A STANDARDIZED CLINICAL GRADING RUBRIC

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CHALLENGES: CLINICAL PERFORMANCE EVALUATION

- Great Rewards!
- Subjective Nature (Helminen et al, 2016)
  - Multiple Evaluators, Clinical Sites, & Experiences
  - Trying to be fair
- NLN Nurse Educator Competency III
  - Use Assessment and Evaluating Strategies
- SAFETY is vital (QSEN)
- Letter Grade vs. Pass/Fail
CLINICAL EXPECTATIONS

- Novice to Less Novice:
  - Improvement Over Time (DeBrew & Lewallwen, 2014)
  - Performance vs. Written Work (Bonnel, 2016; O’Connor, 2015, Helminen et al, 2016; Terry, 2017)
  - Preferred Multiple-method Evaluation Approach
    - Unobserved Moments
    - Affective Learning
    - Problem Analysis
    - Clinical Judgment
## CHALLENGES: SYLLABUS VS. CRITERION-BASED BEHAVIORAL OBJECTIVES

<table>
<thead>
<tr>
<th>Noticing deviations</th>
<th>Noticing high temperature and fever-related symptoms, i.e., high temperature more than 38.3°C, dried oral membrane, depressed anterior fontanel.</th>
<th>Noticing high temperature and fever-related symptoms, i.e., high temperature more than 38.3°C, dried oral membrane, depressed anterior fontanel.</th>
<th>Noticing high temperature but showing frustration or hesitation of the further assessment of fever-related symptoms.</th>
<th>Noticing high temperature when assessment of temperature (with febrile patient).</th>
</tr>
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<tbody>
<tr>
<td>- When noticing high temperature, further assessment of fever-related symptoms.</td>
<td>- Noticing the stage of fever as well as high temperature, i.e., saying that “The patient is in the chilling stage.”</td>
<td>- When noticing high temperature, further assessment of fever-related symptoms.</td>
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RUBRIC DEVELOPMENT

HISTORY

- Request of Students & Instructors
- Extensive Literature Review
  - Almost 3 decades
- Input of 23 Clinical Instructors
  - From 2010 to 2015
- Gerontological Nursing Experience
  - Criterion-Specific Subscales
  - Critical Indicators = SAFE
• Specific Criterion Behavioral Objectives
  • Difficult to Level each
  • First Clinical Experience
    • 60% of final grade
    • 40% written work
<table>
<thead>
<tr>
<th>EXEMPLARY - A</th>
<th>ACCOMPLISHED - B</th>
<th>BEGINNING - C</th>
<th>UNSAFE - D</th>
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</thead>
<tbody>
<tr>
<td>A1. Performs safely and accurately each time behavior is observed</td>
<td>B1. Performs safely and accurately each time behavior is observed</td>
<td>C1. Performs safely and accurately with close supervision</td>
<td>D1. Performs in an unsafe manner, or unable to demonstrate appropriate behavior</td>
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<tr>
<td>A3. Always demonstrates coordination</td>
<td>B3. Demonstrates coordination most of the time</td>
<td>C3. Occasionally demonstrates coordination</td>
<td>D3. Consistently lacks coordination; Attempts behavior, yet unable to complete</td>
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<td>A4. Always utilizes time on activities efficiently</td>
<td>B4. Spends reasonable time on activities. Able to complete behavior</td>
<td>C4. Takes longer than reasonable time to complete activities</td>
<td>D4. Performs activities with considerable delay; activities are disrupted or omitted</td>
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<td>A5. Always appears relaxed and confident. Demeanor consistently puts patients or families at ease</td>
<td>B5. Usually appears relaxed and confident. Occasionally anxious but does not interfere with skills. Patient/family do not question or feel uneasy</td>
<td>C5. Anxiety occasionally interferes with ability to perform skills; results in questioning or uneasiness in patient/ family</td>
<td>D5. Anxiety interferes with ability to perform skills; results in questioning or uneasiness in patient/family</td>
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<tr>
<td>A6. Applies theoretical knowledge accurately each time while demonstrating critical thinking (making decisions based on client’s assessment data)</td>
<td>B6. Applies theoretical knowledge accurately with occasional cues</td>
<td>C6. Identifies principles of theoretical knowledge, but needs direction to identify application</td>
<td>D6. Applies theoretical knowledge principles inappropriately</td>
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<tr>
<td>A7. Consistently focuses on client during skills without cues</td>
<td>B7. Focuses on client initially without cues, as complexity increases, focuses on skills</td>
<td>C7. Focuses on client initially with cues, as complexity increases, focuses on skills</td>
<td>D7. Focuses on activities or own behaviors, not on client</td>
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<tr>
<td>CRITERION-REFERENCED BEHAVIOR OBJECTIVE SUBSCALE</td>
<td>RUBRIC ROWS</td>
<td></td>
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<td>-------------------------------------------------</td>
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<td>PO: Demonstrate knowledge of healthcare policy, finance, and regulatory environments.</td>
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<tr>
<td>1. Recognizes and respects the geriatric patients’ increased health care complexity as evidenced by clinical preparation (assessing payment source &amp; correlating medical diagnosis in concept map), and comparing nursing &amp; resident-directed care models in pre/post-conference discussions, and/or personal reflections.</td>
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<td>2. Seeks appropriate level of supervision prior to performing skills &amp; interventions.</td>
<td>X X X X X X X</td>
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<td>3. Recognizes and complies with skilled nursing facility resident rights</td>
<td>X X X X X X X</td>
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RELIABILITY ASSESSMENT

