the institutions.*

I convey my best wishes to all teaching and non-teaching staff for success of this National Conference in their Endeavor.

I take this opportunity to convey my sincere gratitude and appreciation for being a part of this journey. I also compliment the Editorial Team for their hard work.

Dr. Amrapali Gajbhiye
Professor cum Principal
VSPM MDINE, Nagpur



*It gives me immense pleasure and a feeling of accomplishment to address you as the Principal of this prestigious institution. Since its inception in 1995, the college has strived towards maintaining high academic standards and excellence in the field of Nursing. We are committed to providing our students with a wide variety of opportunities in order to help them attain their highest potentials. Our aim is to produce excellent professional nurses with exemplary stamina, courage, compassion and devotion to duty, who will make a name for themselves in the years to come. It is a matter of great pride that VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur is organizing National Conference on “**Digital Transformation in Nursing: Clinical judgement and Documentation.**”*

In an era where technology is reshaping every facet of healthcare, it is crucial for nursing professionals to stay ahead of the curve. Digital transformation in healthcare is a cornerstone of a patient-focused outlook to healthcare. Digital technologies have the potential to improve the quality of nursing care. This conference aims to explore the profound impact of digital transformation on clinical judgment and documentation in nursing practice.

As we embark on this journey together, I encourage each of you to engage completely and share your insights. Your participation and contributions will make this conference a resounding success. So, I wish all the very best for the conference and hope that new perspectives will be gained by all attendees. I would like to appreciate the souvenir editorial committee for their time and efforts to complete this task on time.

Editorial Note

Dr. Pascaline David
Chairperson Souvenir Committee,
Professor & Head of Research Dept.
VSPM MDINE, Nagpur.



I, on behalf of VSPM MDINE, welcome all the delegates to the Nagpur city “the Green city, the city of Orange”. I feel extremely delighted to present you this souvenir of National Conference being held from 27th to 28th June 2024 at VSPM Madhuribai Deshmukh Institute of nursing education, Lata Mangeshkar Hospital Nagpur.

In this era of digitalization, the theme of conference is perfect “Digital transformation in nursing: Clinical Judgement and Documentation” Digital transformation (DT) is the process of adoption and implementation of digital technology by an organization. Digital transformation in nursing is the integration of technology with the healthcare systems to offer better patient care, improve staff experience, reduce cost, optimize operational processes, enable faster diagnoses, and treatment.

First & Foremost, I extend my sincere thanks to our esteemed Management, Nursing Director & Principal for supporting and motivating us in bringing this souvenir.

At this stage, I thank all the experts from different corners of India who have contributed their valuable views on the theme. I would also like to thank all panellist for their expert discussion on topic. I express my heart felt appreciation and gratitude to contributors, Judges, authors of the articles and authors of poster competition. I congratulate all the faculty and non faculty who have been associated with conference for their untiring efforts and support in making this event a grand success.

I extend my special thanks to my Co-editors Ms. Stuti Sunar, Varsha Hambarde and Liji Varghese for their innovative ideas and creativity towards bringing this Souvenir on time.

I am sure each and every delegates would feel that the event is not only meaningful and purposive, but also innovative.

Regards!

ORGANIZING COMMITTEE

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HON'BLE SHRI. RANJEET DESHMUKH, CHAIRMAN
VSPM AHE, NAGPUR

ADVISORY COMMITTEE-

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SHRI. SUDHIR DESHMUKH,
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TREASURER - DR. ASHA SHIMGEKAR,
NURSING DIRECTOR, VSPM MDINE, NAGPUR

PROGRAM COORDINATOR- MRS. LATA SUKARE,
PROFESSOR, VSPM MDINE, NAGPUR

PROGRAM COORDINATOR-MS. BINCY. K.P,
ASSOCIATE PROFESSOR, VSPM MDINE, NAGPUR

COMMITTEE MEMBERS

<i>Sr. No</i>	<i>Committee</i>	<i>Chairperson</i>	<i>Members</i>
1.	Souvenir	Dr. Pascaline David Professor VSPM MDINE Ms. Stuti Sunar	Ms. Varsha Hambarde Ms. Liji Varghese
2.	Registration	Ms. Ashlesha Wasnik	Ms. Pheba Thomas Ms. Ashwini Wahane Ms. Salomi Thakre Ms. Sakshi Bansod
3.	Invitation	Ms. Sarika Bais	Ms. Trupti Soitkar Ms. Deepa Lonkar
4.	Accommodation	Mr. Ujjwal Lohe	Ms. Savitri Sharma
5.	Transportation	Mr. Dhananjay Ingle	Ms. Ruchika Rewatkar
6.	Food & Catering Committee	Mr. Prasobh Kumar Ms. Swati Shende	Ms. Guleksha Patle Ms. Payal Kalambe Ms. Prachi Padole
7.	Stage Committee	Mr. Prasobh Kumar Mr. Ujjwal Lohe	Mrs. Gloriya Karandikar Ms. Swati Wankhede Ms. Aishwarya Dhote
8.	Welcome & Purchasing	Ms. Deepa Lonkar	Ms. Trusha Lambat
9.	Felicitation	All senior faculties	
10.	E - poster presentation	Ms. Priyal Waghchoure	Ms. Trusha Lambat Ms. Sneha Bhute
11.	Minute Secretary	Mrs. Suman Azad	
12.	A.V. Aids	Mr. Ujjwal Lohe	Ms. Gayatri Patel Mr. Dhananjay Ingle
13.	Master of Ceremony	Ms. Bincy K P & Ms. Gloriya Karandikar Ms. Stuti Sunar & Ms. Salomi Thakre	
14.	Documentation Recording and Reporting	Ms. Varsha Hambarde	Ms. Trupti Soitkar
15.	Cultural Feast	Ms. Sarika Bais	Ms. Trusha Lambat Ms. Prachi Padole Ms. Payal Kalambe
16.	First Aid Desk	Ms. Pheba Thomas	Ms. Savitri Sharma

DAY-I (27th JUNE 2024, THURSDAY)

PROGRAMME SCHEDULE

Session	Time	Topics	Speaker	Chairperson
	9:00 Am – 9.30 Am	REGISTRATION & BREAKFAST		Ms. Ashlesha Wasnik Assistant Professor, VSPM MDINE Ms. Ashwini Wahane Clinical Instructor, VSPM MDINE
9.30 Am – 10.30 Am		INAUGURAL FUNCTION		Ms. Bincy.K.P, Associate Professor, VSPM MDINE
	10.30 Am – 11.30 Am	Process Of Extramural Research Proposal Grant-Aid From ICMR	Dr. Sangram Keshari Samal Scientist-D, Indian Council of Medical Research-Regional Medical Research Centre, Bhubaneswar	Dr. Amrapali Gajbhiye, Professor Cum Principal, VSPM MDINE:
	11.30 Am – 12.30 Pm	Digital Health Standards Initiative By Government Of India	Dr. Suresh Kumar Sharma, Consultant Digital Health & Innovation, NRCEs, India	Mrs. Lata Sukare, Professor, VSPM MDINE
	12.30 Pm - 1:00 Pm	Importance In Digital Health	Dr. Sushil Kumar Maheshwari, Associate Professor College of Nursing IHBAS, New Delhi	Mrs. Suman Azad, Associate Professor, VSPM MDINE
1.00 Pm - 2.00 Pm		LUNCH		
	2:30 Pm - 3:30 Pm	Scope Of Data Analytics On Nursing Records	Dr. Rajesh Kumar, Associate Professor, AIIMS, Rishikesh	Dr. Pascaline David Professor VSPM MDINE
	3:30 Pm - 4:30 Pm	Nursing Terminology Standardization	Dr. Jasneet Kaur, Associate Professor, Symbiosis College of Nursing, Pune	Ms. Bincy. K. P, Associate Professor, VSPM MDINE
	4:30 Pm - 5:30 Pm	Nursing Records & Reports	Dr. Suresh Kumar Ray Professor Cum Vice-Principal, Bharti Vidyapeeth College Of Nursing, Pune	Mrs. Lata Sukare, Professor, VSPM MDINE
5:30 Pm – 6 Pm		Cultural Fest & Tea		Ms. Sarika Bais, Assistant Professor, VSPM MDINE

Inauguration- 27th June 2024

Sr. No	Programme	Time	Chairperson/Guest
1.	Welcome & Lamp Lighting	9:30 am- 9.40 am	Organizers
2.	Welcome Song	9.40 am	2 nd Semester B.Sc Nsg. Student
3.	Unveiling of Theme	9.45 am	Chief Guest Hon'ble Dr. Vedprakash Mishra Pro-Chancellor & Chief Advisor Datta Meghe Institute of Higher Education & Research, Sawangi, Wardha
4.	Key Note Address	09.50 am -10:00 am	Dr. Amrapali Gajbhiye Principal VSPM MDINE
5.	Speech by Dean, NKPSIMS	10:00 am -10:05 am	Dr. Sajal Mitra Dean NKPSIMS
6.	Speech by Vice Chairman	10:05 am -10:10 am	Dr. Ashish Deshmukh Vice Chairman VSPM AHE Nagpur
7.	Introduction of Guest of Honor	10.10 am – 10.15 am	Ms. Stuti Sunar Associate Professor VSPM MDINE
8.	Speech by Guest of Honor	10.15 am – 10.25 am	Dr. Sangram Keshari Samal Scientist-D, Indian Council of Medical Research-Regional Medical Research Centre, Bhubaneswar
9.	Introduction of Chief Guest	10.25 am – 10.30 am	Dr. Pascaline David Professor VSPM MDINE
10.	Speech by Chief Guest	10:30 am -10:50 am	Hon'ble Dr. Vedprakash Mishra Pro-Chancellor & Chief Advisor Datta Meghe Institute of Higher Education & Research, Sawangi, Wardha
11.	Felicitation of Dignitaries	10:45 am -10:55 am	Dr. Asha Shimgekar, Nursing Director, VSPM MDINE
12.	Vote of Thanks	10:55 am- 11:00 am	Mrs. Lata Sukare, Professor, VSPM MDINE

SESSION	TIME	TOPICS	SPEAKER / PANELISTS	CHAIRPERSON / MODERATOR
9 Am -10 Am		BREAKFAST		
	10 Am – 11 Am	Introduction & Demonstration To SNOWMED CT National Extension & Resets & Prerequisite To Nursing Retest For India	Dr. Suresh Kumar Sharma, Consultant Digital Health & Innovation, NRCEs, India	Dr. Pascaline David, Professor, VSPM MDINE
11am - 11:30 Am		TEA BREAK		
	11:30 Am – 1 pm	Panel Discussion On - “Transformative Nursing: Excellence In Nursing Diagnosis & Recording”	Dr. Vishwanath Biradar. Professor Cum Vice-Principal, MGM College of Nursing, Aurangabad (Medical Surgical Nursing) Dr. Shilpa Shetkar, Professor Cum Principal Seva Mandal College of Nursing, Mumbai (Community Health Nursing) Dr. Pravin Gholap, Professor Cum Vice-Principal, Ganpatrao Adke College of Nursing, Nashik (Mental Health Nursing) Dr. Shubhangi Pangham, Professor Cum Vice-Principal, Hinduja College of Nursing, Mumbai (Child Health Nursing,) Dr. Delfina Gurav, Professor Cum Vice-Principal, Seva Mandal College of Nursing, Mumbai (Obstetrical & Gynecological Nursing)	Dr. Amrapali Gajbhiye, Professor cum Principal, VSPM MDINE
1pm – 2 Pm		LUNCH		
	2 Pm – 3 Pm	E-Poster Presentation		Ms. Priyal Ms. Trusha Lambat
3 Pm – 4 Pm		VALEDICTORY SESSION		Ms. Stuti Sunar Associate Professor, VSPM MDINE

VALEDICTORY SESSION – 28th June 2024

Sr. No.	Programme	Time	Chairperson
1.	Welcome & Lamp Lighting	3.00 pm – 3.15 pm	Organizers
2.	Souvenir Release	3.15 pm – 3.30 pm	Dr. Pascaline David Professor VSPM MDINE
3.	Declaration of e - Poster Winners	3.30 pm – 3.40 pm	Mrs. Lata Sukare, Professor, VSPM MDINE
4.	Felicitation of Judges	3.40 pm – 3.45 pm	Dr. Amrapali Gajbhiye, Principal, VSPM MDINE
5.	Feedback on National Conference	3.15 pm – 3.25 pm	Ms. Salomi Thakre CI / Tutor VSPM MDINE
6.	Minutes of National Conference	3.25 pm – 3.30 pm	Mrs. Suman Azad Associate Professor VSPM MDINE
7.	Report – of National Conference	3.30 pm – 3.35 pm	MUHS Observer MNC Observer
8.	Speech by Guest of Honor	3.35 pm – 3.45 pm	Dr. Kajal Mitra Director of Academic & Research, VSPM AHE
9.	Felicitation of Guest of Honor Dr. Kajal Mitra Shri. Sudhir Deshmukh	3.45 pm – 4.00 pm	Dr. Asha Shingekar, Nursing Director, VSPM MDINE
10.	Introduction of Chief Guest	4.00 pm – 4.05 pm	Ms. Bincy KP Associate Professor VSPM MDINE
11.	Speech by Chief Guest	4.05 pm – 4.15 pm	Dr. Ramling Mali Former MNC President, Principal, Shirodkar College of Nursing, Mumbai
12.	Felicitation of Guests	4.15 pm – 4.20 pm	Dr. Asha Shingekar, Nursing Director, VSPM MDINE
13.	Vote of Thanks	4.05 pm – 4.10 pm	Dr. Amrapali Gajbhiye Principal, VSPM MDINE
14.	National Anthem	4.10 pm	Ms. Pheba Thomas & Ms. Liji, CI/Tutor, VSPM MDINE

VSPM ACADEMY OF HIGHER EDUCATION, NAGPUR

“My notion of democracy is that the weakest should have the same opportunity as the strongest”- Mahatma Gandhi

India with its teeming multitudes is a land of variation. At one end of the spectrum, it is poised to lead the world in software, boasts of the largest metropolitan urban centers and the richest individuals. On the other end of this spectrum is 70% of its rural population, with probably the lowest literacy and income levels in the world. It was this weakest link in the world’s largest democracy that Mahatma Gandhi wanted the benefits of development to reach. He understood that the nation could become strong only by strengthening its weakest link.

