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DIGITALIZATION OF HEALTHCARE BY MEANS OFTELE-NURSINGEXTENDINGTOWARDS SPINAL CORD INJURY PATIENTS WITH MULTI-SYSTEM COMPLICATIONS

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Abstract

Many tele-health technologies however are in the early stages of development or diffusion and thus require study to define their application and potential harms or benefits. Tele-nursing is one of the communication systems to encourage the development of nursing practice. Digital health is now the default operating system of healthcare.

Keywords: *Digitalization, Healthcare, Oftele-Nursing, Extending, Spinal Cord Injury*

INTRODUCTION

Clinical Need: Condition and Target Population: The cases increased in Spinal Cord Injury will put a strain on health care workers and providers. here Therefore an increasing demand for tele-nursing services that improve access to health care services while maintaining or improving quality and equality of care. Many tele-health technologies however are in the early stages of development or diffusion and thus require study to define their application and potential harms or benefits. Tele-nursing is one of the communication systems to encourage the development of nursing practice. Digital health is now the default operating system of healthcare

AIM OF THE STUDY

To evaluate the effectiveness of tele-nursing involving nurses on the health outcomes after Spinal cord injury and managing complications from maintaining the continuity of specialized care through digitalization.

METHODOLOGY

SCI individuals who were discharged to the community from the institution between February 2021 and September 2022 were followed up, total 142 patients were enrolled. A telephonic interview was conducted, a set of open- ended questions on Spinal Cord Injury complications, which included orthostatic-Hypotension(OH), Autonomic Dysreflexia (AD), pressure ulcer (PU), urology related issues, respiratory related issues, and miscellaneous (spasticity, back pain, post-operative advises) were asked and recorded. The questions were simple for patients understanding eg. Spo2, single breath count, sitting and supine BP monitoring, skin care, suctioning problems, diet, activities of daily living. Quantitative data analysis and synthesis was done and thethemes on which education is required were identified and routinely telephonic calls were done to discuss the issues with solving counseling through video calls (video- conferencing) and watts app chats in simple language.

Generally there are 4 broad functions of home tele-nursing interventions for patients were:

- To monitor vital signs or biological health data (e.g., oxygen saturation).
- To monitor symptoms, medication, or other non-biologic endpoints (e.g., exercise adherence like deep breathing exercises and simple chest PT whichwere taught during hospitalization).
- To provide information (education) and/or other supportive services (such as reminders to

exercise or positive reinforcement).

- To establish a communication link between patient and Nurse provider to handled complication at home.

Counseling services are given through Tele-nursing and hands on demonstration are provided on various procedures are included:.

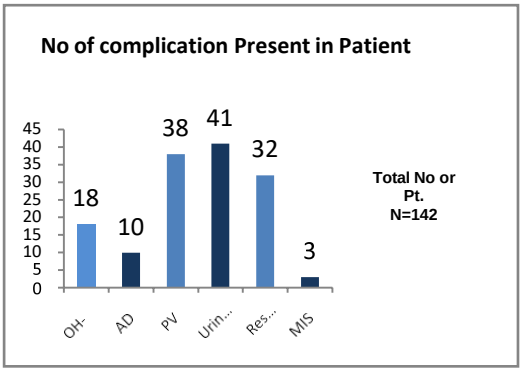
Use of Salt capsules	Dressing techniques (Pressure ulcer dressing)	Manual handling	Posture care	Suction techniques	Use of abdominal binder

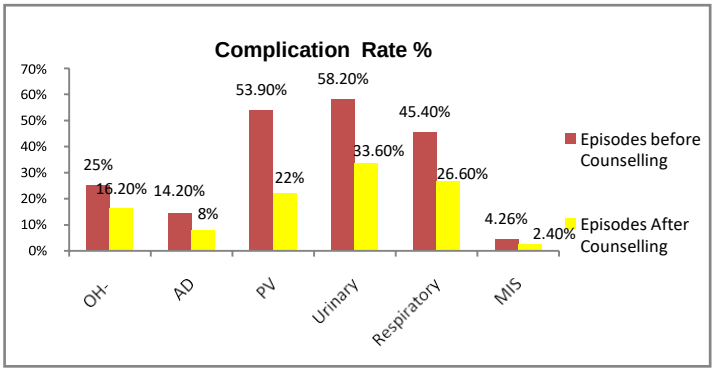
Simple chest physiotheapy	Spo2 monitoring	Supine and sittingBP measurement	BP monitoringbefore CIC andafter CIC	CIC & Catheterization

RESULT

Total number of patients were n= 142, age 18-45 years (mean- 37.225%) SCI individual were enrolled and counseled. Tetraplegic patients are- 45 (31069%) and Paraplegic 97(68.30%). Excluded criteria was patient with any co-morbidity (HTN, CAD, DM, COPD) was not included. Total complication were observed during conversation were 85% OH-25%, AD-14.2%, PU- 53.9%, urinary related issues -58.2%, respiratory issues-45.4%. miscellaneous-4.26%. It is observed that the rate of complications episodes were decreased significantly as well as the symptoms are also reduced. OH 16.2%,AD 8%, PU 22%, urinary related issues -33.6%, respiratory issues-26.6%. miscellaneous- 2.4%. The services were continued and repeated sessions are conducted for each individual to assess their condition, complains, measurements to be taken and follow up of the same. eg. (patient showed correct technique of dressing after repeated session which turned to be effective as evidenced by development of granulation tissues). These qualitative findings are recorded for further on teaching purposes.

1. Access towards continuous health educations.
2. SCI specific follow-ups are a health priority and
3. Strategies to recognized early signs and symptoms of SIC complication.





CONCLUSION

The ongoing service of tele-nursing has a very little but great impact on quality services as patient are providing positive response, appraise the service whenever they require. This research is cost effective for patients as in India net data packs are low in cost and everyone is able to persue it. Above all, thereare issues which could be solved through video calling and nursing consultation regardless of their hospital visit, this is the most beneficial factor of this service which shows a future pathways for other spatiality to deliver the care by means of Tele-nursing to achieve the excellence.

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