Depression Recognition, Assessment and Intervention: Emerging Psychiatric Mental Health Nursing Research

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Background

- Idea: 2013 Conference
- Focus groups (APA Research Council Steering Committee and Expert Panel members plus interested APNA members)
- Question: What can the Research Council do to promote psychiatric nursing research?

Results

- Provide support, motivation and research-specific information for APNA conference participants
  - explore new models of research collaboration
  - dialogue with a leading nurse-scientist with track record of mentoring and inspiration
  - address current funding issues – sources & strategies to secure funding
- Connect with other APNA nurse scientists
- Provide a dedicated space during the conference for emerging PMHN programs of research

Afternoon Break

APNA awarded the Research Council a grant to meet the needs identified

Outcomes
- Preconference: 4 dedicated sessions (Wednesday)
  - Welding Strong Connections Between Research and Practice: PhD and DNP Partnerships to Generate Knowledge and Improve Care
  - The Making of a Nurse Scientist
  - Understanding the Funding Landscape
  - Depression Recognition, Assessment and Intervention: Emerging Psychiatric Mental Health Nursing Research
  - Interactive Panel (Friday 4:45-6:15)
  - Trauma and Healing: Findings and Insights from Three Nurse Scientists

This session addresses the following needs:

- Provide support, motivation and research-specific information for APNA conference participants
  - explore new models of research collaboration
  - dialogue with a leading nurse-scientist with track record of mentoring and inspiration
  - address current funding issues – sources & strategies to secure funding
- Connect with other APNA nurse scientists
- Provide a dedicated space during the conference for emerging PMHN programs of research

Three PMHN Depression Researchers

Role of Resourcefulness in Overcoming Depressive Thoughts, Feelings, and Symptoms

- Jaclene A. Zauszniewski, PhD, RN-BC, FAAN
- Biopsychosocial Research in Primary Care Settings

Carla J. Groh, PhDPMHNP-BC, FAAN
- In-Home, Organization-Embedded PMHN Intervention to Reduce Depressive Symptoms

Linda S. Beeber, PhD, PMHCNS-BC, FAAN
Objectives

• Participants will be able to:
  – Describe factors and assessment dimensions of depression/depressive symptoms
  – Identify protective factors and key intervention points
  – Apply findings to various settings and clinical practice contexts

Depression Recognition, Assessment, and Intervention: Emerging Psychiatric Mental Health Nursing Research

In-Home, Organization-Embedded PMHN Intervention to Reduce Depressive Symptoms

Linda S. Beeber, PhD, PMHCNS-BC, FAAN

Disclosures

• Dr. Beeber has no conflicts of interest to report.

Acknowledgements

• The National Institute of Mental Health (Beeber, PI: RO1 MH065524; Beeber, PI: R34MH08 6553)
• Department of Health and Human Services, Administration for Children and Families, Early Head Start-University Partnership Grants (Beeber, PI: 90YF0042; Beeber, PI: 90YF0056/01)
• 30 PMH APRNs and 60 dedicated team members on the “HILDA” “WINGS” “ALAS” & “Alumbrando el Camino/Bright Moments” Projects
• Our Early Head Start and nonprofit community organization partners
• The mothers who taught us how to help

Significantly Severe Depressive Symptoms are Prevalent

• 40-59% of low-income mothers; 64% Latinas
  National Research Council & Institute of Medicine, 2009
• Limit coping with stressors
• Reduce benefit of education & work programs
  Casey, 2004
• Add to reproduction of multigenerational poverty
  National Research Council & Institute of Medicine, 2009
• Compromise parenting
  Beardslee, 2014

At Moderate Levels Depressive Symptoms Compromise Parenting

• Shorter, less child-centered interactions
  Rosenblum, 1997; Zeanah, 1997; Zbrochower, 1996
• Less sensitive, responsive interactions
• Less frequent touch, play, joy
  Rosenblum, 1997; Bettes, 1988; Stepakoff, 2000
• Negative judgments of child’s behavior
  Koschanska, 1987; Murray, 1996; Radke-Yarrow, 1990
• Highly stimulating, “rough touch”
  Cohn, 1989; Weinberg, 1998
At Moderate Levels Depressive Symptoms Compromise Parenting

• "Blunted"
  - Shorter, less child-centered interactions
  - Less frequent touch, play, joy
  Rosenblum, 1997; Bettes, 1988; Stepakoff, 2000

• "Irritable/intrusive"
  - Negative judgments of child's behavior
    Koschanakaya, 1987; Murray, 1996; Radke-Yarrow, 1990
  - Highly stimulating, "rough touch"
    Cohn, 1989; Weinberg, 1998