- Internal Consistency: Congruence of Instrument Concepts
- Rare in the literature
  - Usually assessed for simulation evaluation tools
    - Inter-rater
    - Test-Retest
- One-test Administration
  - Subscale coefficient equivalence reliability (Devon et al, 2007)
HYPOTHESES

1. A reliable assessment method will detect increased scores from midterm to final evaluation.
2. A reliable assessment method will detect no correlation between written assignment scores and clinical performance scores.
METHOD

• Several Criterion-Referenced Behavioral Objectives
• ASSESSMENT of the Clinical Performance Grading Rubric
• First semester undergraduate BSN students: 58
• Seven clinical instructors: Nine clinical sites
• Expedited institutional review board approval
  – Students informed of purpose, voluntary nature
  – De-Identified data
ANALYSIS

• SPSS version 24 with significance level set at $p < .05$

Compared Midterm & Final Performance scores
  • Means scores of Nine Subscales

Compared Performance scores (rubric) & Written work

ANOVA

Independent sample $t$-tests

Pearson Correlation

Cronbach’s alpha
RESULTS

- Difference between Midterm & Final Performance Evaluations:
  - $(M = .89)$ and overall final performance evaluations $(M = .94)$ ($t(57) = -15.896$, $p < .001$ (two tailed))

- No correlation between Written work & Performance Evals:
  - $(r_{56}) = .164$, $p => .05$

- Difference between Written work $(M = .973)$ & Performance Evals: $(M = .915)$
  - $t(114) = 14.536$, $p = < .001$

- Over-all Cronbach’s alpha = .917
LIMITATIONS

- Convenience sample of 58
  - Slightly small Effect Size \((d=0.262)\)
  - Need 92 students to obtain a power of 0.80
- One cohort: One school: One clinical setting
- No Inter-rater reliability
- Potential grade inflation
  - Critical Indicator expectation of Accomplished (B)
CONCLUSIONS

• Integrate Educational Pedagogy with Clinical evaluation
  – Separate grading rubric from clinically-specific expectations
• Clinical Instructors Require Guidance
• Fair Grading can Equate to Consistency and Reliability
• Critical Indicators help Identify Safe Practitioners
  – Supporting pass/fail and letter-grade policies
• Needs Replication
  – Future cohorts; Multiple schools; Multiple clinical environments


REFERENCES


REFERENCES


THANK YOU!

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