VSPM Academy of Higher Education (VSPM AHE), Nagpur has made this objective its mission. Since its very inception in 1971, it has untiringly toiled amongst the most backward regions and the least privileged to provide them the opportunity to become self-reliant. Its focus has been extremely clear. It has emphasized on education, social upliftment and the removal of social evils. The result of the last three decades of efforts has been the setting-up of 55 quality education institutions right from pre-primary schools to medical college, setting-up of social institutions for the backward, women and innumerable programs for removal of social evils.

THE TRUST – A HISTORICAL PERSPECTIVE

Founded by Dr. Bhausaheb Bhoge, a dedicated social worker, in the year 1971, the VSPM Academy of Higher Education, Nagpur (Formerly – Vidya Shikshan Prasarak Mandal) is a registered trust under the Indian Societies Registration Act 1860 and also under Bombay Public Trust Act 1950. Late Padmashree Kamlatai Hospet, a lady social worker, was its first president. Since 1981 Shri Ranjeet Deshmukh is the president of the trust.

The institution has a philosophy of recognizing education as one of its obligations. It aims to promote unity and brotherhood, setting-up of institutions, imparting education in various faculties, opening higher education centres, child education, professional training, centres of excellence, promotion of co-operative movement in various industrial and non-industrial programs with particular emphasis on children, women, family welfare, adult education, fight against social –cultural evils and creating awareness towards progress amongst people who are in rural areas and are the last links of the nation. This includes programs for people who are below the poverty line.

THE TRUST – TODAY

VSPM AHE is managed by prominent citizens known for their commitment to the cause of the less privileged and representing various facets of social life, led by the visionary Mr. Ranjeet Deshmukh who looked after it in its fledgling form and made it the unparalleled powerhouse of education and social work. It boasts of more than 50 institutions including primary schools, middle schools, higher secondary schools, arts, science and commerce colleges, a medical college, nursing college, a dental college, physiotherapy college, training college for teachers, a management institute, hostels for backward students and even a large multi- speciality hospital. Over 1,00,000 students have benefited from the various institutions of the trust and more than 15,000 students are enrolled in these institutions in an academic year.

VSPM MADHURIBAI DESHMUKH INSTITUTE OF NURSING EDUCATION

VSPM Madhuribai Deshmukh institute of Nursing Education is a unit of VSPM AHE, affiliated to Maharashtra University of health sciences Nashik and recognized by Indian Nursing Council (INC) and Maharashtra State Nursing Council (MNC). The institution started the School of Nursing which offers a Diploma in General Nursing and Midwifery in 1995 and College of Nursing in which offers the degree of Bachelor of Nursing in 2005. It is attached to NABH accredited 1180 bedded parent hospital.

VSPM MDINE is accredited with the National Assessment and Accreditation Council (NAAC) with an 'B++ grade. VSPM MDINE also awarded Best Nursing college in (Vidarbha) Maharashtra by Maharashtra University of Health Sciences Nashik in the year 2023. VSPM MDINE has 39th rank in Indian institutional ranking framework & 7th from Maharashtra west zone.

Today, VSPM Madhuribai Deshmukh institute of nursing education is offers B.Sc. Nursing, Post Basic B.Sc. Nursing, M.Sc. Nursing program with five specialties in affiliation with Maharashtra University of Health Sciences, Nasik. College has sanctioned yearly intake of 145 students with 46 university approved faculty positions. College is recognized as a hub for designing & implementing innovative teaching learning strategies and translating them into evidence based practices. Strong Leadership & Governance, stable faculty positions envisages to for go ahead with our commitment towards Excellence to realize our vision of becoming national leader among academic centers of Nursing Education

LATA MANGESHKAR HOSPITAL

The Lata Mangeshkar Hospital is attached to the N.K.P. Salve Institute of Medical Sciences & Research Centre as a teaching hospital. The hospital has been upgraded to a 1180 bedded fully equipped hospital and 250 bedded Multispeciality Hospital. It is located at Digdoh Hills and serves the people of nearby villages and industrial areas of Central India. It has excellent facilities for hospitalization of indoor patients. The speciality units of the hospital are well patronized by the people because of its location and its affordable charges. There is 24×7 hours Casualty and disaster management facility. It provides facilities like 24 hours Pathology and Blood Bank, ECG, Radiology including MRI, CT Scan, Colour Doppler etc.

The Surgery Units not only perform routine surgeries but also have a Burn Unit, Reconstructive Surgery Unit, Urology and Plastic Surgery Unit. General Medicine Department caters to adult diseases and has a well-equipped ICU/CCU as well as Dialysis Unit. Facilities like Arthroscopic surgeries, Replacement Surgeries and Super Speciality Surgeries like Neurosurgery and Onco-surgery are also available. Ophthalmology department caters to Cataract, Glaucoma and other patients. Laser treatment and Eye Bank facilities are also available. The Paediatric department works for the welfare of the new born as well as adolescent; it has Neonatal ICU (Intensive Care Unit) and Paediatric ICU. The hospital also has a separate ward for Psychiatric Indoor patients. A well-equipped Obstetrics & Gynaecology department caters to mother and child care.

Lata Mangeshkar Hospital is committed to delivering quality patient care at affordable price through practices that are ethical and equitable, to practice high standards of medical care, creating patient friendly health care eco system through continual improvement, and to ensure that the patient is treated with respect, compassion and dignity in a safe environment.

CLINICAL SERVICES:

Outpatient Department

- *General Medicine*
- *General Surgery*
- *Anaesthesia*
- *Plastic and Reconstructive Surgery*
- *Obstetrics & Gynaecology*
- *Paediatrics*
- *Immunization Room*
- *Orthopaedics*
- *Respiratory Medicine*
- *Ophthalmology*
- *ENT*
- *Psychiatry*
- *Dermatology*
- *Artificial Limb Centre*
- *Palliative Care*

Inpatient Department

- ✚ *General Medicine*
- ✚ *Respiratory Medicine*
- ✚ *General Surgery*
- ✚ *Plastic & Reconstructive Surgery*
- ✚ *Obstetrics & Gynaecology*
- ✚ *Paediatrics*
- ✚ *Orthopaedics*
- ✚ *Ophthalmology*
- ✚ *ENT*
- ✚ *Psychiatry*
- ✚ *Dermatology*

Super Specialities

- ❖ *Paediatric Surgery*
- ❖ *Retinal Surgeries*
- ❖ *Uro Surgery*
- ❖ *ART*
- ❖ *Neuro Surgery*

Critical Care Unit

- *Medicine Intensive Care Unit*
- *Respiratory Medicine Intensive Care Unit*
- *Surgical Intensive Care Unit*
- *Obstetric Intensive Care Unit*
- *Paediatrics Intensive Care Unit*
- *Neonatal Intensive Care Unit*
- *Burn Unit*
- *Dialysis Unit*

Modular & Non Modular Operation Theatres Present

- ✚ *Diagnostic X-ray*
- ✚ *Ultrasound*
- ✚ *Computed Tomography (CT Scan)*
- ✚ *Magnetic Resonance Imaging (MRI)*
- ✚ *Mammography*
- ✚ *2-D Echo & Doppler*
- ✚ *Molecular Pathology Lab
(Virology)*
- ✚ *Endoscopy*

KEY NOTE ADDRESS

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THEME: DIGITAL TRANSFORMATION IN NURSING:

CLINICAL JUDGEMENT & DOCUMENTATION

It is a great honour to address this esteemed gathering at the conference on "Digital Transformation in Nursing: Clinical Judgement & Documentations." As we stand at the intersection of healthcare and technology, it is imperative to discuss the transformative power of digital health initiatives in enhancing nursing practices and patient care.

Over the past decade, India has made significant strides in digital health. The Ministry of Health and Family Welfare (MOHFW) has notified clinical terminology and coding standards through the EHR Standards for India (EHRSI-2016) and the National Digital Health Blueprint (NDHB). These initiatives underscore the importance of standardizing health information to ensure consistency, accuracy, and interoperability across healthcare systems.

One of the cornerstone standards is SNOMED CT, which has been identified as the preferred terminology for all clinically relevant information along with NANDA Nursing terminology. Since becoming a member of SNOMED International in 2014, India has made SNOMED CT available for use at no cost, with the National Resource Centre for EHR Standards (NRCeS) acting as the National Release Centre.

Particularly relevant to our theme today, the National Digital Health Blueprint of 2019 advocates for the consolidation of federated, standardized healthcare data to form comprehensive Electronic Health Records (EHRs). This initiative ensures patient privacy and promotes the use of anonymized data for public good, thus balancing individual rights with societal benefits.

In 2020, the Telemedicine Practice Guidelines and specific guidelines for Nursing, Ayurveda, Siddha, Unani, and Homeopathic practitioners were introduced, establishing a framework for remote consultations. These guidelines have been pivotal during the COVID-19 pandemic, ensuring continuity of care when in-person consultations were not feasible.

The most recent addition, the Digital Personal Data Protection Bill of 2022, aims to safeguard patient data, ensuring that digital health information remains secure and confidential.

Understanding these policies is not just about compliance; it's about leveraging these frameworks to enhance clinical judgment and documentation in nursing. By integrating standardized terminologies and secure digital tools, we can improve the accuracy of clinical documentation in nursing fields, support decision-making, and ultimately, provide better patient care.

Nursing will continue to offer value and importance to healthcare systems in the coming decades. However, the profession must consider its role, knowledge, and relationships with technologies and patients to remain relevant in digitally enabled societies and healthcare systems and continue to provide compassionate care in a digital world. Without proactive strategic self-reflection, planning, and action, nursing will fail to control its trajectory across the chasm separating the past, present, and future of practice.

As we navigate this digital transformation, let us embrace these innovations to empower nurses, enhance clinical practices, and improve health outcomes. Together, we can build a healthcare system that is resilient, efficient, and truly patient-centred.

Experts Write Up

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Scientist-D,

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Process of Extramural Research Proposal Grant-Aid from ICMR

Extramural Research Proposal is a funding system that funds research ideas conceived by researchers or institutions outside their organizations or agencies. These calls are very tough and competitive, the best quality research with a high societal potential project gets approved for final funding with each year's progress report. This proposal involves various components that help to understand the novelty and potential impact compared to the existing technology of the new research idea. The Indian Council of Medical Research (ICMR), New Delhi, is the oldest medical research apex body that was established in 1911 as the Indian Research Fund Association (IRFA) to sponsor and coordinate medical research in India. After independence, IRFA was predesignated as ICMR under the Ministry of Health and Family Welfare with expanded research functionality and responsibility. In recent years, the rapid advancement of science and technology has helped to understand the various disease process mechanisms and find the appropriate strategies to prevent and cure. ICMR encourages both intramural (ICMR Institutes) and extramural research (Non-ICMR institutes) in the country. The ICMR's vision is to translate research ideas into functional effective high-impact research that is expected to enhance the quality of human and animal life. The focus of ICMR is to pursue research and address public health issues. Specifically, health problems of vulnerable and marginalized sections the society. In the present talk, a detailed description of the ICMR-extramural research proposal will be discussed.

Dr. Suresh Kumar Sharma,
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Digital Health Standards Initiative by Government of India and implication of SNOMED CT for Nursing Terminology

In the past few years, India has launched several initiatives in digital health. Pursuant to the Cabinet decision for full functional autonomy, the National Health Agency was reconstituted as the National Health Authority on 2nd January 2019, under Gazette Notification Registered No. DL –(N) 04/0007/2003-18. NHA has been set up to implement PM-JAY, as it is popularly known, at the national level. NHA is leading the implementation of the Ayushman Bharat Digital Mission (ABDM) in coordination with different ministries/departments of the Government of India, State Governments, and private sector/civil society organizations.

EHR Standards for India, notified by MoHFW in 2013 and 2016, provide detailed recommendations for standardizing EHR systems. These guidelines aim to create an interoperable healthcare ecosystem in the country, ensuring that healthcare information is seamlessly accessible and exchangeable across different platforms and institutions. MoHFW has established a Centre of Excellence named as National Resource Centre for EHR Standards (NRCeS) at C-DAC, Pune to accelerate and promote adoption of EHR standards in India. The Ayushman Bharat Digital Health Mission (ABHM) stands out, aiming to create a digital health ecosystem with unique health IDs, digitized health records, and a registry of healthcare professionals and health facilities. These initiatives represent a commitment to leveraging technology for healthcare transformation.

The healthcare industry is undergoing a profound transformation with the advent of digital health records. Digital health records are essential in modernizing healthcare delivery, ensuring accuracy, and enhancing patient care. Nurses are primary point of contact for patients, and access to comprehensive, up-to-date patient information is crucial for informed decision-making and effective care planning. In nursing, digital records facilitate improved coordination among healthcare team, enabling them to provide seamless, efficient, and timely

care. Moreover, digital health records minimize the risk of errors associated with manual record-keeping, such as illegible handwriting and misplaced documents, thereby improving patient safety. They also streamline administrative tasks, allowing nurses to focus more on patient care rather than paperwork.

Several terminologies have been developed to ensure uniformity and clarity in nursing documentation. Some of the prominent nursing terminologies include the North American Nursing Diagnosis Association International (NANDA-I), International Classification for Nursing Practice (ICNP), Nursing Interventions Classification (NIC), and Nursing Outcomes Classification (NOC). These terminologies enable nurses to communicate consistently about patient conditions, nursing diagnosis, interventions, and outcomes, enhancing the quality of care and facilitating research and education in nursing. The NANDA-I focuses on diagnosing patient responses to health problems, ICNP is used to compose and represent diagnoses, interventions, and outcomes, the NIC provides a comprehensive list of interventions that nurses perform]8], and the NOC offers a set of outcomes to evaluate the effects of nursing care. Standardized nursing terminologies are critical for ensuring that care is documented accurately and comprehensively, supporting clinical decision-making, and promoting the continuity of care across different settings and providers.