• "Functional" Karl, 1995

Negative Outcomes in the Infant and Toddler (> 6 mos duration)

• Smaller fetal body & head growth
  Avan, 2010

• Delayed language & developmental milestones
  Lyons-Ruth, 1986; Murray, 1996; Zeanah, 1997

• Negative affect & severe tantrums
  Goodman, 1993; Needlman, 1991

• Less positive affect toward self
  Cicchetti, 1997

• Lowered resilience to environmental risks
  Avan, 2010

• Less confidence in social situations
  Gross, 1994

Beyond the 0-3 Era

• School-aged children of symptomatic mothers
  - conduct disorders
  - social difficulties
  - learning/language problems that persist
  - limited achievement
    Campbell, 2007 & 2009

• Require remedial services

• At risk for depression and suicide in adolescence and adulthood

• Maternal depressive symptoms add to risks to the child conferred by economic hardship

Interventions with Low-Income Mothers

• Barriers: Transportation difficulties, childcare needs, stigma, competition with meeting basic needs

• Limited evidence: Problems with acceptability, fidelity, adequate retention
  Appleby, 1997; Cooper, 2003; Spinelli, 2003; Miranda et al., 2006; van Doesum, 2008; Kersten-Alvarez, 2010

• Solutions:
  - Nurses as trusted symbols (Peplau, 1989)
  - In-home psychotherapy (Beeber, 2014; Ammerman, 2014)
  - Embedding mental health intervention into existing, trusted, non-mental health community entity (Beeber, 2007)

Intervention: Adapted Interpersonal Psychotherapy (IPT)

• Our team:
  - Adapted Interpersonal Psychotherapy (IPT) to low-income, limited literacy, Spanish-speaking & English-speaking mothers & added depression-specific parenting guidance Beeber, et al., 2008; 2010; 2013; 2014
  - IPT: evidence-supported treatment for depression
    Klerman & Weissman, 1984
  - Tested only with postpartum mothers in traditional clinic model
    Weissman, Markowitz, & Klerman, 2007; Forman, et. al., 2008; Grote et al., 2009

Added Parenting Enhancement to Adapted IPT (IPT + PE)

• Previous IPT trials had shown that reduction of depressive symptoms alone did not change critical views of mother toward child or parenting behaviors

• Added parenting enhancement to adapted IPT

• IPT + PE (Interpersonal Psychotherapy + Parenting Guidance)

• Parenting enhancement focused on how key depressive symptoms compromised parenting

• Specific strategies to change those parenting behaviors
Intervention: IPT + PE

- Designed IPT+PE to accompany a trusted entity (Early Head Start - EHS)
- Three RCT’s showed adapted IPT reduced symptoms, changed negative perceptions & improved maternal responsiveness during parenting interactions
  
  Beeber, et al., 2004; 2010; 2013; 2014

Design

- Randomized, two-group, repeated measures design
- Most had four measurement points:
  - Baseline (T1)
  - Mid-intervention - 14 weeks (T2)
  - Termination - 22 weeks (T3)
  - 1-month post-termination – 26 weeks (T4)
- IPT+PE: Psychiatric Mental Health APRNs
- Comparison was Usual care (monitored) or Usual care +Attention-control condition (health education by generalist RNs with no mental health preparation)

Samples

- Low-income mothers (English or Spanish-speaking)
- Child 6 weeks – 30 months old enrolled in EHS
- Northeast & Southeast US; Urban, rural & suburban
- ≥ 16 Center Epidemiological Studies-Depression scale (CES-D) Radloff, 1977
- 15 years of age or older
- No regular counseling or psychotherapy
- No psychotropic medications
- Able to consent or have a guardian consent

Intervention

- Engagement using the nurse-client relationship
  Peplau, 1952; O’Toole, 1989
- 10 in-person in-home, 4 phone boosters, 1 termination (15 total)
- Final RCT used shortened version (10 total)
- Content:
  - IPT: Current episode of depression linked to one: transition, dispute, loss or interpersonal deficit
  - PE: Focus on depressive symptoms that compromise parenting; strategies to interrupt
  - Relapse prevention strategies

Adaptations - Clinical Relevance

- Objectification - visual self-assessment (circle or graph)
- “Skill sheets” related to the IPT focus – modular, interactive, laminated, 3rd grade reading level
- Written using mothers’ words
- Specialized mother-child interaction assessment
- Adaptations of existing maternal enhancement (NCAST Baby Cues)
  - “In-home” allowed on the spot intervention and strategy application
- Weaning (booster sessions) and termination strategies

