

The Resilience in Illness Model: Dialogue on Across-Illness Conditions and Difficult/Traumatic Life Circumstances

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Greetings from Indiana University School of Nursing



Indianapolis Indiana, USA

Haase, Chen, Wu 6.24.2014





During our time together...

- Describe the Positive Health Perspective
- Discuss the Resilience in Illness Model (RIM)
 - RIM development for adolescents/young adults with chronic illness
 - What hinders and fosters resilience: Protective, risk and outcome factors
 - Interventions and potential
 - RIM as organizing framework for nursing research and practice
- Dialogue among session attendees regarding
 - Positive health concepts in research and clinical practice
 - how the RIM may be useful and/or adapted for research on other illness conditions and/or traumatic life situations.

What is Positive Health?

- Efforts to gain understanding of ways individuals sustain or regain optimal health.
 - Salutogenic: Presence of wellness as well as absence of disease
 - Emphasis on primary prevention and positive health promotion
 - Consider strengths to address problems
 - Holistic Perspective
 - Singer B, Ryff, CD. New horizons in health: An integrative approach.
 Washington, DC: National Academy Press; 2001.

Two Models of Care

Common Goals

BUT

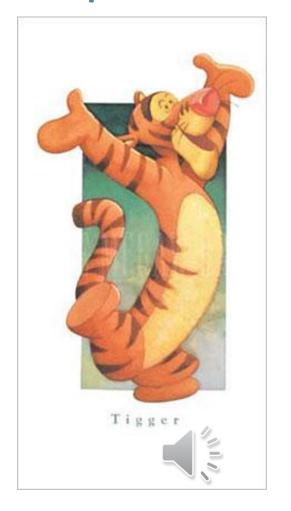
 Different approaches and emphases



An Eeyore Perspective

Eeyare

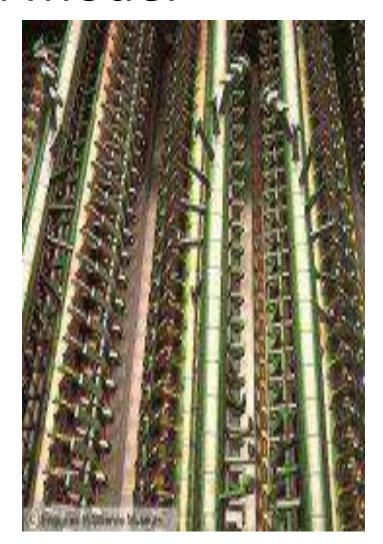
A Tigger Perspective





Function-based Model

- Problem Focused
- Pathology and deficits perspective
 - Risk
 - Morbidity
 - Adjustment problems
 - Developmental Delays
- Additive Approach



Meaning and Values-based Model

- The importance of meaning
 - Patterns and experiences of illness
 - Subjective and holistic
 - Meanings based on patient's understanding of situation, autonomy, beliefs, choices, and relationships.
 - Function viewed <u>within</u> meaningbased models



⁻Costain, K., Hewison, J. & Hawes, M. (1993) Comparison of a function-based model and a meaning-based model of quality of life in oncology: Multidimensionality examined. <u>Journal of Psychosocial Oncology</u>. vol. 11(4)17-37.

⁻Haase, J. & Rostad, M. (1994a). Experiences of completing cancer treatments: Child perspectives. Oncology Nursing Forum, 21(9), 1483-1494.

Research-based "Doing Well" Concepts

- Resilience
- Quality of Life
- Courage
- Courageous Coping
- Connectedness
- Spiritual Perspective
- Derived Meaning
- Hope



Development of the Haase Resilience in Illness Model

- Mixed Methods Approaches
 - Model Generation
 - Model Evaluation
 - Intervention Evaluating



Focused on Adolescents/Young Adults with Chronic illness

- 1. Haase, J.E. (1987). The components of courage in chronically ill adolescents. ADVANCES IN NURSING SCIENCE, 9(2), 64 80.
- 2. Haase, J.E., Heiney, S., Ruccione, K., & Stutzer, C. (1999). Research triangulation to derive meaning-based quality-of-life theory: Adolescent resilience model and instrument development. INTERNATIONAL JOURNAL OF CANCER, SUPP. 12, 125-131.
- 3. Haase, J.E. (2004). The adolescent resilience model as a guide to interventions. Special Section: Proceedings from the 5th Annual State of the Science Workshop on Resilience and Quality of Life in Adolescents. JOURNAL OF PEDIATRIC ONCOLOGY NURSING. 21(5) 289-299.
- 4. Haase, J. E., Kintner, E. K., Monahan, P.O., Robb, S.L. (2013). The Resilience in Illness Model, Part 1: Exploratory Evaluation in Adolescents and Young Adults with Cancer. CANCER NURSING. DOI: 10.1097/NCC.0b013e31828941bb.
- 5. Robb, S., Burns, D., Stegenga, K., Haut, P., Monahan, P., Meza, J., Stump, T., Cherven, B., Docherty, S., Hendricks-Ferguson, V., Kintner, E., Haight, A., Wall, D., Haase, J.E. (In Press). Randomized Clinical Trial of Therapeutic Music Video Intervention for Resilience Outcomes in Adolescents/Young Adults Undergoing Hematopoietic Stem Cell Transplant: A Report from the Children's Oncology Group. CANCER.

