

PROMOTING BONE HEALTH THROUGH UTILIZATION OF A NURSE LED PROTOCOL

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This project is in partial fulfillment of the degree requirements for the Doctor of Nursing Practice at Touro University Nevada

ABSIRACI

Osteoporosis is a preventable chronic condition defined as low bone density with bone micro-architecture deterioration resulting in an increased risk of fragility fractures, mortality, morbidity, and financial burden. Weight-bearing exercises and osteoprotective behavior modification can improve bone mineral density and reduce fragility fractures but deficits in the identification of at-risk patients have hindered efforts to intervene.

INTRODUCTION

Osteoporosis: Most prevalent bone disease among older adults (Sabin & Sarter, 2014). It is preventable (through modifiable risk factors) (Kling, Clarke, & Sandhu, 2014). Inadequate screening = late detection = increased morbidity.

Osteoporosis results from bone density loss and causes fragility fractures (Kling, Clarke, & Sandhu, 2014).

It is a silent disease until a fragility fracture occurs-50% risk thereafter for subsequent fracture (French & Emanuele, 2019).

Prevalence in postmenopausal women due to

Prevalence in postmenopausal women due to the retraction of estrogen (1 in every 2 women) (Daly et al., 2019)

MATERIALS & METHODS

Facts on Osteoporosis Quiz (FOOQ)

Novel four question Likert-like survey
Novel EHR osteoporosis tool
Educational materials (PPT, etc.)
FOOQ: Pre- and Post- survey results:
Paired sample doubled-tailed t-test
(p=0.05)
Likert-like survey: Paired sample doubledtailed t-test (p=0.05)
DEXA ordering: Fischer's exact test of

Purpose/Aims

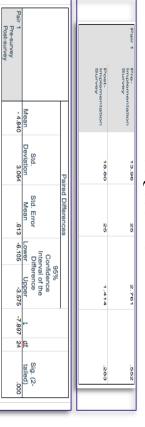
To create a multifaceted osteoporosis preventative initiative that integrates a nurse-led protocol for osteoporosis screening and recommend lifestyle osteoprotective modifications improve BMD and increase DEXA screening rates.

Population/Setting: Telehealth nursing staff (n=25), Location: Single telehealth facility, Los Angeles Location providing all virtual support.

KESULIS

- The nurses participating in the project significantly improved on the FOOQ
- The opinions of the nurses involved in the project significantly improved
- DEXA ordering significantly increased for female patients > 64 years old
- DEXA scan ordering increased for female patients 50-64 years of age but the increase was not statistically significant.

FOOQ SCORING



The data above indicate that there was an increase in total score between the pre-survey as 13.96 (mean) and post-survey (18.80 (mean).

DEXA Ordering

Total	Yes DEXA	No DEXA	DEXA count for Women > 65	DEXA Columns Pre and Post-Implementation Women >65
15065	14268	797	Pre- Implementation	d Post-Implementas
15065	14386	679	Pre- Implementation Implementation	ion Women >65
30130	28654	1476	Total	
				_

DEXA Columns Pre and Post-Implementation Women 50-64	d Post-Implement	ation Women 50-6	*
DEXA count for Women 50-64	Pre- Implementation	Post- Implementation	Total
No DEXA	11981	11904	23885
Yes DEXA	2895	2979	5874
Total	14876	14883	29759

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increase was not statistically significant

StatPlus Excel plug-in

Data analyzed using SPSS version 25,

independence (p=0.05)

CHALLENGES

COVID 19 was a challenge-patient's were reluctant to undergo non-emergency testing due to the shelter at home recommendations.

Increased volume of Covid-19 related calls and e-mails inundated the department, straining all resources, which created a time barrier for nurses to effectively screen for osteoporosis risk factors.

DISCUSSION

onclusions

Strategies for osteoporosis prevention are both costeffective, increase efficacy, and promote healthy bones (identification and modifications of modifiable osteoporosis risk factors).

Limitations

Use of a non-random sampling plan-only the Telehealth nurses at a single location were able to participate in the project increased the risk of selection bias.

Future Directions

Future research questions: Do recommendations made by Telehealth nurses translate into healthy bones?.

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