Graft Versus Host Disease(GVHD) in an Oncology Clinic

David M. Kirera, DNP, APRN, FNP-C

PROBLEM STATEMENT

- Patients with cutaneous GVHD suffer from chronic wounds, increased medical cost & poor quality of life[3]
- Extended wound healing time of more than 12 weeks after stem cell transplant[1]
- Patients with cutaneous GVHD experience anxiety, financial burden, difficulties with ADL's and poor self-image related to skin color changes[3]

PROJECT PURPOSE

Purpose: To improve health outcomes by decreasing wound healing time in patients with cutaneous GVHD.

Aim: To implement a wound care protocol based on the Bates-Jensen wound assessment tool and to assess nurses wound care knowledge.

Clinical Question: In patients aged 18 years and older with cutaneous GVHD after allogenic stem cell transplant who receive outpatient wound care, does implementing a newly designed EB protocol to manage GVHD improve wound healing as determined by the Bates-Jensen Wound care Assessment Tool within a 12-week period?

MODEL/NURSING THEORY

- **Plan-Do-Study-Act cycle[2]**

- **Nursing Theory**

Mishel's Uncertainty in Illness Theory guided the QI project[4]

METHODS

Participants

Patient inclusion criteria: Post allogenic stem cell transplant patients with a diagnosis of cutaneous GVHD (N=39)

- Exclusion criteria: Patient without a diagnosis of cutaneous GVHD.
- Registered nurses working in the outpatient Bone Marrow Transplant (BMT) Clinic (N=20)

Setting

- Outpatient BMT clinic is located in west central Florida.

Instruments/Tools

- Bates-Jensen Wound Care Assessment Tool to evaluate wound healing time over a 12-week period
- mHealth Technology survey: Wound care knowledge measured pre-post nursing knowledge of wound care.

Intervention

- Pre-implementation chart review identified 39 patients who were evaluated for the project.
- Nurses attended educational sessions prior to the implementation of the evidence-based wound care protocol. Sessions included utilization of the Bates-Jensen Wound Care Assessment Tool.
- Pre/post surveys of nursing knowledge was evaluated using mHealth Technology survey: Wound care knowledge.

Data Collection

- Bates-Jensen wound assessment scale
- mHealth Technology survey: Wound care knowledge.

Data analysis

- Paired sample T-Test
- Bar graph

RESULTS

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre_Survey	3.4300	20	.57133	.12775
	Post_Survey	3.8050	20	.33635	.07521

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre_Survey & Post_Survey	20	.870	.000

Pre-survey mean t= 3.43, Std deviation 0.57

post-survey mean t= 3.80, Std deviation 0.34

P < .001 These results are statistically significant.

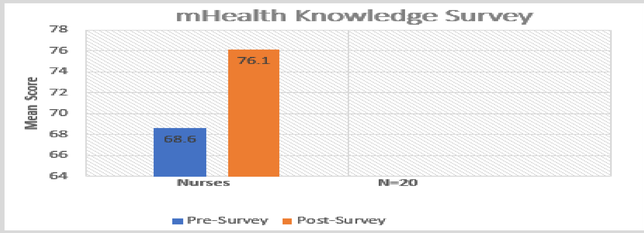
One-Sample Test

Test Value = 0

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference Lower	Upper
Pre_Survey	26.849	19	.000	3.43000	3.1626	3.6974
Post_Survey	50.592	19	.000	3.80500	3.6476	3.9624

95% CI pre-survey 2.16-3.7, Post survey 3.65-3.96

p< .001



Pre-survey mean total score 68.6, post-survey mean total score 76.1(5% Increase).

DISCUSSION

- Thirty-nine patients were evaluated for participation.
- Pre/Post knowledge survey indicated improvement in nursing knowledge of wound care by 5%.

Limitations:

- Full implementation of this DNP project was severely limited by the impact of the COVID-19 and resulting restrictions from the Centers for Disease Control and Prevention(CDC).
- Based on the recommendation of the CDC, the BMT clinic developed a new process of care:

1) Post-transplant patient were discharged to home care.

2) Patient's whose wounds were not manageable at home were readmitted to an acute care setting.

IMPLICATIONS FOR ADVANCE PRACTICE NURSING

- The decision to proceed with implementation of education seminars during the covid-19 pandemic demonstrated the ability of advanced practice nurses to be flexible and adapt evidence-based care in unusual situations offers the opportunity to improve patient outcomes.
- A wound care protocol has potential to improve wound healing time.

SUSTAINABILITY

- The protocol can be used to improve outcomes for patient with wounds including cutaneous GVHD.
- Further study is needed to develop a wound care assessment tool specific for GVHD patients.

Wound Care Protocol

SCAN ME

References

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An EB wound care protocol improves nursing knowledge in wound care management leading to improved efficiency and clinical outcomes in this patient population.

UNIVERSITY of SOUTH FLORIDA