Selected Measures

- **Depressive Symptom severity**
  - Center Epidemiological Studies-Depression scale (CES-D, Spanish version)
  - Hamilton Rating Scale for Depression (HRSD)
  - Structured Clinical Interview for DSM-IV (SCID – R)
- **Negative perceptions of the child**
  - Child Behavior Checklist (CBCL)
- **Parenting/Responsiveness**
  - Maternal Child Observation (unstructured 45-minute videotaped mother-child interactions)
- **Mediators**
  - General self-efficacy scale (GSE)
- **Moderators**
  - SF-12 health and function
Evidence Table - Handout

- 2004: RCT English-speaking mothers in NC & NY
- 2010: RCT Spanish-speaking, newly-immigrated mothers in NC
- 2013: RCT English-speaking mothers in NC & NY
- In progress: RCT Spanish-speaking, non-EHS mothers in NC

Successful Scientific Trajectory

- Four-step sequence
  - Forman, et al., 2007
  - Step 1: Reduction of maternal depressive symptoms
  - Step 2: Positive maternal perceptions of the child
  - Step 3: Positive mothering behaviors
  - Step 4: Positive infant-toddler outcomes

Results over Time

<table>
<thead>
<tr>
<th>Study</th>
<th>Depressive Symptoms</th>
<th>Maternal perceptions</th>
<th>Maternal behavior</th>
<th>Child outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>English speakers</td>
<td>Yes – Sig btw groups</td>
<td>Not measured</td>
<td>Yes – sig btw groups</td>
<td>Not measured</td>
</tr>
<tr>
<td>Spanish speakers</td>
<td>Yes – Sig btw groups</td>
<td>Yes – Sig btw groups</td>
<td>No – n/s</td>
<td>n/s</td>
</tr>
<tr>
<td>English speakers</td>
<td>No – n/s</td>
<td>Not measured</td>
<td>Yes – sig btw groups</td>
<td>n/a</td>
</tr>
<tr>
<td>Spanish speakers</td>
<td>Yes – Sig btw groups</td>
<td>Yes – sig btw groups</td>
<td>In progress</td>
<td>In progress</td>
</tr>
</tbody>
</table>

Success So Far

- Adapting a short-term, evidence-based intervention for depressive symptoms (Interpersonal Psychotherapy) for in home delivery
- Tailoring it for mothers: low-income, diverse ethnic & cultural groups, Spanish translation & interpreter model, limited literacy
- Fitting it into trusted community programs with different models and varying degrees of staff MH capacity
- Building community agency staff capacity to identify, support and refer mothers (and parents) with depressive symptoms
- Formalizing the community capacity-building functions into curricula (Alumbrando el camino/Bright Moments; Nurse Family Partnership Mental Health Enhancement)

Clinical Implications

- Nurses rock!
  - Being “the nurse” reduces stigma (Peplau)
  - Powerful skills of engagement (Interpersonal Theory - Peplau)
  - PMH-APRNs ideal but not scalable
  - RNs providing health education reduced symptoms as effectively as adapted IPT+PE
  - HOWEVER, only mothers receiving IPT+PE showed significant changes in parenting behaviors
  - Test hybrid model of RN +APRN model to make it cost-effective and change enduring behaviors
  - Capitalize on our tremendous power as trusted providers

Clinical Implications

- Less is more
  - 75-80% of mothers in the intervention groups completed minimum dose of IPT/parenting enhancement sessions (higher than comparison – 36%)
  - Low-income, high stressed mothers are “thrifty” – quickly calculate effort and reward
  - Key is to reduce intervention to its core elements
  - IPT focus on one stressful dimension and a key parenting behavior; skill acquisition around focused dimensions = positive outcome
Clinical Implications

- Generic interventions are powerful
  - Naming (Peplau)
  - Objectifying
  - Fitting environmental demands to energy level
  - Self-efficacy building strategies e.g., role proficiency (parenting self-efficacy)
  - Problem solving around one key stressor
  - Emphasis on transferrable skillsets
  - Symptom management
  - Instillation of hope

Next Steps

- Scale it up
- Universal screening for mothers past the postpartum period
- Shifting to other high-risk mothers (developmental delays/disabilities/autism)
- Two scale-ups in progress:
  - Nurse-Family Partnership
  - HRSA Collaborative Innovation Network (COIIN)

References

- Handout has the full reference list and additional sources
- Contact:
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Disclosures

Jaclene A. Zauszniewski, PhD, RN-BC, FAAN has no conflicts of interest to disclose