Definition: Resilience as Process



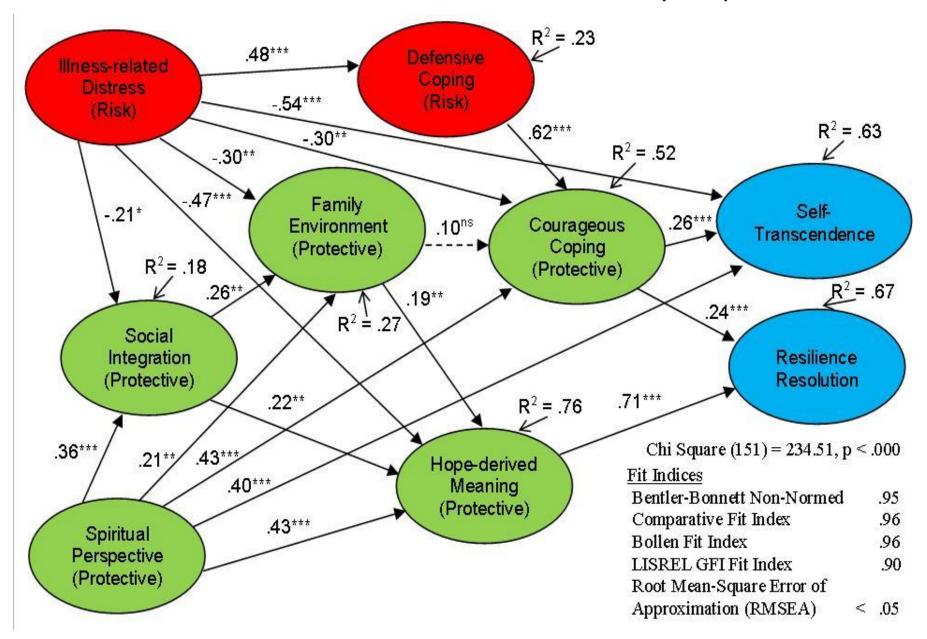
- Ways individuals
 - identify, develop and use protective resources
 - (e.g., spiritual perspective, social integration, family environment, courageous coping, and hope-derived meaning)
 - to flexibly deal with illness-related stressors
 - (e.g. symptom distress, uncertainty in illness and defensive coping)
- in order to achieve positive health outcomes.

Definition: Resilience as Outcome

- Resilience resolution and selftranscendence
- Characterized by:
 - Mastery, accomplishment and competency;
 - Motivation;
 - Acknowledgement and acceptance;
 - Ability to rise above the illness
 - Desire to reach out and help others.



Haase Resilience in Illness Model (RIM)



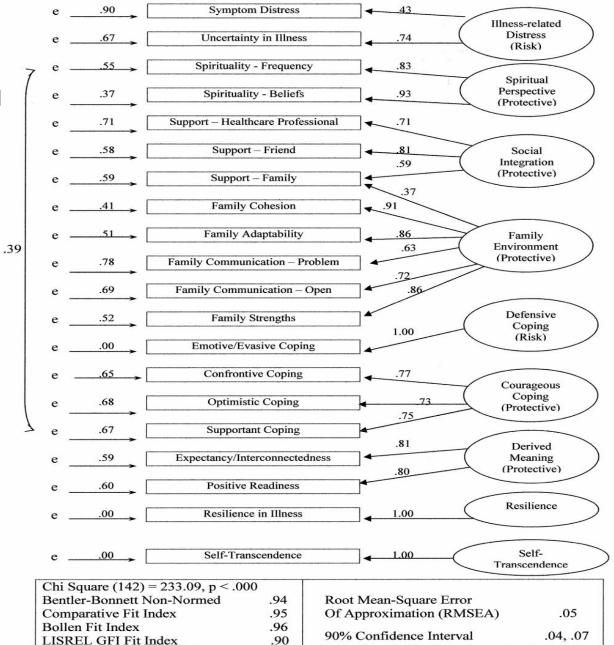
Resilience in Illness Model Latent Factors and Manifest Variables

	Latent Factors	Manifest Variables	
1	Illness-related distress	Uncertainty in illness Symptom-related distress	
2	Defensive coping	Evasive Emotive Fatalistic	
3	Positive coping	Confrontive Optimistic Supportant	
4	Family support	Family adaptability/cohesion Family communication	
5	Social Integration	Perceived social support from family Perceived social support from healthcare providers	
6	Hope-Derived meaning	Expectancy, Interconnectedness, Positive Readiness	
7	Spiritual Perspective	Spiritual Beliefs Frequency of Spiritual Practices	
8	Self-Transcendence	Self-Transcendence	
9	Resilience	Resilience in Illness Confidence Sense of Well-being	