American Nursing Association recognized terminologies, NANDA, NIC, NOC, the Omaha System, PNDIS, and SNOMED CT for capturing clinical terms related to nursing care for recording and reporting purpose. These terminologies support administrators, nursing executives, informatics nurses, nurse managers, and staff nurses in making informed decisions about choosing or combining nursing terminologies that best fit to clinical needs of patients.

SNOMED CT is an extensive, multilingual healthcare terminology that provides a standardized way to encode health information. It covers a wide range of clinical concepts, including diseases, procedures, and outcomes, and is used globally to ensure the interoperability of health records. For nursing, SNOMED CT offers a comprehensive framework that integrates nursing terminologies i.e. NANDA, ICNP, NIC, NOC, the Omaha System and PNDIS. Which enable the detailed documentation of nursing diagnoses, interventions, and outcomes within a standardized, universally understood system. By incorporating SNOMED CT into nursing practice, nurses can ensure that their documentation aligns with international standards, facilitating better communication and information exchange across healthcare systems.

Integrating SNOMED CT into this initiative ensures that nursing documentation is consistent, accurate, and interoperable with other healthcare records. This integration supports evidence-based practice, improves patient safety, and enables better health data analytics and population health management. For nurses, using SNOMED CT means their contributions to patient care are recorded in a way that is universally understood, ensuring that nursing care is fully recognized and valued within the healthcare system.

The adoption of SNOMED CT within the Digital Health Standards Initiative has significant implications for nursing terminology. Firstly, it promotes the use of standardized language across the nursing profession, reducing variability in documentation and improving the consistency of care. Secondly, it enhances the visibility and impact of nursing care by ensuring that nursing activities are accurately represented in health records. Thirdly, it facilitates better data collection and analysis, supporting research, quality improvement, and policy-making in nursing. Finally, it prepares the nursing workforce for the future of healthcare, where digital proficiency and the ability to work with standardized terminologies will be essential skills.

In conclusion, the integration of SNOMED CT within India's Digital Health Standards Initiative represents a crucial step towards modernizing nursing practice. It ensures that nursing documentation is consistent, accurate, and interoperable, ultimately improving patient care and supporting the professional growth of nurses.

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DIGITAL HEALTH

Digital health involves the use of various technologies and devices, including telehealth services, health information technology and mobile health (Health), to improve communication between health care professional and patients throughout healthcare systems. It improves relationships between patients and their health care professionals, expands preventive disease strategies, and shifts healthcare toward value-based treatment, increasing access to health information for patients and providers.

After the Covid 19 pandemic, Digital health technology has become more significant. To monitor health metrics of patients, digital health technologies use computing platforms, software, connectivity, and sensors.

Benefits of digital health

1. Better Patient-Nurse- Doctor Relationships

Through digital health, patients can access information about their own health as well as have a stronger relationship with their provider. For example, many hospital systems have digital health portals where patients can message their providers and receive answers back relatively quickly, rather than needing to wait for their next appointment. With digital health portals, patients can also meet with their doctors via video chat. Providers can provide real time updates to their patients regarding lab work and testing all without the patient needing to come into the office.

2. Improves Access to Information

Using digital health technologies, patients can actively manage their own health and monitor any irregularities that they may experience. Through digital health, patients also have access to information related to disease prevention, drugs, physical therapy etc which allows patients to make more informed decisions about their health.

3. Promotes Lifestyle Changes among Patients

The amount of education individuals has access to because of digital health is immense and can lead to lifestyle modifications for patients who may be at risk for common diseases, such as heart disease or diabetes. Physical and occupational therapy can also be achieved through digital health platforms which are paramount to a patient's recovery.

4. Responsive and sustainable healthcare

The price of healthcare services has increased dramatically as a result of growing chronic disorders and long stay in hospitals. By introducing the idea of self-care patient remote monitoring solution, these platforms have also contributed to easing the pressure on medical staff members and facilities like clinics and hospitals.

5. Prevention before treatment

By regularly monitoring and tracking symptoms, digital health technologies assist people in managing their health issues. More importantly, it is a technique for the early diagnosis of critical alterations in disease progression in a patient before lung health has been irreparably affected. As a result, both those with respiratory diseases and those who are considered "at risk" can significantly benefit from using digital health platforms.

6. Reduce workload of healthcare professionals

Digital healthcare solutions aim to reduce the administrative workload and other tedious tasks that healthcare professionals must complete. As a result, they spend more time interacting with and monitoring patients. This is essential for patients, clinics, outpatient care facilities, or home care settings where travel may be difficult or not recommended. Patients are prepared to provide their doctor access to their health information anytime, thanks to the clinical-grade technologies they carry.

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NURSING TERMINOLOGY STANDARDISATION

Introduction

Nursing terminology standardization is a critical aspect of modern healthcare that ensures clarity, accuracy, and consistency in communication among health care professionals. As the healthcare environment becomes increasingly complex and interdisciplinary, standardized nursing terminology facilitates better patient care, enhances data interoperability, and supports evidence-based practice. It enables nurses to accurately document patient conditions, interventions, and outcomes, thereby improving clinical decision-making and patient safety. Moreover, standardized terminology is essential for research, education, and policy development, as it provides a common language that can be universally understood and applied across various healthcare settings and systems.

a) Definition

Nursing terminology refers to the specialized vocabulary & set of terms used by nurses to describe clinical conditions, procedures, interventions, outcomes, and other aspects of patient care.

b) Current State of Nursing Terminology and its adoption: *The current state of nursing terminology is marked by a growing adoption of standardized language systems, such as NANDA-I, NIC, and NOC, across healthcare settings worldwide. These systems enhance communication, documentation, and interoperability among healthcare professionals. Despite these advancements, challenges remain, including inconsistent implementation and varying levels of familiarity among nurses. Efforts to integrate standardized terminology into electronic health records (EHRs) are ongoing, promoting more widespread use. Continued education and training are essential to improve adoption rates, ensuring that standardized nursing terminology can fully support evidence-based practice, patient safety, and improved health outcomes.*

1. Various terminologies

NANDA: *NANDA (North American Nursing Diagnosis Association) terminology is owned and maintained by NANDA International (NANDA-I). This standardized language is used primarily for identifying, defining, and classifying nursing diagnoses. It is utilized by nurses and other healthcare professionals to ensure accurate and consistent patient care documentation, enhance communication among healthcare teams, and support evidence-based practice. NANDA-I updates its terminology every few years to incorporate new research findings, clinical practices, and feedback from users. The updates ensure that the terminology remains relevant and reflects the latest advancements in healthcare. Access to NANDA-I terminology typically requires a fee. This fee may cover membership, publications, or licensing for integration into electronic health records (EHRs) and other healthcare systems. The revenue supports ongoing research, development, and dissemination of the standardized nursing diagnoses.*

ICNP: *The International Classification for Nursing Practice (ICNP) terminology is owned by the International Council of Nurses (ICN). ICNP is used for standardizing nursing language across different regions and healthcare settings. It supports the documentation of nursing care, including diagnoses, interventions, and outcomes, facilitating clear communication among nurses and other healthcare professionals. ICNP aims to enhance patient care, support evidence-based practice, and improve the quality of healthcare data. ICNP is regularly updated by the ICN to reflect the latest clinical practices, research findings, and user feedback. These updates ensure the terminology remains current and relevant, addressing emerging health issues and advancements in nursing care. Access to ICNP terminology typically involves a fee. This fee can cover licensing for integration into electronic health records (EHRs), educational materials, and other resources. The fees support the ongoing development, refinement, and dissemination of ICNP, ensuring it continues to meet the needs of the global nursing community.*

NIC: *The Nursing Interventions Classification (NIC) terminology is owned by the University of Iowa College of Nursing. NIC is used to standardize the documentation and communication of nursing interventions. It provides a comprehensive list of interventions that nurses perform in various settings, ensuring consistency and clarity in patient care documentation. NIC helps in planning and delivering evidence-based care, evaluating*

nursing outcomes, and supporting research and education in nursing practice. NIC is regularly updated to incorporate new research, clinical practices, and user feedback. These updates ensure that the classification remains relevant and accurately reflects the current state of nursing practice. Access to NIC terminology often requires a fee. This fee may cover licensing for integration into electronic health records (EHRs), educational resources, and publications. The fees support the ongoing development, maintenance, and dissemination of NIC, ensuring it remains a valuable tool for the nursing profession.

NOC: *The Nursing Outcomes Classification (NOC) terminology is owned by the University of Iowa College of Nursing. NOC is used to standardize the documentation and measurement of patient outcomes resulting from nursing interventions. It provides a comprehensive list of outcomes that can be used to evaluate the effectiveness of nursing care, supporting evidence-based practice, improving patient care, and facilitating communication among healthcare professionals. NOC is also used in nursing education and research to track and measure the impact of nursing interventions on patient health.*

NOC is regularly updated by the University of Iowa College of Nursing to reflect new research, clinical practices, and feedback from users. These updates ensure that the classification stays current and relevant to modern nursing practice. Access to NOC terminology typically requires a fee. This fee may cover licensing for use in electronic health records (EHRs), educational materials, and other resources. The fees support the ongoing development, refinement, and dissemination of NOC, ensuring it continues to serve the needs of the nursing community effectively.

2. Challenges in adopting the nursing terminologies standardisation

Adopting nursing terminology standardization faces several challenges:

- **Inconsistent Implementation:** *Variability in the adoption of standardized terminologies across different healthcare settings can lead to inconsistent documentation and communication.*
- **Lack of Training:** *Many healthcare professionals may not receive adequate training on the use and benefits of standardized terminologies, leading to resistance or improper use.*
- **Integration with EHR Systems:** *Integrating standardized nursing terminologies into existing electronic health record (EHR) systems can be complex and costly, requiring significant time and resources.*

- **Financial Constraints:** *The fees associated with accessing and maintaining up-to-date standardized terminologies can be a barrier for some healthcare institutions, especially smaller ones.*
- **Resistance to Change:** *Healthcare professionals may be resistant to changing their established documentation practices, preferring*

II Benefits of standardisation

1. **Consistency in care plan:** *Standardized nursing terminology ensures that care plans are consistent across different healthcare providers and settings, improving the continuity and quality of patient care.*
2. **Accurate documentation and record keeping:** *It enables precise and comprehensive documentation of patient conditions, interventions, and outcomes, leading to better record-keeping and more reliable patient histories.*
3. **Efficiency in Healthcare Delivery**
 - **Reduce Errors:** *Standardized terminology reduces the likelihood of misunderstandings and errors in patient care, enhancing patient safety.*
 - **Streamlined Process:** *It simplifies the documentation process, saving time for healthcare professionals and allowing them to focus more on direct patient*
4. **Facilitation of Research and Education**
 - **Easier Data Collection and Analysis:** *Standardized terminology facilitates the collection and analysis of data across multiple studies and settings, supporting robust research efforts.*
 - **Better Training and Curriculum Development:** *It provides a common language for educational materials and training programs, ensuring that nursing students and professionals are well-prepared and knowledgeable.*

III Strategies for implementing Standardisation

a. Collaboration and Consensus Building

- **Involvement of Stakeholders:** *Engage nurses, healthcare providers, administrators, and IT professionals to ensure buy-in and participation in the standardization process.*
- **Use of Professional Organizations and Regulatory Bodies:** *Work with organizations like NANDA-I, ICN, and regulatory bodies to develop and promote standardized terminologies*

a. Adoption of EHR standards 2016 and ABDM on boarding regular updates

Implement electronic health record (EHR) systems that support standardized nursing terminologies, ensuring compatibility and interoperability. Stay updated with the latest standards and guidelines, such as the EHR Standards 2016 and the American Board of Digital Medicine (ABDM), to ensure compliance and effectiveness.

The EHR Standards 2016 and the American Board of Digital Medicine (ABDM) are crucial frameworks that guide the implementation and use of electronic health records (EHRs) in healthcare settings. The EHR Standards 2016 provide a set of guidelines and requirements for the design, development, and deployment of EHR systems, ensuring interoperability, data security, and usability. On the other hand, the ABDM focuses on advancing the adoption of digital technologies in medicine, including EHRs, through certification and accreditation programs. These standards play a vital role in enhancing the quality, efficiency, and effectiveness of healthcare delivery by promoting the use of standardized and secure digital health records.

b. Education and Training

1. Continuous Professional development: *Continuous professional development (CPD) is essential in terminology standardization to keep healthcare professionals updated with evolving terminologies, ensuring accurate and consistent documentation. CPD also promotes best practices, compliance with regulations, collaboration, and ultimately improves patient outcomes through effective use of standardized terminologies.*

2. Incorporating Standardisation in Nursing Audits: *Education and training are essential for incorporating standardization in nursing audits as they ensure healthcare professionals understand and can effectively use standardized terminologies. This understanding leads to consistent and accurate documentation, crucial for audit reliability. Training also promotes compliance with auditing standards, enhances communication among healthcare teams, and supports continuous improvement in auditing practices. Ultimately, education and training help ensure that nursing audits are conducted efficiently, leading to improved patient care and outcomes.*

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NURSING RECORDS AND REPORTS IN THE ERA OF DIGITALIZATION

“I don’t think that health and healthcare could continue without nurses being on board with digital health technology” - Erica Burton

Introduction

In the ever-evolving landscape of healthcare, the integration of technology has become not just a convenience but a necessity. At the forefront of this digital revolution stand nurses, whose roles extend beyond bedside care to embrace the intricacies of healthcare technology. Gone are the days of traditional charting and manual documentation. In this digital age, nurses are harnessing the power of electronic health records (EHRs), tele-health platforms, and mobile applications to streamline patient care.