Objectives

- To define and describe resourcefulness
- To explain how resourcefulness relates to depressive affect, cognitions, and symptoms within the context of resourcefulness theory
- To explicate the components and process of resourcefulness training
- To review research on the mental health benefits of resourcefulness training
**What is Resourcefulness?**

- Collection of cognitive – behavioral skills for coping with adversity
- Two forms of resourcefulness:
  - Personal resourcefulness = self-help skills
  - Social resourcefulness = help-seeking skills

**Resourcefulness & Depression**

- Greater resourcefulness associated (or antecedent or predictive) with lower frequency and severity of depressive symptoms
- Resourcefulness found to be an intervening (mediating or moderating) variable between perceived stress, thoughts, and feelings and health and quality of life outcomes

**Research and Practice**

**Measurement**

≈

Clinical assessment

**Theory of Resourcefulness**

**Contextual Factors**

- Intrinsic
- Extrinsic

**Process Regulators**

- Cognitive
- Affective
- Motivation
- Energy

**Resourcefulness**

- Personal
- Social

**Quality of Life**

- Mental Health
- Physical Health

**Process Regulators Associated with Depression**

- Affective process regulators
  - Feelings / emotions
  - Negative emotions
- Cognitive process regulators
  - Automatic negative thoughts
  - Depressive cognitions

**Quality of Life Indicators Associated with Depression**

- Mental health
  - Adaptive functioning
  - Performance of daily activities
  - Life satisfaction
- Depressive symptoms
  - Frequency of symptoms
  - Severity of symptoms
Depressive Cognition Scale

<table>
<thead>
<tr>
<th>Cognition</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hopelessness</td>
<td>I am hopeful about the future</td>
</tr>
<tr>
<td>Helplessness</td>
<td>I can do many things well</td>
</tr>
<tr>
<td>Purposelessness</td>
<td>I am useful and needed</td>
</tr>
<tr>
<td>Powerlessness</td>
<td>I am in control of my life</td>
</tr>
<tr>
<td>Worthlessness</td>
<td>I am a worthwhile human being.</td>
</tr>
<tr>
<td>Loneliness</td>
<td>I have many people in my life.</td>
</tr>
<tr>
<td>Emptiness</td>
<td>I think my life is pretty full.</td>
</tr>
<tr>
<td>Meaninglessness</td>
<td>I believe my life is worth living.</td>
</tr>
</tbody>
</table>

Negative Emotions Scale

<table>
<thead>
<tr>
<th>I feel:</th>
<th>(Subscale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nervous</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Sad</td>
<td>Depression</td>
</tr>
<tr>
<td>Anxious</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Restless</td>
<td>Anger</td>
</tr>
<tr>
<td>Lonely</td>
<td>Depression</td>
</tr>
<tr>
<td>Unhappy</td>
<td>Depression</td>
</tr>
<tr>
<td>Angry</td>
<td>Anger</td>
</tr>
<tr>
<td>Tense</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Worried</td>
<td>Anxiety</td>
</tr>
<tr>
<td>Irritable</td>
<td>Anger</td>
</tr>
</tbody>
</table>

Depressive Symptoms Scales

- Commonly used scales capture:
  - Affective symptoms
  - Cognitive symptoms
  - Behavioral symptoms
  - Somatic symptoms
- Symptom overlap is problematic
  - Similar symptoms with medical conditions
  - Potential for misdiagnosis of depression
  - Duplication of measurement with scales focusing on affective or cognitive symptoms

Depressive Symptoms Scales

- Need to decide which symptoms are of interest versus diagnosis of depressive illness.
- Example #1 – Based on Beck’s theory of depression which states cognitive symptoms appear before affective, behavioral, and somatic symptoms – may want to target cognitions.
- Example #2 – Modified scales that exclude somatic / physical symptoms are available.

Resourcefulness Scales

- Resourcefulness Scale – 28 items; 6 point Likert scale; captures use of resourcefulness skills in sample situations.
- Resourcefulness Skills Scale – 8 items; 4 point Likert scale; assesses how frequently respondents use the 8 RESOURCE skills taught during resourcefulness training.
Positive Effects of Resourcefulness Training

<table>
<thead>
<tr>
<th>Population</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy elders</td>
<td>Adaptive functioning</td>
</tr>
<tr>
<td></td>
<td>Life satisfaction</td>
</tr>
<tr>
<td>Chronically ill</td>
<td>Positive affect &amp; cognition</td>
</tr>
<tr>
<td></td>
<td>Positive behavior changes</td>
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<tr>
<td></td>
<td>Better self-assessed health</td>
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<tr>
<td></td>
<td>Improved functioning</td>
</tr>
<tr>
<td>Grandmothers</td>
<td>Lower stress</td>
</tr>
<tr>
<td></td>
<td>Fewer depressive symptoms</td>
</tr>
<tr>
<td></td>
<td>Better quality of life</td>
</tr>
<tr>
<td>Women caregivers</td>
<td>Fewer depressive symptoms</td>
</tr>
<tr>
<td></td>
<td>Better self-assessed health</td>
</tr>
</tbody>
</table>

References


References (cont.)