Latent Variables	Manifest Variables	Measures	Item n, Range, Mean (SD)	Cron- bach's Alpha
Illness- related distress	Symptom distressUncertainty in illness	McCorkle Symptom Distress ScaleMishel Uncertainty in Illness Scale	 11 1-5 1.8 (0.6) 28 1-5 2.3 (0.5) 	.82 .89
Coping- defensive	Emotive/evasive coping	Jalowiec Coping Scale Revised: • Emotive & Evasive Subscales	• 18 0-3 1.2 (0.5)	.79
Spiritual Perspective	Spirituality-frequencySpirituality-beliefs	 Reed Spiritual Perspective Scale-Practices Reed Spiritual Perspective Scale-Beliefs 	 4 1-6 4.0 (1.5) 6 1-6 4.5 (1.3) 	.87 .94
Social integration	Perceived Social Support: • Healthcare provider • Friends • Family	 Perceived Social Support (PSS) PSS: Healthcare provider Scale PSS: Friends Scale PSS: Family Scale 	 20 1-5 3.7 (0.6) 20 1-5 4.1 (0.6) 20 1-5 4.0 (0.7) 	.90 .91 .91
Family Environment	 Family Cohesion Family Adaptability Family Communication-Open Family Communication-Problem Family Strengths 	 Family Adaptability Cohesion Scale Family Adaptability Cohesion Scale Parent-AYA Communication Scale Parent-AYA Communication Scale Family Strengths Scale 	 16 1-5 3.7 (0.6) 14 1-5 3.4 (0.6) 10 1-5 3.2 (0.7) 10 1-5 4.0 (0.7) 12 1-5 3.7 (0.6) 	.89 .83 .82 .90
Courageous Coping	Confrontive CopingOptimistic CopingSupportant Coping	Jalowiec Coping Scale-Revised Confrontive Subscale Optimistic Subscale Supportant Subscale	 10 0-3 1.4 (0.6) 9 0-3 2.1 (0.6) 5 0-3 1.7 (0.6) 	.80 .75 .60
Hope-derived	• Expectency/	Herth Hope Index Subscales		

Latent Variables	Manifest Variables	Outcome Measures	Items n, Range, Mean (SD)	Cronbach's Alpha
Self- Transcendence	• Self- transcendence	 Reed Self-transcendence Scale 	• 15 1-4 3.3 (0.4)	.75
Resilience in Illness	• Resilience in Illness	Haase Resilience in Illness Scale	• 15 1-6 5.1 (0.6)	.81

Resilience in Illness Measurement Model



A Closer Look at Risk and Protective Factors

Clinical and Research Implications and Potential Mechanisms of Interventions

Illness-related Distress (Risk)

 The degree of perceived illness-related uncertainty and disease and symptom-related distress

Focus:

- Uncertainty in Illness
 - Ambiguity
 - Complexity
- Symptom Distress

Defensive Coping (Risk)

- The degree to which the patient/family member uses evasive and emotive coping strategies to deal with the cancer experience.
- Use/ Effectiveness of strategies:
 - Evasive/avoidant
 - Emotive
 - Fatalistic

Derived Meaning (Protective)

- The degree to which the patient/ family member uses spiritual perspective and hope to derive meaning from the cancer experience.
- Spiritual Perspectives
 - Beliefs
 - Practices
- Hope-Derived Meaning

Spiritual Perspective

 "Spirituality is the aspect of humanity that refers to the way individuals seek and express meaning and purpose and the way they experience their connectedness to the moment, to self, to others, to nature, and to the significant or sacred."

Puchalski, C., B. Ferrell, et al. (2009). "Improving the quality of spiritual care as a dimension of palliative care: the report of the Consensus Conference." J Palliat Med **12**(10): 885-904.

Puchalski, C. & Ferrell, B. (2010) Making Healthcare Whole: Integrating Spirituality into Patient Care. West Conshohocken, PA: Templeton Press

