Research Problem: Nurse Practitioners’ Impact on Rural Adolescent Pill Abuse

Lindsey Ratcliff, RN-BSN
Research Advisor: Dr. Jan Schiefelbein, Ph.D., RN
Research Committee Members: Dr. Jennifer Harris, Ph.D., APRN, FNP-C, and Dr. Greg Belcher, Ph.D., Technology and Workforce Learning
INTRODUCTION
STATEMENT OF PROBLEM

Prescription Medication Misuse

Adolescent population
Rural America
Proper Disposal
STATEMENT OF PURPOSE

Goals

- Identify Prescribing Knowledge
- Provide Education
- Test Intervention
SIGNIFICANCE OF STUDY

Primary Care Providers

Gateway

Consequences

Availability

Mixing drugs

Comorbidities
THEORETICAL FRAME WORK

Imogene King’s Middle Range Theory of Goal Attainment

Goal Attainment

Nurse-Patient Relationship

Nurse Assessment

Combined perceptions of nurse and patient

Communication
RESEARCH QUESTIONS

- Demographic characteristics
- Knowledge of growing epidemic
- Competency level of proper medication storage and pill disposal techniques
- Frequency of preceptors educating patients
- Retention level following the educational intervention
- Impact on their future practice
REVIEW OF LITERATURE
TYPES OF MEDICATION

- OPIOIDS
- STIMULANTS
- CNS DEPRESSANTS
- COUGH, ALLERGY, ANTIBIOTICS
Teen prescription drug abuse > illicit drug abuse
10-25% of high school population
2nd to alcohol and marijuana
Highest rate 12-24 year olds
Female > male
Socially acceptable
FACTORS ASSOCIATED WITH RISE

- Perceived Safety
- Availability
- Media Advertisement
- Social Acceptability
- Motivating Factors differ
Prevention

School-Based

Community-Based

Primary Care
DISPOSAL
METHODOLOGY
DESIGN

- Quasi - Experimental
- Pre-test/Post-test
- Quantitative
- Qualitative
PSU Nurse Practitioner Class
Voluntary Involvement
IRB approval exempt
15 participants
PROCEDURE

- Informed consent
- Time for questions
- Pre-test
- Education presented
- Post-test
DATA ANALYSIS

Data Analysis

Tests and Survey

SPSS

Quantitative Items

Descriptive statistics

Demographic Survey

Paired – Samples T-test

Pre- & Post-test

Hand Analysis

Qualitative Items
ASSUMPTIONS

Population representation

Belief in confidentiality procedures

Truthful answers

Willingness to participate
Results and Discussion
Demographics

- 93% Female
- Mean age 33 years
- Average experience as RN 6-10 years
- Future practice setting: Community clinic or Private practice
Knowledge Related to Intervention

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
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<tbody>
<tr>
<td>Pretest Score</td>
<td>60.833</td>
<td>13.2512</td>
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<tr>
<td>Posttest Score</td>
<td>77.500</td>
<td>10.7736</td>
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<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>Sig. (2-tailed)</th>
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<tbody>
<tr>
<td>Pretest Posttest</td>
<td>-16.6667</td>
<td>13.9087</td>
<td>-4.641</td>
<td>.000</td>
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Participants’ Beliefs

<table>
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<tr>
<th>Thoughts</th>
<th>Root Cause</th>
<th>Importance to NP role</th>
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<tbody>
<tr>
<td>• Awareness of the problem</td>
<td>• Accessibility</td>
<td>• Prescriber</td>
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<tr>
<td>• Prescriber responsibility</td>
<td>• Patient education</td>
<td>• Educator</td>
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Utilization in Future Practice

Intervention Effect
- Education
- Awareness
- Prescribing practices

New awareness
- Prevalence
- Types of medications
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<tr>
<th></th>
<th>n</th>
<th>Mean Rank</th>
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<tr>
<td>Negative Ranks</td>
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<td>6.00</td>
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<td>0.00</td>
<td>0.00</td>
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<tr>
<td>Ties</td>
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<tr>
<td>Total</td>
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</table>

• Posttest < Pretest
• Posttest > Pretest
• Posttest = Pretest

\[ Z = -1.732 \quad p = .083 \]
Preceptor Example

Patient Education

Patient Education by Preceptor

- Always: 45.67%
- Frequently: 33.33%
- Sometimes: 6.67%
- Never: 6.67%
- I don't know: 6.67%
Implications

Intrinsic motivation for patient safety in population

Important inclusion in educational programs

NP students open to add to future practice
<table>
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<th>Limitations</th>
<th>Future Research</th>
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<td>Sample size</td>
<td>Multiple locations</td>
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<tr>
<td>Generalizability</td>
<td>Larger sample</td>
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