Technology has transformed the nursing profession, empowering nurses to deliver more efficient and effective care while adapting to the changing needs of patients and healthcare systems. Technology isn't just about digitizing paperwork— it's about enhancing patient outcomes and experiences. Nurses are leveraging tools like remote monitoring devices, patient portals, and predictive analytics to proactively manage patient health, prevent complications, and improve overall wellness. Technology-enabled nursing interventions are revolutionizing patient care and driving positive health outcomes.

In the digital era, nurses are not just users of technology; they're also innovators and educators. From developing new clinical workflows to training colleagues on the use of advanced medical devices, nurses are at the forefront of driving technological innovation in healthcare. Nurses play a pivotal role in shaping the adoption and integration of technology within healthcare settings, ultimately leading to better patient care and outcomes.

While the benefits of technology in nursing are undeniable, there are also challenges to navigate, such as data security concerns, interoperability issues, and the

need for ongoing education and training.

The intersection of healthcare and technology is where the future of nursing lies. Nurses are not just caregivers—they're innovators, educators, and champions of change. Together, they're charting a course towards a future where technology and compassion converge to create a healthier, more connected world

Types of Nursing records and reports which can capture in HMIS solution

Nurses have several critical responsibilities in HIMS (HER). These duties ensure that patient care is well-documented, coordinated, and efficient. Here are the key roles and tasks that nurses typically perform with EHR systems:

- 1. Data Entry and Documentation*
- 2. Medication Administration*
- 3. Care Coordination*
- 4. Clinical Decision Support*
- 5. Patient Education and Engagement*
- 6. Compliance and Quality Assurance*
- 7. Monitoring and Follow-Up*
- 8. Reporting and Data Analysis*
- 9. Training and Support:*
- 10. Confidentiality and Security*

Types of Data under HMIS portal, Government of India

- ✓ MCH Data (ANC, INCANDPNC)*
- ✓ Vaccination data*
- ✓ Family Planning*
- ✓ Government Schemes*
- ✓ NVBDCP data*
- ✓ Childhood diseases*
- ✓ Patient Services*
- ✓ Adolescent Health*
- ✓ Laboratory Testing*
- ✓ National Health Programme*
- ✓ Birth/Death review*
- ✓ Stock Positions*
- ✓ National Ambulation services.*

WHO proposes to categorize the health information system under five interrelated “subsystems”:

- *Epidemiological Surveillance (modifiable infectious diseases, environmental conditions, and risk factors)*
- *Routine service reporting*
- *Special programmes reporting systems (tuberculosis and leprosy control, MCH, school health)*
- *Administrative systems (healthcare financing systems, health personnel systems, logistic systems)*
- *Vital registration systems (births, deaths, and migratory movements)*

Benefits of Digital Nursing records:

Technology has transformed the nursing profession, empowering nurses to deliver more efficient and effective care while adapting to the changing needs of patients and healthcare systems. Technology isn't just about digitizing paperwork— it's about enhancing patient outcomes and experiences. Nurses are leveraging tools like remote monitoring devices, patient portals, and predictive analytics to pro-actively manage patient health, prevent complications, and improve overall wellness. Technology-enabled nursing interventions are revolutionizing patient care and driving positive health outcomes

Challenges of Digital Nursing records and Method of overcome these challenges

Problems	Solution
✓ <i>Cost of Implementation & Usage</i>	<i>Funding</i>
✓ <i>Time-consuming Training</i>	<i>Thorough Training Programme</i>
✓ <i>Staff Limitation</i>	<i>Proper Training</i>
✓ <i>Work flow disruption</i>	<i>Establish a Consistent workflow</i>
✓ <i>Privacy Concerns</i>	<i>Data Security</i>
✓ <i>Data Migration</i>	<i>move information</i>
✓ <i>Lack of Interoperability</i>	<i>Access to patient data</i>
✓ <i>Communication Gap</i>	<i>Effective patient & healthcare provider communication</i>
✓ <i>Insufficient planning</i>	<i>Strategic Planning</i>
✓ <i>Restraints of technical resources</i>	<i>Build budgeted technical resources</i>

Training and adaptation:

It's not uncommon for electronic health record (EHR) software implementation to be met with some resistance. Transitioning from a paper-based environment to one reliant on an electronic system can be daunting for staff, but with proper training, staff can learn even the most complicated systems. Training isn't just helpful. Research has shown that it's essential to the implementation process. It can help programs avoid setbacks, errors, employee turnover and other general frustrations while facilitating a smooth transition from paper (or an existing EHR) to an electronic system. Without it, meaningful use of your chosen her technology simply isn't possible.

Here are five effectives HER training tips to help gets staff adequately Trained and comfortable on a new system:

- 1. Identify Employee Computer Skills and Provide Basic Training*
- 2. Designate One or Two Tech-Savvy "Super Users"*
- 3. Train Employees Only on Areas They're Going to Use*
- 4. Conduct Post-Implementation Feedback Sessions*
- 5. Take Advantage of Post-Go Live Resources Provided by Your HER Vendor*

Potential Benefits of Maintaining Digital Nursing Records & Reports For Global Standardization

The digital revolution is well underway in healthcare systems around the world, and active engagement with technology is going to be an increasingly essential aspect of nursing going forward.

- 1. Virtual Patient Care*
- 2. Access to modern information*
- 3. Universal access to Health services*
- 4. Increase in work efficiency*
- 5. Nurses feel confident that they can deliver safe care*
- 6. Uniform Coding and Documentation Practice*
- 7. Data Sharing and Data Analytics*

Panel Discussion –

On -

Transformative

Nursing:

Excellence in Nursing

Diagnosis & Recording

PANELIST-1

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Introduction:

As frontline healthcare professionals, nurses spend the most time interacting directly with patients. This unique position enables them to leverage technology to significantly enhance patient care in several crucial ways. Through the use of technology, patients can receive consistently higher-quality care. Additionally, nurses can extend their reach to a broader population, minimize errors that could affect patient care, and quickly address changes in a patient's condition.

Effect of advance technology on accurate and efficient nursing diagnosis recording

1. Electronic Health Records (EHRs):

- *Improved Documentation*
- *Ease of Access*
- *Error Reduction*

2. Clinical Decision Support Systems (CDSS):

- *Guidance and Alerts*
- *Data Integration*

3. Adoption and use of Clinical/Nursing Terminologies:

- *Adoption of recommended terminology by Govt of India SNOMED CT, which have nursing terminologies such as NANDA, ICNP, NIC, NOC.*

4. Artificial Intelligence (AI) and Machine Learning:

- *Predictive Analytics*
- *Pattern Recognition*

5. Mobile Health (mHealth) Applications:

- *Real-time Data Collection*
- *Patient Engagement*

6. Wearable Technology:

- *Continuous Monitoring*
- *Early Detection*

7. Big Data Analytics:

- *Comprehensive Analysis*
- *Outcome Tracking*

8. Telehealth:

- *Remote Assessments*
- *Data Sharing*

Benefits:

- *Enhanced Accuracy*
- *Increased Efficiency*
- *Improved Patient Outcomes*
- *Reduced Errors*

Incorporating these technological advancements into nursing practice not only improves the quality of care but also supports the ongoing professional development of nurses by providing them with modern tools and data-driven insights.

Potential challenges in recording nursing diagnosis, outcome and nursing intervention implementing these tools in clinical practice

1. Technical Challenges:

- *System Integration*
- *Data Interoperability*
- *Technical Glitches*

2. User Adoption:

- *Resistance to Change*
- *Training Requirements*

3. Data Quality and Integrity:

- *Data Entry Errors*
- *Incomplete Data*
- *Data Overload*

4. Privacy and Security:

- *Data Privacy*
- *Cybersecurity Threats*

5. Financial Constraints:

- *High Costs*
- *Return on Investment*

6. Workflow Disruption:

- *Transition Period*

- *Adaptation Time*

7. Ethical and Legal Issues:

- *Informed Consent*
- *Liability*

Strategies to Overcome These Challenges:

1. *Comprehensive Training and Support*
2. *Stakeholder Involvement*
3. *Robust IT Infrastructure*
4. *Interoperability Standards*
5. *Change Management*
6. *Pilot Programs*
7. *Regular Audits and Monitoring*

By anticipating these challenges and implementing strategies to mitigate them, healthcare organizations can better leverage technology and data analytics to enhance the recording of nursing diagnoses, outcomes, and interventions, ultimately improving patient care and clinical efficiency.

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Nursing's embrace of digital transformation: revolutionizing care Fine people, We are currently on the verge of a significant shift in healthcare, particularly in the noble profession of nursing. The unavoidable trends are serious areas of strength for blowing, by the power of advanced change. It is essential, as we gather here, to acknowledge not only the development of technology but also its central role in reshaping the manner in which we provide care, improve patient outcomes, and empower healthcare professionals.

Nursing, which is frequently referred to as the centre of healthcare, is about to undergo a remarkable transformation. Imagine a world where AI algorithms improve diagnostics, telemedicine connects patients and nurses across vast distances, and patient records are seamlessly integrated across platforms. This is the reality that we are currently shaping, not just a vision. Numerous advancements are included in digital transformation in community health nursing such as

- 1. Telehealth and Remote Monitoring:** *Technology allows for remote consultations and monitoring of patients in community settings, enabling nurses to assess health status and provide timely interventions.*
- 2. Health Information Exchange (HIE):** *Adoption EHR Standards 2016 and ABDM standards facilitates Interoperable health information systems facilitate the exchange of patient data among healthcare providers, enhancing care coordination and continuity in community settings.*
- 3. Electronic Health Records (EHRs) for Community Health:** *EHR systems tailored to community health nursing streamline documentation processes, ensuring comprehensive recording of health assessments, interventions, and outcomes for individuals and populations.*

4. Mobile Health (mHealth) Applications: *Mobile apps provide tools for health education, self-management, and tracking of health indicators, empowering individuals to actively participate in their care and allowing nurses to monitor population health trends.*

5. Geographic Information Systems (GIS): *GIS technology enables spatial analysis of community health data, identifying geographic patterns of health disparities, environmental risks, and resource allocation needs for targeted interventions.*

Technology is becoming increasingly important to our day-to-day practice, from wearable devices that monitor patient vitals in real time to electronic health records (EHRs) that streamline documentation and reduce errors.

The frontline heroes of healthcare, nurses, are not only embracing these tools; rather, they are driving their implementation and making the most of their use to provide better care for patients. Take into account the effect on patient outcomes. With advanced instruments, medical attendants can get to thorough patient chronicles immediately, empowering faster navigation and more customized care plans.

Mobile apps make it easier for healthcare teams to communicate with one another, ensuring that important information is shared promptly and accurately. These developments save time as well as save lives. Additionally, nurses gain professional autonomy as a result of digital transformation. It gives roads to constant learning through web-based assets and computer experiences.

It encourages cross-disciplinary collaboration, breaks down silos, and encourages a holistic approach to patient care. As medical caretakers, we are not simply parental figures; we are pioneers in utilizing innovation to further develop medical services conveyance at each level. However, in the midst of these headways, we should likewise recognize the difficulties come across such as

1. Digital Divide: *Disparities in access to technology and internet connectivity may limit the use of digital health tools among underserved populations, exacerbating existing health inequities.*

2. Health Literacy and Technological Proficiency: *Ensuring that community members have the necessary health literacy and technological skills to effectively use digital health tools and understand health information presents a challenge.*

3. Interdisciplinary Collaboration: *Collaborating with other community stakeholders, such as social services, public health agencies, and community organizations, to integrate digital*

health tools into comprehensive care delivery models requires effective communication and coordination.

4. Healthcare Workforce Training Needs: *Community health nurses require training to effectively utilize digital health tools, interpret health data, and engage with diverse populations in community settings.*

5. Ethical Considerations in Community Health: *Ethical issues related to the use of technology in community health, such as informed consent, privacy, and autonomy, need to be carefully considered and addressed.*

The change to advanced medical services isn't without obstacles — worries about information security, aberrations in admittance to innovation, and the requirement for continuous preparation are huge. However, these difficulties can be overcome. They force us to think creatively in a responsible way so that every nurse and every patient can share in the benefits of this change. Let us reaffirm our commitment to utilizing technology for the greater good of humanity as we look toward the future. Let us work for healthcare policies that encourage digital integration and make investments in the infrastructure needed to keep these advances going. Furthermore, in particular, let us never neglect to focus on the human touch — the sympathy, compassion, and commitment that characterize nursing. All in all, computerized change in nursing isn't just about embracing new devices; it is tied in with embracing another time of medical care — one that is more brilliant, more associated, and significantly understanding focused. Together, let us jump all over this chance to shape a better world, where development meets sympathy in the consideration we give.

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Advancements in technology and data analytics enhancing the accuracy and efficiency of nursing diagnosis recording specifically in the psychiatric field. Like...