Spiritual Distress

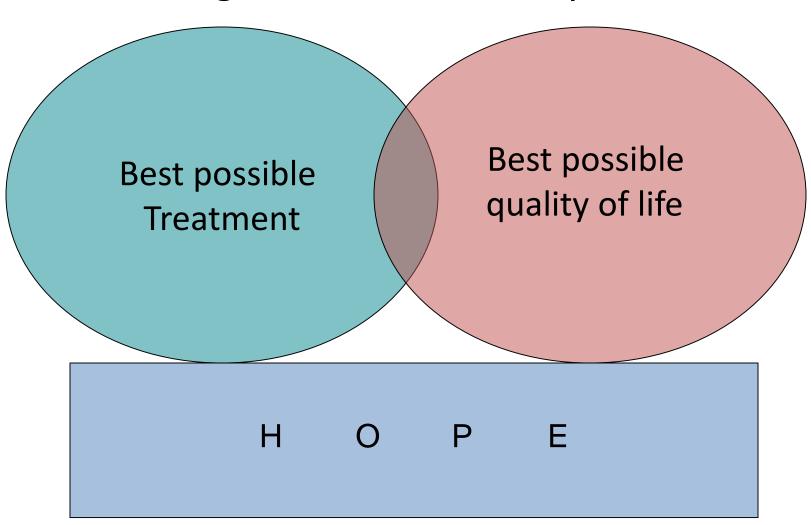
- Existential
- Abandonment
- Anger
- Concerns about relationship with deity
- Conflicted or challenged belief systems
- Despair / Hopelessness
- Grief/loss
- Reconciliation
- Isolation
- Religious / Spiritual Struggle

Spiritual Care

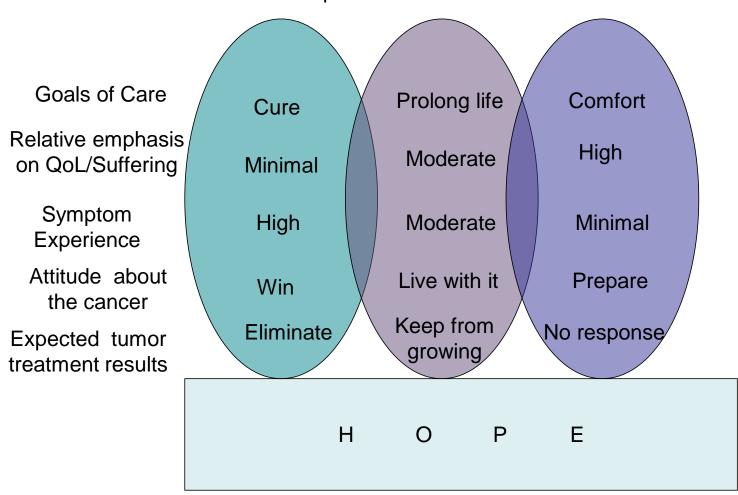
- Compassionate presence
- Reflective listening/query about important life events
- Support patient sources of spiritual strength
- Open ended questions
- Inquiry about spiritual beliefs, values and practices
- Life review, listening to the patient's story
- Targeted spiritual intervention
- Continued presence and follow up
- Guided visualization for "meaningless pain"
- Progressive relaxation
- Meaning-oriented-therapy
- Referral to spiritual care provider as indicated
- Dignity-conserving therapy

Hope-Derived Meaning

Forming a Team to care for your child



Experiences of other families



Social Integration (Protective)

- Degree to which
 - patient/family perceive a sense of connectedness with and support from friends and health care providers in the midst of having cancer.
- Perceived Social Support
 - Friends
 - Healthcare Providers
- Example: Profile Based Intervention
- Phillips-Salimi, C. R., Haase, J. E., & Kooken, W. C. (2011). Connectedness in the Context of Patient-Provider Relationships: A Concept Analysis. J ADV NURS. DOI: 10.1111/J.1365-2648.2011.05763.X.

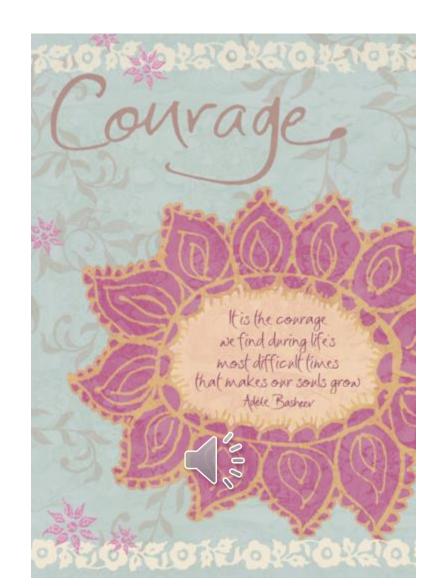
Family Environment (Protective)

- The degree to which the patient/family member perceives the family as adaptable, cohesive, effectively communicating, and having family strengths.
- Family
 - Adaptability
 - Cohesion
 - Communication
 - Perceived Strengths
- Example: Adolescent/Young Adult Profile

Courageous Coping (Protective)

The degree to which the AYA uses and finds effective:

- confrontive
- optimistic
- supportant coping strategies to deal with the illness experience



Resilience and Self-Transcendence

"Chemo Kid Rock" by Heather (age 12)

Verse 3

Somebody once asked, "How can you do this task?"

I said, "You just have to do it yourself..."