Disclosures

Carla J. Groh, PhD, PMHNP-BC, FAAN has no conflict of interest to disclose.

Primary Care Settings

- McAuley Health Center, a nurse managed center; cares for the underinsured.
- Mercy Primary Care, a primary care clinic sponsored by Trinity Health System; managed by physicians; cares only for the uninsured.
- Both located on the east side of Detroit.
Demographics of Patient Population

- Patient populations very similar:
  - Predominately female
  - African American
  - Low social economic status
  - Primarily unemployed, underemployed or on disability
  - Significant co-morbidities
  - M age mid 40s

Demographics of the Community (zip code 48213)

- Population: 27,712
- Majority female
- Median age: 32.9
- Median household income: $24,103
- Individuals below poverty level: 41.9%

Source: 2008-2012 American Community Survey 5-Year Estimates

Nursing Research Studies

- The Impact of a Longitudinal Lifestyle Change Program on the Mental Health of Obese Under-served African American Women

- Depression Screening and Treatment in Uninsured Urban Patients

Nursing Research Studies

- Exploring the Relationship between Diabetes Mellitus, Depression, Self-Efficacy and Glycemic Control in an Urban, Minority Population

- Vitamin D, Depression and Coping Self Efficacy in Young Women: A Longitudinal Study

Lifestyle Change Program

- Impetus for study
- 24-week longitudinal study (N=55)

- Interventions included:
  - chair exercises
  - education
  - scripture readings

Lifestyle Change Program

- Outcome measures:
  - BMI
  - SF-36
  - Lipid profile
  - Hemoglobin A1c

- Results:
  - Significant increase in mental component score from baseline (M=44.1) to 12-weeks (M=50.7) with a decrease at 24-weeks (M=47.9) (P=.000)
**Depression Screening and Treatment in Uninsured Urban Patients**

- **Impetus for study**
- Prospective, repeated measures design (N=674)
- Screened for depression using PHQ-9
- If depressed, randomized to 1 of 4 arms:
  - Usual care;
  - Usual care + psychotherapy
  - Usual care + psychotherapy + education
  - Usual care + education

**Outcome measures:**
- PHQ-9

**Results:**
- All treatment groups showed significant decrease in depression over 6-month period, from a mean score of 15 at baseline to 8.3 at 6-months ($P<.005$).

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**Diabetes Mellitus, Depression, Self-Efficacy and Glycemic Control in an Urban, Minority Population**

- **Impetus for study**
- Cross-sectional design
- Recruited 30 Type 1 & Type 2 diabetics

**Outcome measures:**
- Hemoglobin A1c
- PHQ-9
- Self-efficacy for Diabetes

**Results:**
- 33% scored depressed (PHQ-9>10)
- Significant inverse r-ship detected between PHQ-9 score and self-efficacy
- R-ship between PHQ-9 score and Hemoglobin A1c not significant

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**Vitamin D, Depression and Coping Self-Efficacy in Young Women**

- **Impetus for study**
- Not conducted in primary care but could be
- Longitudinal study over 3 seasons (N=77)

**Outcome measures:**
- BDI-II
- Coping Self-efficacy Scale (CSES)
- Vitamin D levels using dried blood spot testing

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**Vitamin D, Depression and Coping Self-Efficacy in Young Women**

- **Results:**
  - Vitamin D and CSES scores significantly different over 3 data collection points
  - BDI-II scores not significantly different
  - Significant inverse r-ship between BDI-II and CSES over 3 data collection points
Implications of Study Findings for Psychiatric Nurse Researchers

• Findings provide added knowledge regarding:

  ➢ Risk factors for depression (obesity, DM, vitamin D levels, low self-efficacy);
  ➢ Key assessment dimensions (self-efficacy, depression scores as measured by standardized instruments, co-morbid health problems)
  ➢ Key interventions (lifestyle change program, education, socialization, practical support, culturally sensitive interventions)

Barriers, Challenges and Rewards of Conducting Research in Primary Care

• Recruitment
• Retention
• Competing demands
• Health status of participants

• Practical issues:
  ➢ Transportation
  ➢ Childcare
  ➢ Working phones
  ➢ Cooperation of primary care providers and staff

References