- 1. Tele psychiatry:** *Telehealth platforms facilitate remote psychiatric assessments and interventions, significantly enhancing access to mental health care. These platforms allow for timely diagnoses, consistent follow-ups, and continuous monitoring, especially for individuals in underserved or remote areas. Tele psychiatry enables the collection of comprehensive patient data over time, which aids in forming accurate nursing diagnoses and developing tailored treatment plans. Additionally, tele psychiatry can help bridge the gap between patients and specialists, ensuring that more individuals receive the psychiatric care they need without the constraints of geographical barriers.*
- 2. Adoption and use of Clinical/Nursing Terminologies:** *The integration of standardized clinical and nursing terminologies, such as SNOMED CT, NANDA, ICNP, NIC, and NOC, significantly enhances the precision and consistency of nursing diagnoses. These terminologies, endorsed by entities like the Government of India, provide a common language that facilitates accurate documentation and communication among healthcare professionals. Mapping these terminologies to ICD-10 using SNOMED CT further aligns psychiatric nursing practices with global standards, ensuring that diagnoses are both comprehensible and comparable across different healthcare settings, ultimately leading to improved patient care.*
- 3. Mobile Health Apps:** *Mobile health apps offer innovative solutions for real-time symptom tracking and mental health monitoring. These apps enable patients to record their symptoms and mood variations regularly, providing healthcare professionals with continuous, valuable data. This real-time information can lead to more accurate and timely psychiatric diagnoses, allowing for personalized and dynamic treatment plans. Additionally, mobile apps can engage patients actively in their care, promoting better self-management and adherence to treatment protocols, thereby enhancing overall mental health outcomes.*

4. Predictive Analytics: *Predictive analytics leverages vast amounts of data to identify patterns and risk factors associated with mental health conditions. By analysing historical and real-time data, these advanced analytics tools can aid in the early detection of psychiatric disorders and facilitate personalized care planning. Predictive analytics can help psychiatric nurses anticipate potential crises, tailor interventions to individual patient needs, and improve overall treatment outcomes. The insights gained from predictive analytics contribute to more proactive and preventive mental health care strategies.*

5. Decision Support Systems: *AI-driven decision support systems assist psychiatric nurses in making evidence-based clinical decisions. These systems analyse patient data, clinical guidelines and research to provide recommendations on diagnosis and treatment plans. AI integration improves diagnostic accuracy, optimizes intervention strategies and enhances treatment outcomes. Decision support systems support psychiatric nurses in delivering high-quality, individualized care based on the latest evidence and best practices.*

There are potential challenges in accurately recording nursing diagnoses, outcomes, and interventions when implementing these technological tools in clinical practice.

1. Privacy and Confidentiality: *Ensuring the privacy and confidentiality of sensitive mental health information is a significant challenge when using digital tools. Electronic records and digital communications must be secured against unauthorized access and breaches. Strict protocols and encryption methods are necessary to protect patient data, but maintaining these standards requires constant vigilance and updates, adding complexity to the implementation of new technologies in psychiatric nursing.*

2. Patient Engagement: *Encouraging patients to consistently use digital health tools and accurately report their symptoms can be difficult. Many patients may lack the motivation, technological skills, or understanding to engage with these tools effectively. Additionally, variability in patient engagement can lead to incomplete data, impacting the accuracy of nursing diagnoses and the effectiveness of interventions.*

3. Stigma and Trust: *Stigma surrounding mental health and distrust in technology can hinder the adoption of digital mental health tools. Patients may be reluctant to use these tools due to concerns about being judged or misunderstanding how their data will be used. Building trust through education, transparency, and demonstrating the benefits of these technologies is essential to overcoming these barriers.*

4. Training Requirements: *Nurses need specialized training to effectively use advanced digital tools and interpret data analytics in psychiatric care. This training includes understanding the technology, integrating it into clinical practice, and maintaining competence with ongoing advancements. Implementing comprehensive training programs requires time, resources, and support from healthcare institutions to ensure successful adoption.*

5. Ethical Considerations: *Ethical issues such as autonomy, informed consent, and the appropriate use of AI and predictive analytics in mental health care must be addressed. Ensuring that patients are fully informed about how their data will be used and that their autonomy is respected is crucial. Ethical frameworks must be developed to guide the use of these technologies, balancing innovation with patient rights and well-being.*

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Professor Cum Vice-Principal,
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(Child Health Nursing,)



Enhancing the accuracy and efficiency of nursing diagnosis recording specifically in paediatric care through advancements in technology and data analytics.

In paediatric care, accurate nursing diagnosis recording is crucial for effective patient management and improved outcomes. Advancements in technology and data analytics offer promising avenues to enhance the precision and efficiency of this process.

The following case study highlight the effective integration of technology in the nursing process, resulting in improved healthcare outcomes

Case Study#1: Enhancing Fever Management in Paediatric Hospital Settings with Ped N-CDSS- (Paediatric Nursing-Clinical Decision Support System) Hyperthermia

Prolonged fever can significantly affect a child's metabolic rate and various organ systems, such as cardiopulmonary, digestive, and nervous systems. Despite fever's potential benefits for immune response to infections, misconceptions often lead to unnecessary interventions and heightened anxiety. Nurses struggle with efficient assessment, diagnosis, intervention, and evaluation of fevers due to the absence of structured protocols and decision-support systems.

Introducing Ped N-CDSS-Hyperthermia: *To address these challenges, a multi-disciplinary team at [Hospital Name] developed the Paediatric Nursing-Clinical Decision Support System for Hyperthermia (Ped N-CDSS-Hyperthermia). This system integrates a comprehensive Paediatric Nursing-Knowledge Base for Hyperthermia, consolidating evidence-based guide lines and best practices. It automates nursing assessments, diagnoses, interventions, and evaluations tailored to paediatric patients, ensuring standardized and timely care delivery.*

Implementation and Impact: *The Ped N-CDSS-Hyperthermia was piloted across [Hospital Name]'s general surgery and immunology wards. During the pilot phase, significant improvements were observed in nursing records' completeness and timeliness. The system's*

structured approach facilitated more accurate and timely nursing interventions, optimizing patient care outcomes.

Standardised Nursing Care plan provides the standardized language with the advantages as follows;

Improved communication among nurses, health care professionals, and administrators is a key benefit of using standardized nursing language. The use of standardized nursing languages enhances communication of nursing care nationally and internationally, alerting nurses to beneficial interventions that might not be widely known in their areas.

Increased visibility of nursing interventions is crucial. Nurses often rely on verbal communication and in formal notes, leaving their work largely undocumented. According to Pearson (2003), current documentation focuses more on legal protection than patient care. However, computerized nursing documentation systems can enhance patient-centred and consistent records, highlighting nursing activities and their impact on patient outcomes.

Using standardized nursing language improves patient care. Cavendish (2001) surveyed 64 school nurses to identify common complaints of abdominal pain and used the Nursing Intervention Classification (NIC) and Nursing Outcomes Classification (NOC) to assess interventions and outcomes. The main complaints were nausea, headache, and vomiting, often caused by psycho social issues, viral syndromes, or menstrual cycles. Nutritional factors and cultural practices like fasting during Ramadan were also identified. The top pain management activities included observing nonverbal cues of discomfort, comprehensive pain assessments and reducing factors that increase pain (e.g., fear, fatigue). Following these interventions, symptom intensity decreased by 6.25%, symptom persistence by 4.69%, symptom frequency by 6.25%, and associated discomfort by 41.06%.

Potential challenges in accurately recording nursing diagnoses, outcomes, and interventions when integrating these technological tools into paediatric clinical practice

Sr. No.	Experiences shared by Nurses	Challenges	Possible Solutions /Opportunities
1	The biggest barrier to any system, electronic or paper-based, is chronic under staffing. If staff are too busy to take breaks or use the bathroom, they will struggle to engage with the system And deliver patient care."	Misalignment between clinical and nursing goals	Aligning interdisciplinary workflow Result driven system (Proven clinical utility) Empowered nurses are at CENTRE.
2	Often, decision-makers have never walked in our shoes and don't understand our work, yet they impose systems on us without knowledge of our work flows and information use	Product Mismatch	Involvement of Nurses right from Procurement Support during deployment Feedback Analysis (Participative) Strengthening training
3	Some of the workforce started with pen and paper, and support has often been lacking as new technology is introduced	Fixed Mind-set	Inter professional, Multidisciplinary approach Positive role models through technology champions and Clinical System Facilitators Curricular & pedagogical innovation(Training of Minds)
4	The most fundamental problem in our trust is inadequate IT systems; we are upgrading to Windows7, An OS nearly a decade out of date."	Insufficient IT / Organizational support	Core Team for IT Development of Road Map (IT Vision) Digital Literacy
5	Mobile devices, essential for junior physicians, are forbidden for nurses due to concerns about personal device use and digital professionalism."	Creating culture of Digital Professionalism	Deployment of the digital professionalism model

Conclusion: *Yetano their well-documented challenge related to Digital health care that it may widen health disparities in children, especially in regions lacking IT support. Researchers must Prioritize alternative care solutions for vulnerable children. Child health nurses need to stay update don technology and provide informed feedback. They should critically evaluate new technologies to ensure they benefit children's well-being*

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A nursing diagnosis is a clinical judgment made by a nurse about the response of an individual, family, or community to actual or potential health problems and life processes. In the context of obstetrics and gynecology, nursing diagnoses are essential for identifying and addressing the unique health needs of women during pregnancy, childbirth, and the postpartum period, as well as for gynecological conditions.

The utilization of technology plays a crucial role in improving diagnosis accuracy and record-keeping efficiency in nursing practice. Some of the advancements in technology and data analytics are:

1. CLINICAL DECISION SUPPORT SYSTEMS (CDSS):

CDSS use algorithms, evidence-based guidelines, and patient data to provide real-time diagnostic support to nurses. These systems offer suggestions, alerts, and reminders related to potential diagnoses, differential diagnoses, and recommended diagnostic tests or interventions, helping nurses make more informed and accurate clinical decisions. In gynecological and obstetrical nursing are designed to assist healthcare provider's in making informed decisions by offering evidence-based recommendations, alerts, and reminders. Here are some examples of CDSS applications in this field:

2. DIAGNOSTIC IMAGING TECHNOLOGY:

Advanced imaging technologies, such as ultrasound, computed tomography (CT), magnetic resonance imaging (MRI), and digital radiography, facilitate non-invasive visualization of internal structures and pathology. Nurses can utilize these technologies to assist in diagnosing various conditions, such as fractures, tumor's, and organ dysfunction, enhancing diagnostic accuracy and treatment planning.

3. POINT-OF-CARE TESTING (POCT):

Point-of-Care Testing (POCT) in gynecological and obstetrical nursing refers to diagnostic tests performed at or near the site of patient care, allowing for rapid

assessment and immediate decision-making. These tests are integral to providing timely and efficient care to women during pregnancy, labor, and gynecological examinations.

Here are some examples of POCT applications in this specialty

4. ELECTRONIC HEALTH RECORDS (EHR):

EHRs enable streamlined documentation and easy access to patient history, ensuring comprehensive and accurate records for obstetric and gynecological care by using Clinical/Nursing Terminologies Systematized Medical Nomenclature for Medicine–Clinical Terminology SNOMED CT, which have nursing terminologies such as NANDA, ICNP, NIC, NOC. EHR systems provide a centralized platform for storing, accessing, and managing patient records electronically. Nurses can input, retrieve, and update patient information in real time, eliminating the need for paper-based documentation and streamlining record-keeping processes. EHRs improve efficiency by reducing documentation errors, facilitating information sharing, and enhancing data accessibility and interoperability

6. MOBILE DOCUMENTATION APPLICATIONS:

Mobile documentation applications enable nurses to document patient encounters, assessments, and interventions directly at the point of care using smartphones or tablets. These applications offer customizable templates, voice-to-text functionality, and barcode scanning capabilities, allowing nurses to document efficiently and accurately while minimizing workflow disruptions. Mobile documentation applications for gynecological and obstetrical nursing can enhance the efficiency and accuracy of clinical documentation, patient management, and communication among healthcare providers.

7. BARCODE MEDICATION ADMINISTRATION (BCMA):

BCMA systems use barcode technology to verify medication administration at the bedside. Barcode Medication Administration (BCMA) is a technology used in healthcare settings to ensure the correct administration of medications to patients. It involves the use of barcodes on patient identification bands and medication packaging, along with barcode scanners and electronic medication administration records (eMAR) to verify and document medication administration processes. Nurses scan medication barcodes, patient identification wristbands, and healthcare provider badges to ensure accurate medication administration, dosage, and patient safety. BCMA systems integrate with EHRs to record medication administrations electronically, enhancing record-keeping efficiency

8. PREDICTIVE ANALYTICS:

Data analytics can identify trends and potential risks in pregnancy, aiding in the prediction and prevention of complications such as preeclampsia or gestational diabetes. Predictive analytics in gynecological and obstetrical nursing leverages data to anticipate health issues, improve patient outcomes, and enhance clinical decision-making. By analyzing historical and real-time data, healthcare providers can predict potential complications, optimize care plans, and improve overall maternal and fetal health.

9. CLINICAL DOCUMENTATION IMPROVEMENT (CDI) TOOLS:

CDI tools analyze clinical documentation to identify gaps, inconsistencies, or inaccuracies that may affect coding, billing, or quality reporting. Nurses can use CDI tools to improve documentation quality, ensure compliance with regulatory standards, and capture complete and accurate patient data for reimbursement purposes.

Clinical Documentation Improvement (CDI) tools in gynecological and obstetrical nursing are designed to enhance the accuracy, completeness, and consistency of patient health records. These tools support healthcare providers in capturing detailed clinical information, ensuring proper coding, and optimizing patient care and reimbursement processes.

10. PATIENT EDUCATION TOOLS:

Digital platforms provide educational resources tailored to each patient, enhancing understanding and adherence to care plans, which supports better outcomes. Patient education tools in gynecological and obstetrical nursing are essential for empowering patients with knowledge about their health, enhancing their ability to make informed decisions, and improving overall outcomes. These tools provide critical information on various topics, including prenatal and postnatal care, gynecological health, and family planning. Here's an overview of effective patient education tools in this specialty: Mobile Applications, Websites and Online Portals, Printed Materials, Educational Videos and Animations, Interactive Workshops and Classes, Patient Portals and Electronic Health Records

e - Poster Presentation

Ms. Swati Shende

Lecturer

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Poster Presentation -1

"DIGITAL TRANSFORMATION IN HEALTH CARE"

Ms. SWATI SHENDE
ASSISTANT PROFESSOR, VSPM MDINE, Nagpur

INTRODUCTION

Digital transformation in healthcare is the process of using technology to improve the delivery and outcomes of care, while reducing costs and errors. It involves integrating data, automating tasks, and innovating solutions across the healthcare value chain. Digital transformation aims to meet the needs of patients and providers, and to achieve continuous improvement of care.