I have to be strong, I have to be tough

And I'll know when I've had enough

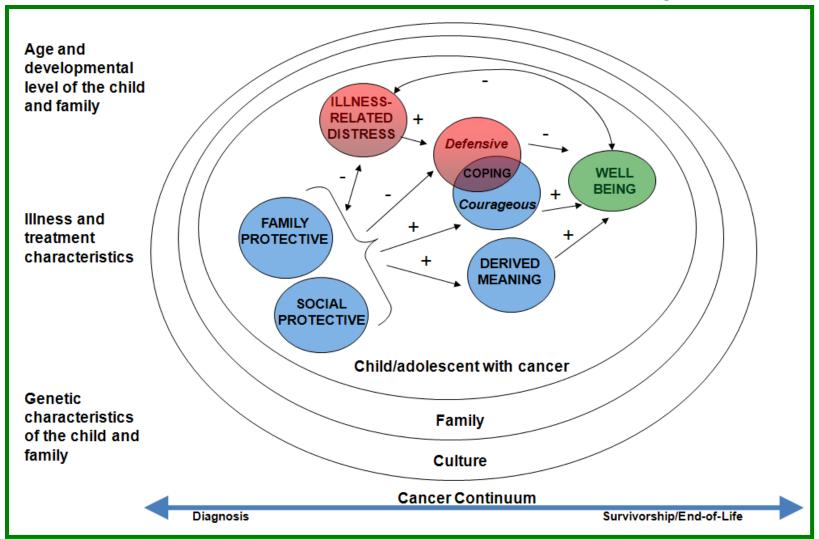
And we could all use some kind of CURE...





Children's Oncology Group Nursing Discipline Committee Organizing Framework

Resilience in Individuals and Families Affected by Cancer



Kelly, K. P., Hooke, M. C., Ruccione, K., Landier, W., & **Haase, J.** (2014) Developing an organizing framework to guide nursing research in the Children's Oncology Group (COG).SEMINARS IN ONCOLOGY NURSING. DOI:10.1016/j.soncn.2013.12.004.

COG Nursing Discipline Guiding Values

- Child and adolescent/young adult (AYA) at the core
- Directly solicit child's perspective
- Cancer a family experience
- Social/ecological features important
- Positive health approaches
- Strengths-based perspective -- focus on meaning of the cancer experience
- Importance of the child's symptom experience
- Distal outcome of care = sense of wellbeing in context of illness
- Goal: help children and their families transcend the illness

Two Randomized Control Trials In AYA with Cancer



■National Institute of Nursing Research R01 NR008583 (Haase, PI; Robb, Co-PI)

■Children's Oncology Group ANUR0631 National Cancer Institute U10 CA098543 & U10 CA095861 (Cochairs: Haase & Robb)



Stories through Music for AYA Resilience during Treatment and Parents

■Children's Oncology Group ANUR0631 National Cancer Institute U10 CA098543 & U10 CA095861 (Co-chairs: Haase & Robb)

Robb's Contextual Support Model of Music Therapy

Motivational Theory of Coping (Skinner & Wellborn, 1994)

- Coping as a function of behavior regulation
- Fundamental Psychological Needs
 - Competence
 - Autonomy
 - Relationships
- Drives influence and direct human behavior
- Attributes of environment & self interact
 - Influences the appraisal process
 - Influences resulting action

Robb, S.L. (2000). The effect of therapeutic music interventions on the behavior of hospitalized children in isolation: Developing a contextual support model of music therapy. *Journal of Music Therapy*, *37*, 118-146.

SMART I Study Design

- Phase II randomized control trial
- Two groups:
 - TMV (experimental)
 - Audiobooks (low dose control)
 - Stratified by site and age (11-13, 14-17,18-24)
- Six intervention sessions delivered by board certified music therapist over 3 weeks
- Outcomes measured at baseline, post-intervention, and 100 days post-transplant
- Brief symptoms measured pre- & post-sessions 2, 4, and 6.

Contextual Support Model of Music Therapy (CSM-MT)

TMV designed to improve positive health outcomes via multiple RIM paths. Elements of structure, autonomy support, and relationship support essential to active AYA involvement in song writing & video production.

TMV Intervention Components	TMV Process Outcomes	RIM Latent Variables
 Predictability Familiar, predictable music Song scripts Storyboards Leveled Involvement Autonomy Support	Predictable structure supports active engagement in the intervention by choosing/creating contents of music video (music, photos, lyrics)	Courageous coping Defensive coping Illness-related distress
 AYA-Directed Choices (music, lyrics, visual images, vocalists, involving others) Quality Product 	Reflect on their experiences; Identify what is important to them	Spiritual perspective Social integration Family environment
 Supportive Relationships Music to communicate unspoken thoughts, feelings, dreams for future 	Identify hopes/desires for the future	Hope-derived meaning
 AYA-Centered Family, peer, healthcare provider involvement 	Involve family, peers, and/or healthcare providers in project as desired	Social integration Family environment
	Communicate their ideas to others	Social integration Family environment Courageous Coping Defensive Coping

Why a music video?

