

## Abstract #95811

### Sigma's 30th International Nursing Research Congress

#### To Develop the Schematic Illustration of the MDRPI Care: An Evidence-Based Framework

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**Purpose:** The most common locations of pressure injury by facial medical device-related pressure injury (MDRPI) include nose bridge, upper ear lobe, bilateral zygomatic processes, occipital bone, forehead, posterior neck and chin. The dilemma in the event of such pressure injury is to relieve the stress and heal the wound, which can result in change to patient's comfort and reduced acceptance of facial medical device. The aim of this study was to develop a schematic illustration of prevention and care for facial medical device-related pressure injury (MDRPI) on the evidence-based framework.

#### **Methods:**

By literature review of care of medical device-related pressure injury (MDRPI) and integration of nursing measures with evidence, innovative thinking and brainstorming would help to incorporate and develop interventional procedures to satisfy patients' needs in clinical practice, that could eventually be organized into a schematic illustration to be provided to clinicians in medical environment.

#### **Results:**

The result of this study was centered on evidence in six aspects of clinical care, including: (1) the type of facial medical device; (2) the cause of facial medical device-related pressure injury (MDRPI); (3) locations of high incidence; (4) assess facial skin condition; (5) the identification of pressure injury; and (6) nursing care mode of facial medical device. That the schematic illustration of "medical device-related pressure injury (MDRPI) prevention and care for facial medical device" was developed and provided as standard for clinical nursing staff to improve facial health care and the quality of care to pressure injury due to the device.

#### **Conclusion:**

The developed schematic illustration of "medical device-related pressure injury (MDRPI) prevention and care for facial medical device" based on the research result was provided to nursing staff as a standard and teaching aid, in order to improve the quality of clinical care, which would be worthy of continuous promotion and implementation in clinical practice.

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#### **Title:**

To Develop the Schematic Illustration of the MDRPI Care: An Evidence-Based Framework

#### **Abstract Describes:**

Ongoing Work/Project

## Applicable category:

Clinical

## Keywords:

Medical device-related pressure injuries, Evidence- based framework and Prevention and care for MDRPI

## References:

- Barakat-Johnson, M., Barnett, C., Wand, T., & White, K. (2017). Medical device-related pressure injuries: An exploratory descriptive study in an acute tertiary hospital in Australia. *Journal of tissue viability*, 26(4), 246-253. doi:<https://doi.org/10.1016/j.jtv.2017.09.008>
- Delmore, B. A., & Ayello, E. A. (2017). CE: Pressure Injuries Caused by Medical Devices and Other Objects: A Clinical Update. *Am J Nurs*, 117(12), 36-45. doi:10.1097/01.naj.0000527460.93222.31
- Dyer, Andrea. (2015). Ten top tips: Preventing device-related pressure ulcers. *Wounds International*, 6(1), 9-13.
- Haesler, E. (2017). Evidence Summary: Pressure Injuries: Preventing medical device related pressure injuries. *Wound Practice & Research: Journal of the Australian Wound Management Association*, 25(4), 214.
- Kayser, S. A., VanGilder, C. A., Ayello, E. A., & Lachenbruch, C. (2018). Prevalence and Analysis of Medical Device-Related Pressure Injuries: Results from the International Pressure Ulcer Prevalence Survey. *Adv Skin Wound Care*, 31(6), 276-285. doi:10.1097/01.ASW.0000532475.11971.aa [doi] 00129334-201806000-00007 [pii]

## Abstract Summary:

The aim of this study was to develop a schematic illustration of prevention and care for facial MDRPI on the evidence-based framework. That schematic illustration will provided as standard for clinical nursing staff to improve facial health care and the quality of care to pressure injury due to the device.

## Content Outline:

**Background:** The most common locations of medical device-related pressure injury (MDRPI) include nose bridge, upper ear lobe, bilateral zygomatic processes, occipital bone, forehead, posterior neck and chin. The dilemma in the event of such pressure injury is to relieve the stress and heal the wound, which can result in change to patient's comfort and reduced acceptance of facial medical device.

**Objective:** The aim of this study was to develop a schematic illustration of prevention and care for facial MDRPI on the evidence-based framework.

**Method:** By literature review of care of MDRPI and integration of nursing measures with evidence, innovative thinking and brainstorming would help to incorporate and develop interventive procedures to satisfy patients' needs in clinical practice, that could eventually be organized into a schematic illustration to be provided to clinicians in medical environment.

**Result:** The result of this study was centered on evidence in six aspects of clinical care, including: (1) the type of medical device; (2) the cause of MDRPI; (3) locations of high incidence; (4) assess skin condition; (5) the identification of pressure injury; (6) nursing care mode of facial medical device. That schematic illustration of "MDRPI prevention and care for facial medical device" was developed and provided as standard for clinical nursing staff to improve facial health care and the quality of care to pressure injury due to the device.

**Conclusion:** The developed schematic illustration of "MDRPI prevention and care for facial medical device" based on the research result was provided to nursing staff as a standard and teaching aid, in order to improve the quality of clinical care, which would be worthy of continuous promotion and implementation in clinical practice.