DIGITALIZATION AND HEALTH

2. BIG DATA

Big data is a massive amount of information on a given topic. Big data includes information that is generated, stored, and analyzed on a vast scale too vast to manage with traditional information storage systems. In health care, the move to digitize records and the rapid improvement of medical technologies have paved the way for big data to have a big impact in the field.

4. VIRTUAL REALITY

Virtual reality in healthcare is the premise of using computer-simulated realities by wearing a headset or goggles over the eyes – to support aspects of medical care and offer improvements or benefits not found by traditional means. VR in healthcare is used for many purposes. The technology enables surgeons to virtually examine a patient before a procedure, allows medical personnel to train in life-like simulations and supports virtual sensory tests for patients with muscle weakness. VR is also used to generate empathy among healthcare providers by simulating the conditions of their patients.

1. INTERNET OF THINGS

The Internet of things describes devices with sensors, processing ability, software and other technologies that connect and exchange data with other devices and systems over the Internet or other communications networks.

3. ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) refers to the development of computer systems of performing tasks that require human intelligence. AI aids, in processing amounts of data identifying patterns and making decisions based on the collected information. This can be achieved through techniques like Machine Learning, Natural Language Processing, Computer Vision and Robotics.

5. TELE HEALTH

Telehealth is the distribution of health-related services and information via electronic information and telecommunication technologies. It allows long-distance patient and clinician contact, care, advice, reminders, education, intervention, monitoring, and remote admissions.

BENEFITS

- Improved Patient Care
- Efficiency and Cost Reduction
- Enhanced Data Analytics
- Patient Engagement
- Innovation and Research
- Security and Privacy

Conclusion

The digital transformation of healthcare includes changes related to the internet, digital technologies, and their relation to new therapies and best practices for better health management procedures.

Ms. Aishwarya Dhote

Clinical Instructor cum Tutor, VSPM MDINE, Nagpur

Poster Presentation -2

DIGITAL TRANSFORMATION IN NURSING

Digital Recording & Reporting by Nurses

Introduction to Electronic Health Records (EHRs) in Nursing

Electronic Health Records (EHRs) are digital versions of a patient's medical history. EHRs have transformed the way nurses provide care, improve patient outcomes, and enhance overall healthcare delivery.

Patient Health Record

Benefits of EHRs for Nurses

- ✓ BETTER PATIENT CARE
- ✓ BETTER CLINICAL DECISION MAKING
- ✓ MORE EFFECTIVE COMMUNICATION
- ✓ MORE ACCURATE AUTOMATED DOCUMENT PROCESSING
- ✓ INCREASED PRODUCTIVITY
- ✓ ENHANCED SECURITY
- ✓ LOWER HEALTH CARE COST
- ✓ EASY ACCESSIBILITY

Types Of Electronic Health record

The Future of EHRs in Nursing Practice

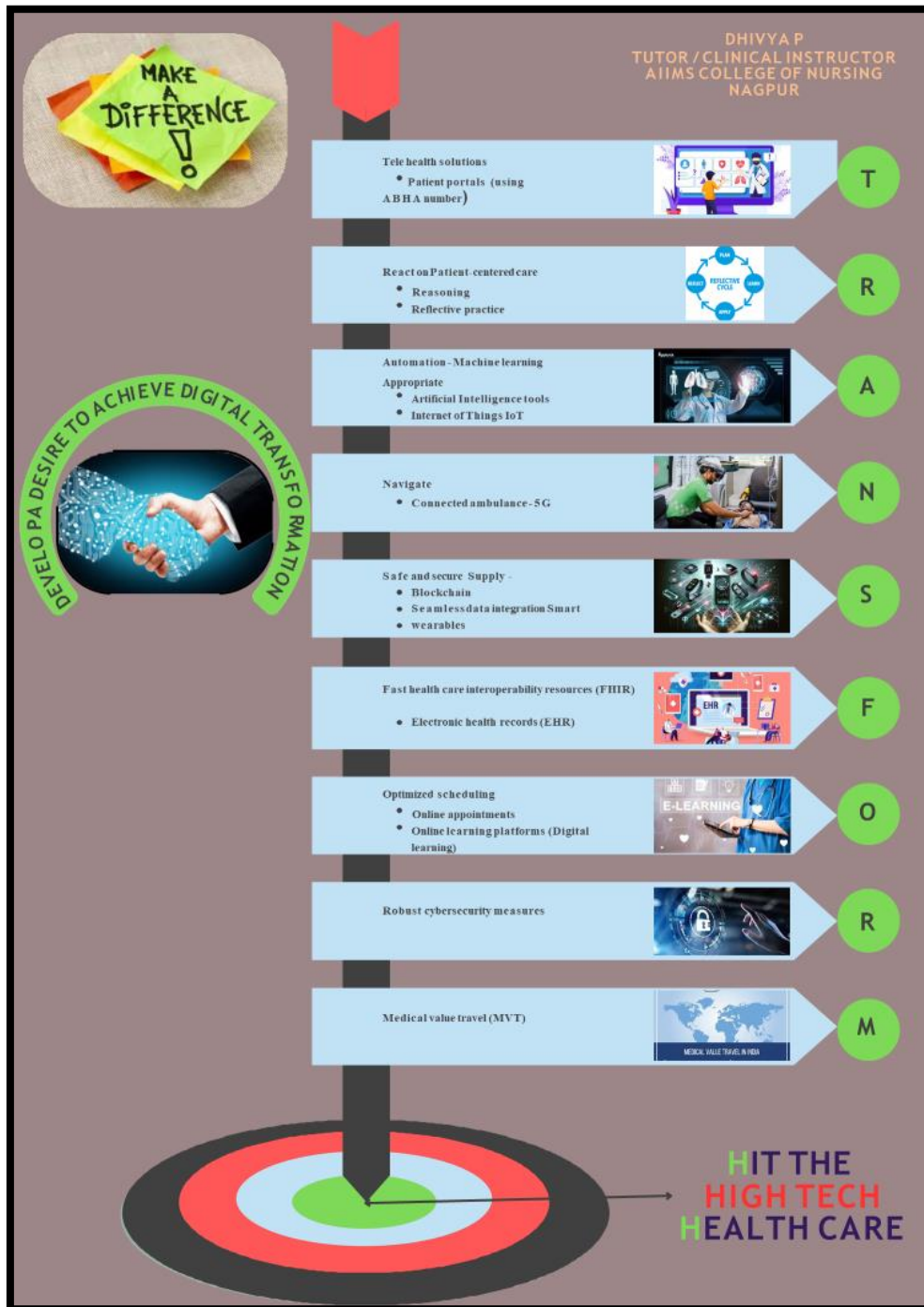
- Interoperability
- Artificial Intelligence
- Telehealth Integration
- Patient-Centered Design

Dhivya P

Tutor / Clinical Instructor

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Poster Presentation -3



Ms. Sneha Bante

Lecturer

VSPM MDINE, Nagpur

MOBILE
HEALTH

Digital Transformation in Nursing

1 M-HEALTH

It is a general term for the use of mobile phones and other [wireless](#) technology. The most common application of m-Health is the use of mobile devices to educate consumers about preventive healthcare services.

2 M-HEALTH APPS

- Clinical Diagnostic apps
- Reminder apps
- Text & video communication app
- Prescription apps
- Productivity apps
- Mental Health apps

3 BENEFITS


- Time-consuming
- Store accurate report
- Maintain Patient records
- Hassle free payments
- Immediate access to care
- Electronic reminders
- Wirelessly connected device


4 DISADVANTAGES

- Data Privacy
- Accuracy of Data

5 FUTURE DEVELOPMENT

The industry of m-Health app development is expanding quickly, with a projected CAGR of 24.6% between 2024 and 2027.





Ms. Janhavi Dhivar

Smt. Sunanda Pravin Gambhirchand College of Nursing

“DIGITAL TRANSFORMATION IN NURSING: CLINICAL JUDGEMENT & DOCUMENTATION”

INTRODUCTION

Digital transformation in healthcare refers to the integration of digital technologies into all aspects of healthcare delivery, management, and operations. Nursing practice can achieve greater accuracy in documentation, faster access to patient information, improved coordination of care, and better patient engagement. It also opens doors to new opportunities for innovation and continuous improvement in healthcare delivery. Thus, understanding and leveraging digital technologies are essential for nurses striving for excellence in today's healthcare landscape.

IMPORTANT TECHNOLOGIES THAT ENHANCE HEALTHCARE DELIVERY

Traditional nursing practices face several challenges that can hinder efficient healthcare delivery and patient care.

1. Paper-Based Documentation
2. Communication Barriers
3. Limited Access to Information
4. Workflow Inefficiencies
5. Resistance to Change
6. Lack of Standardization
7. Workload and Burnout

Challenges in Implementing Digital Transformation in Nursing:

- ❖ Resistance to Change
- ❖ Privacy and Security Concerns
- ❖ Training and Skill Development
- ❖ Infrastructure Requirements
- ❖ Workflow Integration
- ❖ Cost Considerations
- ❖ Interoperability and Integration

Positive Impact of Digital Transformation on Nursing Workflows: -

- ❑ Improved efficiency
- ❑ Enhanced communication
- ❑ Quality care
- ❑ Patient engagement & education
- ❑ Data utilization & analytics
- ❑ Regulatory compliance & documentation
- ❑ Professional development

key aspects shaping this future:

- ✓ Artificial Intelligence (AI) and Machine Learning
- ✓ Internet of Medical Things (IoMT):
- ✓ Telehealth and Virtual Care:
- ✓ Block chain Technology

Ms. Roshani Mohammad

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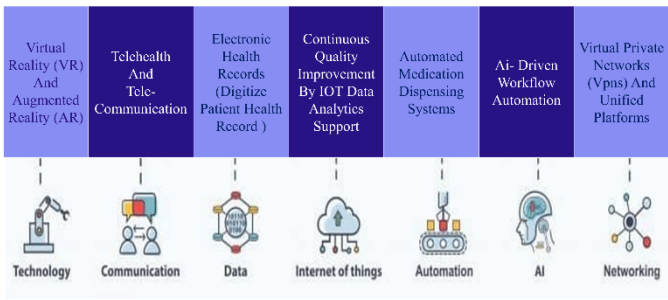
“ DIGITAL TRANSFORMATION IN NURSING : CLINICAL JUDGMENT & DOCUMENTATION”

I. INTRODUCTION

We're in a big cycle of digital transformation, and its importance to be prepared for it. Digital transformation in nursing represents a pivotal shift in healthcare delivery, integrating advanced technologies to enhance patient care, streamline workflow, and improve overall efficiency



2. TECHNOLOGICAL INNOVATION



4. CHALLENGES AND CONSIDERATIONS

Intensive Care Nursing	Enhanced monitoring Improved workflow efficiency
Maternal and child health nursing	Prenatal and postpartum care mHealth programs to send voice or text messages to women during their pregnancy and after delivery
Gerontological Nursing	Medication Management: AI-driven reminders and smart dispensers
Mental health Nursing	AI chatbots and virtual assistants provide 24/7 support for mental health education, coping strategies
Community health Nursing	Digital platforms facilitate community outreach, health education programs, and preventive care initiatives
Nurse Education	Continuous Professional Development Evidence-Based Practice

3. BENEFITS OF DIGITAL TRANSFORMATION IN MAKING CLINICAL JUDGMENT

I think the biggest Innovation of the Twenty-first Century will be the intersection of biology and technology -Steve Jobs

DATA SECURITY AND PRIVACY	Challenge: Protecting sensitive patient information from cybersecurity threats, data breaches, and unauthorized access is critical but challenging in a digital environment. Consideration: Implement encryption protocols, access controls, regular audits, and staff training on cybersecurity best practices to safeguard patient data and comply with regulatory requirements (e.g., HIPAA).
INTER DISCIPLINARY COLLABORATION	Challenge: Effective collaboration among multidisciplinary teams, including physicians, nurses, therapists, and IT specialists, is essential for successful digital transformation. Consideration: Foster a collaborative culture, establish clear communication channels, and promote teamwork to ensure cohesive integration of digital solutions and coordinated patient care.
QUALITY AND SAFETY	Challenge: Ensuring the reliability, accuracy, and safety of digital tools and systems used in patient care. Consideration: Conduct thorough testing and validation of technologies, monitor performance metrics, and implement feedback mechanisms to continuously improve quality and patient safety.
ETHICAL AND LEGAL ISSUES	Challenge: Addressing ethical dilemmas related to AI, data privacy, patient consent, and the ethical use of technology in nursing practice. Consideration: Develop ethical guidelines, engage in ethical discussions with stakeholders, prioritize patient autonomy and privacy, and ensure compliance with ethical standards and regulatory requirements.

CARE REGIO - Digital Transformation and Technology in Nursing Care
Dominik Fuchs , Ann-Kathrin Waibel

Abstract
Digital technologies have the potential to improve the quality of nursing care. CARE REGIO is a Bavarian joint research project for digital transformation and technology in nursing care. The project goals are supporting the nursing staff, saving time, improving the quality of care as well as increasing the quality of life and safety of those in need of care. In Phase 1 of the project, literature and stakeholder analyses, and qualitative surveys were carried out. Subsequently, central fields of action were defined for Phase 2 of the project. CARE REGIO can make a significant contribution to evaluating existing digital solutions, developing new solutions, and accelerating their implementation

Conclusion
Nurses are the primary co-ordinators of care and digital technologies provide significant opportunities to improve the working life of nurses , they allow healthcare worker to expand there range and scope of task increasing efficiency through speed and travel time savings both in urban and remote setting

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Poster Presentation -7

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DIGITAL TRANSFORMATION IN NURSING: CLINICAL JUDGEMENT & DOCUMENTATION

Introduction

Digital transformation in nursing is a comprehensive process that integrates digital technologies into various aspects of nursing practice, education, and administration. This transformation aims to improve patient outcomes, enhance efficiency, and foster a culture of excellence in healthcare. Digital transformation in nursing involves integrating advanced technologies and digital solutions to enhance patient care, streamline workflows, and improve overall healthcare delivery.