- Expressing the "unspoken"
 - "...very deep things like what she's been going through with this illness there was silence about that. With the video...she is talking now." (parent)
- Music as a non-threatening and appealing medium
 - "My favorite was writing...the music. Writing the words." (adolescent)
- Using the process to explore and "make sense" of the cancer experience
 - "Watching the video after transplant helps me remember...Just the hard times and the fun times I had." (adolescent)
- Sharing the video with others as a way to communicate and connect
- "So I was trying to go in depth there in the words. So people could hear [my]
- song and maybe understand it better." (adolescent)

Albert's Video: My Fight

Age 15

Melody: My Girl by the Temptations

Verse 1

I've got courage on a painful day. When it's hard at times, I've still got joy in the day.

Chorus

I guess y'all would say what would make me feel this way. My courage, my heart, my God—talkin' bout my fight, my fight.

Verse 2

I've got so much faith, the angels protect me.

I've got positivity and it runs through me.

Verse 3

I've got all the support that one child needs; I've got all the love from my friends and family.



SMART Sample (N = 113)

Inclusion Criteria	Exclusion Criteria
Oncology condition requiring SCT	Cognitive impairment precluding completion of measures/intervention
Both allogeneic and autologous	Cancer diagnoses not usually occurring in childhood/AYA populations
Ages 11 to 24 years inclusive	Married or Having Children

Mean Age:17.3 (3.8)

Gender: 42.5% female; 57.5 male

Autologous: 40.2%; Allogeneic: 59.8

Groups equivalent at baseline; exception religious activity



Effect Sizes for Latent Variable Outcomes

		Con-		Conen			Con-		Conen	
	TMV	trol	Tx	effect		TMV	trol	Tx	effect	
Factor	n	n	effect	size	P value	n	n	effect	size	P value
Illness-Related										
Distress	36	40	-0.686	-0.160	0.493	31	36	-0.487	-0.121	0.626
Coping-Defensive	36	40	0.855	0.199	0.393	31	36	-0.328	-0.082	0.743
Spiritual										
Perspective	40	40	1.283	0.291	0.199	30	37	1.805	0.450	0.071
Social Integration	39	40	1.015	0.231	0.310	31	37	2.197	0.543	0.028
Family										
Environment	40	40	1.374	0.311	0.169	30	37	2.659	0.663	0.008
Hope-Derived										
Meaning	40	40	-1.154	-0.261	0.248	30	37	0.734	0.183	0.463
Coping-										
Courageous	36	40	2.167	0.505	0.030	31	36	1.096	0.273	0.273
Self-										
Transcendence	36	40	0.737	0.172	0.461	31	36	1.706	0.424	0.088
Resilience	40	40	0.936	0.212	0.349	30	37	1.05	0.262	0.294

Summary & Next Steps: ANUR 1131

- TMV efficacious for positive growth in courageous coping, social integration, family environment
- RIM working as hypothesized to guide intervention design and evaluation
- Parent interview data indicate parents also derived benefit, but may need help to open/sustain dialogue about DVD content
- Testing Parent Intervention TMV Standard of Care for AYA
 - National Cancer Institute R01 CA162181 (Haase/Robb, MPIs)
 - Children's Oncology Group ANUR1131 National Cancer Institute; U10 CA098543 & U10 CA095861 (Haase/Robb, Co-Chairs)



JOURNAL OF ADOLESCENT HEALTH

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Original article

Parental Perspectives on a Behavioral Adolescent/Young Adult Resilience D the Children's Oncology Group

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Article history: Received October 5, 2011; Accepted May 9, 20 Keywords: Adolescent health services; Behavioral interventi Qualitative evaluation; Targeted intervention

10/8/2014

ARTICLE

Recruitment Strategies and Rates of a Multi-Site Behavioral Industry Publishing Corporation Nating Records and Practice Nating Records and Practice Publishing Corporation International Practice International Internation Adolescents



Adults With Research Article

Verna L. Hendricks-Ferguson, 1 Engaging Nurses in Research for a Randomized Clinical Trial CPON, Debra S. Burns, PhD, N of a Behavioral Health Intervention

(AC/PC), Celeste R. Phillips-Sal

Kristin A. Stegenga, PhD, RN, C

& Joan E. Haase, PhD, RN, FAA

ABSTRACT Introduction: To provide an overview of factors introduction: To provide an overview of factors i cruitment of adolescents and young adults (& search and recruitment rates and reasons for i a multicenter study entitled "Stories and Music cent/Young Adult Resilience during Transplant" Methods: A randomized clinical trial study desig The settings included 9 hospitals. The sample in (aged 11-24 years) who were undergoing a ste plant. Several instruments were used to measu