Vision:
Continuous learning, adaptation, and leveraging technology to improve patient care and nursing practices.

Telehealth and virtual care

- Data aggregation dashboards
- Video conferencing

Electronic health record

- decision support (E.g. disease activity measures)
- charting tool

AI

- Machine learning
- Deep learning
- Pattern mining
- Causal learning

DIGITAL HEALTH TECHNOLOGIES

Wearable sensors and devices

- Internet of medical things
- Activity trackers
- Continuous biochemical monitoring

Digitally enabled therapeutics

- Personalized biofeedback
- Pharmacist-guided drug dosing

Mobile health applications

- Symptom monitoring
- Patient portals

Goal:
Improve patient outcomes, efficiency, and nursing practice through digital technologies

According to a report by **Future Market Insights**, the global digital \$ 253.6 billion by 2033, with a CAGR of 14.5% from 2023 to 2033. transformation in the healthcare market is projected to be worth \$65.2 billion by 2023. The market is expected to reach US

Scope:
Education, technology integration, patient care, and continuous improvement

KEY AREAS FOR ENHANCING KNOWLEDGE AND STRIVING FOR EXCELLENCE IN NURSING THROUGH DIGITAL TRANSFORMATION

Continuous Improvement and Innovation

- Feedback Mechanisms
- Research and Development

Electronic Health Records (EHRs)

Telehealth and Telemedicine

Mobile Health (mHealth)

Data Analytics and Artificial Intelligence (AI)

Robotic Process Automation (RPA)

- Automation of Routine Robotics in Clinical Settings

Interdisciplinary Collaboration

- Integrated Care Teams
- Communication Tools

Cybersecurity

- Data Protection

Patient Engagement and Empowerment

Education and Training

- Digital Literacy
- Simulation and Virtual Reality (VR)

DIGITAL TRANSFORMATION BARRIERS

- Training / Skills Lack of knowledge with technology
- Revenue Lack of budget for Digital Transformation.
- Resources Unwillingness to invest to new technology.
- Data Issues Cybersecurity remains as a risk

ADVANTAGES:

- Better Time Management
- Improved Healthcare Services
- More Effective Internal Communication

Examples of Digital Transformation in Nursing-

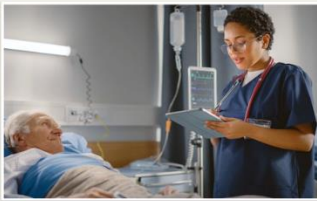
- Remote Patient Monitoring:** Nurses can monitor patients with chronic conditions using wearable devices that track vital signs and alert healthcare providers to any anomalies.
- Virtual Reality (VR) for Training:** VR can be used to simulate clinical scenarios, providing nurses with hands-on experience without the risks associated with real-life practice.
- Block chain for Health Records:** Implementing block chain technology to ensure secure, tamper-proof patient records and enhance data integrity

Poster Presentation -8

Ms. Vaishanai Vedre

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DIGITAL TRANSFORMATION IN NURSING : CLINICAL JUDGEMENT & DOCUMENTATION



DIGITAL TRANSFORMATION IN NURSING CLINICAL JUDGEMENT –

involves the integration of digital technologies to enhance decision-making processes and improve patient care outcomes. This transformation includes various aspects such as electronic health records (EHRs), decision support systems, telehealth, and mobile health applications. These technologies collectively enhance nursing clinical judgement by providing more accurate, timely, and comprehensive information, thus improving patient outcomes. However, successful implementation requires addressing challenges related to data security, interoperability, and the need for ongoing training.

THE DIGITAL TRANSFORMATION OF NURSING DOCUMENTATION IN INDIA –

is a significant development aimed at improving healthcare delivery and efficiency. This transformation involves integrating advanced digital tools and systems to streamline and enhance nursing documentation processes. **AIIMS (All India Institute of Medical Sciences)** : Implementation of a comprehensive EHR system to enhance documentation accuracy and accessibility. Use of telemedicine platforms for remote patient management and documentation. **Apollo Hospitals** : Adoption of EHRs and mobile health applications to streamline nursing documentation and improve patient care. Use of advanced analytics and CDSS to support clinical decision-making



ELECTRONIC HEALTH RECORDS (EMR)

- Used for –
- Insurance claims
 - Schedule patient visits
 - Manage payments
 - Share information and recording data



CLINICAL DECISION SUPPORT SYSTEMS

- Tool for medical staffs to –
- Plan treatment
 - Drug management and patient monitoring
 - Clinical documentation
 - Clinical guideline implementation



MOBILE HEALTH APPLICATION (MHEALTH)

- Aarogya setu
- Ayushman app
- Tata 1mg online healthcare app
- Medlife
- TB aarogya sathi
- Vikaspedia



WEARABLE TECHNOLOGY AND IOT DEVICES

- Smart watches
- Smart shoes
- Smart ring and finger
- Bluetooth key tracker
- Smart jewelry
- Fitness track
- Implants



TELE HEALTH NURSING AND REMOTE MONITORING

- Telehealth equipment are devices for remote monitoring such as –
- Digital BP monitors
 - Glucose meters
 - Pulse oximeter



ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

- Robot assisted surgeries
- Analyzing errors in prescriptions
- Personalized treatment
- Aids in clinical research and trails

OVERCOMING DIGITAL CHALLENGES IN NURSING REQUIRES A STRATEGIC AND MULTIFACETED APPROACH:

1. **Enhance Data Security:** Implement robust encryption, access controls, and regular security audits to protect patient data.
2. **Standardize Protocols:** Adopt and promote standardized data exchange protocols for interoperability.
3. **Collaborate with Vendors:** Work with EHR and IT vendors to ensure systems are compatible and can communicate seamlessly.
4. **Provide Comprehensive Training:** Develop ongoing training programs and support systems to help staff effectively use new technologies.
5. **Seek Funding:** Apply for grants and explore funding opportunities to offset initial setup and maintenance costs.
6. **Establish Support Systems:** Create peer support networks and helpdesks to assist staff with technical issues.
7. **Use Feedback Loops:** Gather and act on staff feedback to continuously improve digital tools and training programs.
8. **Advocate for Policy Support:** Engage in advocacy for government policies and incentives that promote healthcare interoperability and digital transformation

DIGITAL TRANSFORMATION CAN MAKE A DIFFERENCE



Poster Presentation -9

Ms. Sakshi Vijendra Bahekar

MKSSS's Sitabai Nargundkar College of Nursing for Women, Nagpur

ARTIFICIAL INTELLIGENCE AND CARDIAC SURGERY DURING COVID-19 ERA

POSTER BY: MS.SAKSHI BAHEKAR

CONDENSE

The worldwide load on hospital employees has increased due to the coronavirus disease 2019 (COVID-19) pandemic. The cardiac field has lagged in high-priority situations. A backlog of cardiac cases have been seen but with the aid of technology, the accumulation of postponed or cancelled non-urgent cardiac care ought to be curable. National healthcare systems have gone through a revolution in technology, from telemedicine to artificial intelligence (AI). While AI opens up a whole new world of possibilities in healthcare, examples include the replacement of traditional systems with more accurate and efficient processing machines, and triage assistance through risk predictions. Telemedicine allows for remote patient monitoring.

This review's objectives are to examine AI's methodology developments, its incorporation into cardiac surgery and other clinical settings today, as well as its possible roles in the future, which are steadily approaching as the COVID-19 age pushes for alternative care methods.

INTRODUCTION

The WHO in early 2020 announcement of the coronavirus disease 2019 (COVID-19) pandemic contributed significantly to the strain on countries and healthcare systems. Health institutions around the world have prioritized intensive care units as a safeguard against the spike in COVID-19 patients. A lack of supplies for heart surgery procedures has resulted from the shift of scarce resources like ventilators, beds, medical personnel, and PPE. Due to the significant changes made to cardiac surgery, the preoperative assessment method has changed, and changes have been made to the post-discharge follow-up. The monitoring of cardiac patients must be done while minimizing the risk of COVID-19 transmission because COVID-19 is linked to higher morbidity and mortality in patients with pre-existing cardiovascular diseases. It is arguable that delays in treatment for some cardiac patients may pose risks.



Subsequently, this led to issues with treatment and decision making, which drive the search for alternative decision-making approaches that minimize contact between individuals, such as artificial intelligence (AI). AI is an umbrella term describing the ability of technology to process decisions.

AIMS

- It intends to summarize:
 - Current advancement of Artificial Intelligence
 - The impact of COVID-19 on development of Artificial Intelligence.
 - The potential role of AI in future cardiac surgeries

SUBSETS OF ARTIFICIAL INTELLIGENCE

Machine learning is the study of particular computer algorithms that are created from sample data using a mathematical algorithm model and then used to produce predictions or judgements.

DL is far more complicated than ML and uses representation learning and artificial neural networks. DL is associated with a hierarchy of growing complexity and abstraction while ML algorithms continue to take a linear approach since it may also be viewed of as a way to automate predictive analytics.

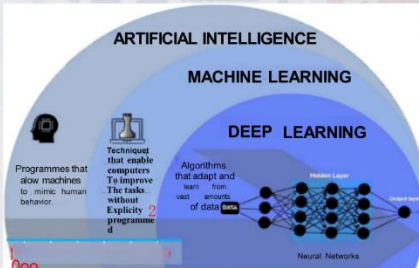


FIGURE DESCRIPTION

Due to variations in how the data are analyzed, DL is better than. For instance, photographs of carotid vessels can be entered, identified as carotid, and then specific features, such as carotid atheromatous plaques, can be determined, leading to the output of symptomatic or asymptomatic classification based on the images.

DISCUSSION: CARDIAC SURGERY AND ARTIFICIAL INTELLIGENCE



- As direct patient contact is reduced during the COVID-19 era, telemedicine has experienced exponential development. Monitoring chronic illnesses, rehabilitation and other telemedicine tasks have been listed as some of its many uses. According to a meta-analysis, tele-cardiac rehabilitation significantly reduced hospitalizations and cardiac events when compared to normal treatment.
- A clinical study conducted by Saeed et al. demonstrated AI aiding triage for ascending thoracic aortic aneurysms (ATAAs). To assess whether patients required surgery an algorithm was constructed based on aortic size; more than or equal to 5cm, prophylactic surgery was recommended.
- Similarly, Ruiz-Fernández et al. evaluated the use of AI independent of the gold standard classification (Risk Adjustment for Congenital Heart Surgery) to differentiate risks (of mortality and other complications) of congenital heart surgery. It was found that AI-based algorithms for decision support have the potential to assess patients' risk who undergo congenital heart surgery into low, medium, and high complication cases. Using multilayer perceptron self-organizing maps, radial-basis-function networks and decision trees, these algorithms were seen to have 80%-99% accuracy.
- The same point is emphasized by both Saeed et al. and Ruiz-Fernandez et al. that information from AI concerning hazards permits anticipation of treatment plans, ultimately considerably influencing clinical decisions.

LIMITATIONS OF ARTIFICIAL INTELLIGENCE



However there are a number of issues with AI, mostly with patient data. Large volumes of data to create the machine learning model, governance, ownership, quality, standardisation, and user-friendliness.

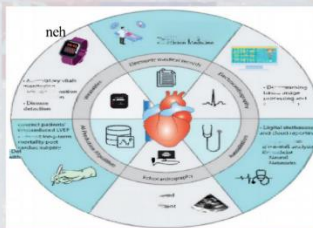
- Standardizing data input is laborious since healthcare organizations use a variety of formats to collect data.
- A significant drawback in imaging is that not all patient instances are identical, therefore the models frequently tend to fail when exposed to fresh, unknown data. As a result, there may be less confidence in these algorithms due to their dependability and biases.

FUTURE WITH ARTIFICIAL INTELLIGENCE

COVID-19 has increased the pressure to hasten the doctor computer collaboration. Although the implementation of AI in cardiology has provided effective support for the analysis of all patient data, including symptoms, imaging, and more.

- Secondly, algorithms that forecast mortality risk, additional complications, and illness severity provide a significant contribution for choosing the best patient prognosis and course of therapy.

Last but not least, in future AI can help nurse to manage a patient care including clinical documentation, medication administration and vital monitoring. AI can also analyze patient data to identify patterns and potential risk and providing personalized care. AI is a tool which help both Doctors and Nurses to provide effective efficient and wholesome care.



CONCLUSION

With the expanding amount of data, AI has made its way into the healthcare system, and more effective solutions to support the clinical framework are being welcomed. The more AI options there are, the lower the risk of COVID-19 spreading and the demand on scarce resources in light of the pandemic. It is important to remember that the issues with data outlined above will take time to remedy.

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Articles on Theme

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ARTIFICIAL INTELLIGENCE: TRASFORMING THE FUTURE OF NURSING

INTRODUCTION

The world is constantly experiencing social, economic, political, cultural and technological changes. Advancement in science and technology have significantly impacted the healthcare industry. Artificial intelligence (AI) is a type of technology that can learn and adapt to support and supplement human task, can help nurses to work more efficiently and increase their capabilities. In recent years AI has emerged as a powerful tool in the field of nursing, revolutionizing the way nurses deliver care, manage their workload and interact with patient. one of the important challenge faced by Indian healthcare system is shortage of qualified health personnel and infrastructure. Integration of AI in nursing has potential to improve patient outcome, streamline healthcare process and reduce the burden on overworked nursing staff.

WHAT IS ARTIFICIAL INTELLIGENCE (AI)?

AI is the intelligence of machine or software as opposed to the intelligence of human being or animal. Machine learning, deep learning, and neural network are the heart of artificial intelligence. With this integration AI can used to tailor management of healthcare system.

INFLUENCE OF AI IN NURSING

➤ AI IN NURSING PRACTICE

Nurses represent the largest group of healthcare professional involved in care delivery. AI in nursing practice mainly focus on patient monitoring, nursing care planning and recording. There is significant application in nursing practice.