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The University of Texas Health Science Center at The University of Texas Healin Science Center at.
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Received 23 April 2013; Revised 30 July 2013; Aco

Academic Editor: Kate Khair Copyright © 2013 Lona Roll et al. This is an open

Nurse involvement in research is essential to th

Nurse involvement in research is essential to it participation challenges encountered by nurses p with research, adjusting to fluctuating staff and p with their knowledge of the research process. The Stories and Music for Adolescent/Young Admultisite, randomized, behavioral clinical trial o stem cell transplant for an oncology condition. To direct care nurses, advanced practice nurses, an coordinators, and physicians. Efforts to include disciplines in both academic and clinical settings

CIN: Computers, Informatics, Noming • Vol. 29, No. 6, 337-343 • Copyright © 2011 Wellers Kluwer Health I Lippincott Williams & Wikins

FEATURE ARTICLE

Psycho-Oncology Psycho-Oncology 20: 1193-1201 (2011)

Published online 29 September 2010 in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/pon.1845

Development an

of a Web-Based Ensuring treatment fidelity in a multi-site behavioral Management Sy intervention study: implementing NIH behavior change for a Randomiz consortium recommendations in the SMART trial

Adolescents and Indiana University, Indianapolis, Indiana Indiana University, Indianapolis, Indiana

Clinical Trial of Sheri L Robb¹⁴, Debra S. Burns², Sharron L. Docherty³ and Joan F. Hasse¹
Research in Nursing & Health, 2011, 34, 362-371

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Young Adults

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University School of Nursing 1111 Middle Drive, The Stories and Music for Adole

Received: 15 January 2010

Abstract

study (R01NR008583; U10CA09 Oncology Group randomized clir intervention for adolescents/young transplant. Treatment fidelity st Institutes of Health (NIH) Beha (BCC) recommendations and pr implementation in a large, multi-s 20 specific treatment fidelity stra correspond with NIH BCC recomm providers, (3) delivery of treatmer skills. Increased use and reporting reliability and validity of behavior model for the application of fideli absence of published literature, behavioral intervention studies.

Copyright © 2010 John Wiley & Keywords: behavioral intervention assurance monitoring; treatment fie

Principles and Strategies for Monitoring Data Collection Integrity in a Multi-Site Randomized Clinical Trial of a Behavioral Intervention

Celeste R. Phillips-Salimi, 10 Molly A. Do Melissa Lee,4 Jo

> University of Kentucky, 315 College of Nursing B *Children's Mercy Hosp ⁴Indiana University School of

Abstract: Although treatment fidelity rity of behavioral interventions have written about monitoring data collect the principles and strategies developed of the "Stories and Music for Adolesc Transplant" study (R01NR008583, U multi-site Children's Oncology Group therapy intervention for adolescents cell transplant. The principles and provide one model for development of integrity monitoring plan for behavior adapted by investigators and may be u application reviewers in evaluating pr Inc. Res Nurs Health 34:362-371, 2011

Randomized Clinical Trial of Therapeutic Music Video Intervention for Resilience Outcomes in Adolescents/Young Adults Undergoing Hematopoietic Stem Cell Transplant

A Report From the Children's Oncology Group

Sheri L. Robb, PhD, MT-BC1; Debra S. Burns, PhD, MT-BC2; Kristin A. Stegenga, PhD, RN3; Paul R. Haut, MD4; Patrick O. Monahan, PhD4; Jane Meza, PhD5; Timothy E. Stump, MA4; Brooke O. Cherven, MPH, RN6; Sharron L. Docherty, PhD, CPNP-AC/PC, RN7; Verna L. Hendricks-Ferguson, PhD, RN8; Elleen K. Kintner, PhD, RN8; Ann E. Haight, MD⁶; Donna A. Wall, MD¹⁰; and Joan E. Haase, PhD, RN, FAAN¹

BACKGROUND: To reduce the risk of adjustment problems associated with hematopoietic stem cell transplant (HSCT) for adoles cents/young adults (AYAs), we examined efficacy of a therapeutic music video (TMV) intervention delivered during the acute phase of HSCT to: 1) increase protective factors of spiritual perspective, social integration, family environment, courageous coping, and hope-derived meaning, 2) decrease risk factors of illness-related distress and defensive coping; and 3) increase outcomes of selftranscendence and reciliance METHODS: This was a multiple randomized controlled trial (COG-ANI/RO63) conducted at 8 Children's Oncology Group sites involving 113 AYAs aged 11-24 years undergoing myeloablative HSCT. Participants, randomized to the TMV or low-dose control (audiobooks) group, completed 6 sessions over 3 weeks with a board-certified music therapist. Variables were based on Haase's Resilience in Illness Model (RIM). Participants completed measures related to latent variables of illness-related dis tress, social integration, spiritual perspective, family environment, coping, hope-derived meaning, and resilience at baseline (TI), post overation (T2), and 100 days posttransplant (T3). RESULTS: At T2, the TMV group reported significantly better co (Effect Size [ES], 0.505; P = .030). At T3, the TMV group reported significantly better social integration (ES, 0.543; P = .028) and fam illy environment (ES, 0.663; P= 0.08), as well as moderate possionificant effect sizes for spiritual perspective (ES, 0.450; P= 0.71) and self-transcendence (ES, 0.424; P=.088). CONCLUSIONS: The TMV intervention improves positive health outcomes of courageous coping, social integration, and family environment during a high-risk cancer treatment. We recommend the TMV be examined in a hander normation of AYAs with high-risk cancers. Cancer 2013-000:000-000. © 2013 American Cancer Society