- 1) Patient monitoring: - IoT (internet of things) enable devices, wearable devices connected to patient, help nurses to collect real time patient data and receive alert notification.*
- 2) Robotic technology and remote care: - nurses with robot support can perform various task like lifting and transferring patient, changing position, delivering meal and providing companionship.*

3) Virtual ICU (VICU) and virtual triage: - virtual critical care technology provide immediate alert to ICU team when needed. Virtual triage connect patient with triage specialist. Automated triage decision tree helps to decide whether patient need hospitalization.

4) AI in diagnostic evaluation: - AI in plays important role in diagnostic evaluation. It helps healthcare provider in identifying disease more accurately and quickly.

5) Electronic health record (EHR): - it is the digital version of patients' paper chart which save time, environment and cost. It provides security, access anytime from anywhere and alert physician.

➤ **AI IN NURSING EDUCATION**

Another area where AI is making a significant impact is in nursing education. AI driven tool provide nursing students with immersive learning experience. There is significant application of AI in nursing education.

1) Transformation of nursing curriculum: - curriculum mainly focusing on technology and machine learning.

2) Transformation in teaching learning process: - AI in teaching learning process focus on virtual reality and augmented reality technologies powered by AI, are being used to create immersive realistic training simulation for nursing students

3) Online education: - online education like computer assisted learning, digital learning software apps, modules, e-library help student to learn more effectively.

4) High tech classroom like smart classroom, flipped classroom is kind of blended learning which aim to increase student engagement in learning process.

5) Chat GPT and Gamma: - is the new, fastest growing application medium for presenting ideas powered by AI. It helps to create beautiful content, respond to question etc.

6) Assessment and evaluation: - different assessment tool powered by AI like progress report, online exam and evaluation, attendance help for easy and error free evaluation

➤ **AI IN NURSING ADMINISTRATION**

AI in nursing administration have power to streamline admin processes and improve communication among health team, optimize resource allocation and improve organizational efficiency.

1) Real time location system (RTLS): - RTLS are used to automatically identify and track the location of object or people in real time usually within the building. bar codes and wristband and radiofrequency identification (RFID) helps to tract and identify patients' location.

2) Centralized command center: - it is a software application such as dashboards that provide real time updates for an organization

3) Hospital information management system: - AI transforms hospital management system through predictive analytics, remote monitoring and continuous learning.

➤ **AI IN NURSING RESEARCH**

AI in nursing research significantly enhancing the accuracy of research through comprehensive checks on the authenticity and integrity of scientific manuscripts

AI powered tool are plan experiments, collect data and analyze it effectively in an unbiased manner. Helps in online data collection across the globe. AI tool can help write and edit manuscripts, cite relevant sources etc. it also helps in handling large data and quick data analysis system. AI can help researcher to quickly and effectively identify relevant literature, even in large and complex datasets. It also accelerates innovation through evidence-based practice

PROS AND CONS OF AI

Sr No	PROS	CONS
1	Less room for error	Expensive to implement
2	Quick decision making	Requires high tech infrastructure
3	Work at risky situation	Requires high tech infrastructure
4	Get works 24 x 7	Replace human

FUTURE CHALLENGES FOR NURSES

- Complex and digital technology require competent professional nurses.
- Potential loss of job due to automation. & Ensuring ethical use of AI in healthcare
- Lack of human touch

CONCLUSION

As AI is continuing to transform the healthcare industry, nurses must embrace this technology to provide high quality patient – center care, enhance quality of nursing education, streamline administrative task and integrate research with EBP.

“Technology will never replace great teachers, but technology in hands of great teachers can be transformational” (George Couros)

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Dr. Pascaline, Ms. Stuti, Ms. Varsha & Ms. Liji

Digital Transformation in nursing: The need of the Digital Century

Introduction

Digitization is simply the converting of hard/paper files and documents into digital files and documents. The digitization of healthcare has enabled health services to be more accessible and available daily. Healthcare digitization including robotic systems and artificial intelligence, the reliance on the internet, mobile and web applications, and social media has increased the dependence on telehealth and virtual healthcare services. Furthermore, with challenges faced with technology and nursing care, COVID-19 has boosted this particular response of dependency for more inclusive healthcare service. The effect of digital technology has been increasing in the nursing sector. Technological advancements like electronic health records, online appointments, telemedicine, SaMD (Software as a Medical Device), and AI-powered medical devices are some of the most remarkable examples of digitalization in the healthcare industry.

Area of digital transformation in health care

Digital OPD, Digital IP/nursing Module, Wearable devices, Electronic health records, Telehealth app, Smart TV's, Automated equipment's eg. IV Pump, Robotic delivery/ surgery, Virtual ICU, Portable Monitors, Smart Beds, artificial intelligence.

Digital transformation in nursing

Use of digital technology by nurses in providing patient care.

Nursing Practice: *Hospital information systems, electronic health records, Monitoring systems, decision support, telehealth.*

Nursing Administration: *Patient and staff identification systems, Real time location systems for nurses.*

Nursing Education: *e-learning, virtual learning, health games, and rehabilitative and personalized health care approaches,*

Nursing Research: *Online research, Online tool, Data handling, online data collection, digital data management and communication and dissemination.*

Benefits of Digital Transformation in health care

- *It enhances the efficiency and accuracy of various healthcare processes, such as appointment scheduling, patient record management, billing, etc.*
- *Digital transformation of healthcare enables the seamless sharing of medical data, facilitating better collaboration among healthcare professionals.*
- *Digital technologies like virtual visits, telemedicine, etc., allow easy access to healthcare services and facilities.*
- *It helps improve patient care, reduces errors, and increases the productivity of medical professionals.*
- *Digital transformation allows valuable insights for research, efficient drug discovery, and the development of personalized treatments.*
- *The patient enjoys digital data access*
- *Quicker access to test results*
- *Sharing of information with your family members*
- *Offers clinicians notes feedback*
- *Patient can review information for medical errors*
- *Instructions and Information is simple and easy to document*
- *Patient has a better approach and access to the medical records*

Challenges of Digital transformation in Health Care

- *Complicated and complex health information causes concern for the patients*
- *Clinician's reports elevate patient provider's relationship concerns*
- *Hackers can approach and access patient's records*
- *It needs to be upgraded on a regular basis*
- *Digital health records are expensive*
- *Complex and composite processes*

Conclusion.

In short, the seamless implementation of the healthcare digital transformation strategy helps revolutionize the industry, improve patient care, increase accessibility, and transform the patient experience. Continuous updating technology will reduce its challenges.

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DIGITAL TRANSFORMATION IN NURSING

In recent year, the healthcare industry has witnessed a profound shift towards digital transformation, and nursing is at the forefront of this revolution. With advancement in technology, nurses are embracing digital tool and platform to enhance patient care, streamline processes, and improve outcomes. Nursing has undergone a significant metamorphosis through digital transformation, revolutionizing patient care and healthcare system worldwide. This shift is propelled by technological advancements, empowering nurses with tools to enhance efficiency, accuracy, and patient outcome. One of the key aspects of digital transformation in nursing is the adoption of electronic health record. These digital systems allow nurses to access patient information securely and in real time, facilitating better coordination of care among healthcare provider. By eliminating paper based record, EHRs reduce error, improve documentation accuracy, and enhance communication between nurses, physicians, and other member of the healthcare team. Furthermore, telehealth has emerged as a game changer in nursing practice. Through telehealth platform, nurses can provide remote patient monitoring, virtual consultation, and follow-up care, extending their reach beyond traditional healthcare setting. This not only improves access to care for patient in remote or underserved areas but also enables nurses to deliver timely interventions and support. Digital tools and mobile application are also empowering nurses to engaged patients in self-care management. From medication reminders to symptom tracking, these application enables patient to take an active role in managing their health, leading to better adherence to treatment plans and improved health outcome. Moreover, artificial intelligence (AI) and machine learning are being integrated into nursing practice to analyse vast amount of patient data, identify patterns, and predict potential health issues. By leveraging AI- powered algorithms, nurses can personalize care plans, detect early warning signs, and intervene proactively, ultimately enhancing patient safety and satisfaction. In conclusion, the digital transformation in nursing is revolutionizing the way healthcare is delivered. By embracing technology, nurses are empowered to provide more efficient, personalized, and patient-centred care.



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Digital transformation in nursing significantly impacts clinical judgment and documentation by leveraging technology to enhance the accuracy, efficiency, and accessibility of healthcare information.

Here are some key aspects:

Clinical Judgment

1. Decision Support Systems:

- Clinical Decision Support Systems (CDSS): Provide nurses with evidence-based guidelines and alerts, aiding in clinical decision-making. These systems can analyse patient data and suggest diagnoses or interventions.

- Artificial Intelligence (AI): AI algorithms can identify patterns in large datasets, predicting patient outcomes and suggesting preventative measures.

2. Telehealth:

- Remote monitoring tools enable nurses to assess patients' conditions in real-time, making informed judgments without the need for in-person visits. This is particularly useful in managing chronic diseases and post-operative care.

3. Data Analytics:

- Big data and predictive analytics help nurses understand trends and risks, improving clinical judgment. By analysing historical data, nurses can make better-informed decisions regarding patient care plans.

Documentation

1. Electronic Health Records (EHRs):

- EHRs streamline documentation by providing a centralized, digital repository for patient information. This enhances accessibility and reduces errors associated with paper records.

- EHRs support interoperability, allowing seamless information sharing among healthcare providers, which is crucial for comprehensive patient care.

2. Mobile Health Application:

- Mobile apps facilitate point-of-care documentation, enabling nurses to record patient information in real-time. This reduces the time spent on documentation and increases accuracy.

- These applications often include templates and standardized forms, ensuring consistency in documentation.

3. Automated Documentation Tools:

- Speech recognition and natural language processing (NLP) technologies allow nurses to dictate notes, which are then transcribed into EHRs. This can save time and reduce the burden of manual data entry.

- Automated tools can extract relevant information from various sources, compiling comprehensive patient records without redundant data entry.

Benefits of Digital Transformation in Nursing

1. Improved Patient Outcomes:

- Enhanced clinical judgment supported by advanced tools leads to better patient care and outcomes.

- Timely and accurate documentation ensures continuity of care, reducing the risk of medical errors.

2. Efficiency and Time Management:

- Automation & digital tools streamline workflows, freeing up more time for direct patient care.

- Nurses can spend less time on administrative tasks and more on patient interaction and intervention.

3. Data Accuracy and Security:

- Digital records reduce the risk of errors from illegible handwriting or incomplete documentation. & Secure digital systems ensure patient data privacy and compliance with regulations such as HIPAA.

4. Professional Development:

- *Continuous access to updated guidelines and protocols through digital platforms helps nurses stay informed and educated.*

- *Digital transformation fosters a culture of continuous improvement and learning within the nursing profession.*

Challenges and Considerations

1. Implementation and Training:

- *Adequate training and support are essential for nurses to effectively use new technologies.*

- *There can be resistance to change, and addressing this through proper change management strategies is crucial.*

2. Interoperability:

- *Ensuring different systems and platforms can communicate and share data seamlessly remains a challenge.*

- *Standards and regulations need to be in place to facilitate interoperability.*

3. Data Security and Privacy:

- *Protecting patient information in digital formats is critical to prevent breaches and ensure compliance with legal standards.*

- *Continuous updates and robust cybersecurity measures are necessary to safeguard data.*

Digital transformation in nursing enhances clinical judgment and documentation, leading to improved patient care, increased efficiency, and better resource management. However, successful implementation requires addressing challenges related to training, interoperability, and data security.

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"मी digi बोलतोय"

अरे दादा, जरा नंबर लावायचा होता बरं का

बरं.. नंबर सांगा, अरे तुम्ही तर आमचे जुने customer ना

मी digi साठवतो वर्षानुवर्षेची history

मीच तर सोडवतो सध्य लक्षणेवरील mystery

सरजी...सरजी माझ्या पोटात खुप जास्त दुखतंय

अहो काका... तुमच्या history त तर kidney stone शिजतंय

ऐ पोरा... आजतरी माया report आणजो वावरातनं परतिस तोवर

मी digi, report झाल्या झाल्या,dear sir... म्हणून पाठवतो WhatsApp वर

अहो राणी sister, बघाना opd पेपर कसा काय हरवलाय

मी digi, ने अखखा नाव गाव वस्तू प्राणी सहित तो साठवलाय

sister पेशंट च्या छातीत खूप दुखत आहे

थांबा ECG machine लगेच घेऊन येत आहे

sister, माया पिंट्याले पुन्हा एकदा vaccine घ्याले कधी आणायचं

पुढील तारखेवर एक SMS येताच लगेच यायचं

"मी digi सोपे करतो कामे शंभर"

अडचणीचा वेळी राही सदा हजर

ABOUT NAGPUR CITY

Nagpur, popularly known as the 'Orange City', is one of the fastest growing metropolis and the third largest city after Mumbai and Pune in Maharashtra. The city is located on the eastern part of the state and is the geographical 'centre' of India (country's 'Zero-Milestone' is located here). Since ages, it has been a city of cultural and political importance. As far as roads, railways and air-flights are concerned; the city is well connected and well served to all the major cities of India. There are many aspects to Nagpur city that indicate that the city is growing in terms of business, education, industry, manufacturing and research. As per media reports, Nagpur is already the 11th most competitive city for investment and has got an advantageous geographical location.



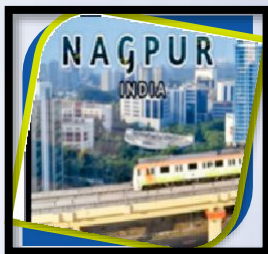
Deekshabhoomi



The Zero Mile Stone



Shri Ganesh
Mandir Tekdi



Nagpur Metro Rail



Gorewada
International Zoological Park



Taste Of Saaji



Nagpur
Tiger Capital of India



Vishnuji Ki Rasoi



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Resource Learning Center



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