KEYWORDS: resilience, adolescents, young adult, cancer, music therapy, music, courageous coping, self-transcendence, family rela-

Haase

SMART II Rationale

- By adding a parent intervention component, to our already efficacious TMV we hypothesize that:
 - Parents will have less distress
 - Parents and AYA will perceive better family environment, that will lead to additional significant benefits for AYA not observed in previous trial

SMART Aims and Study Design

- Test efficacy of a therapeutic music video (TMV) intervention for adolescents/young adults during the acute phase of SCT
- Qualitatively evaluate the effectiveness of the TMV
- Two group, randomized, control design with 114 AYA with cancer, 11-24 years undergoing SCT for cancer

Figure 1. Conceptual Framework for Proposed Study (Includes AYA Outcomes from Current R01)

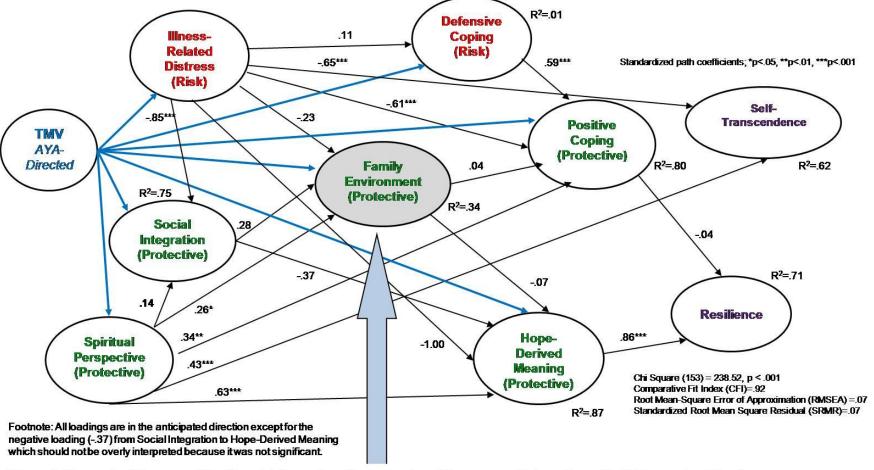
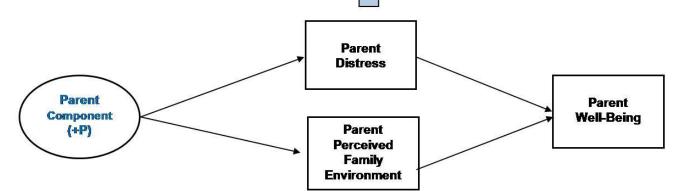


Figure 2. Conceptual Framework for Parent Intervention Component and its proposed interaction with AYA perceived Family Environment and Related Outcomes



SMART II Design

All sessions

done within 6-8 weeks

- Two-group randomized control trial
- AYA/Parent Dyads
 - 198 enrolled for 128 accrued
- Dyads randomized to TMV or TMV+P
 - All AYA receive the TMV as standard care
 - Parents in TMV group receive low dose control
 - Parents in TMV+P receive the parent intervention component

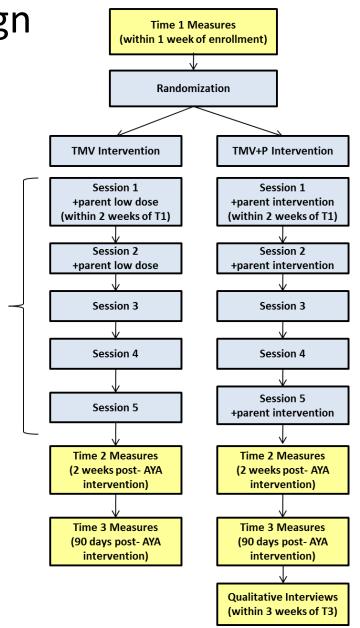


Figure: Study Schema

Program B Parent Intervention

- Tailored 60-minute sessions with a trained nurse
- Session content focuses on:
 - Managing the Chaos: Self-care as the First Step to Caring for Your AYA
 - Relationship Support: How to listen to and Encourage your
 AYA to Talk
 - Strategies for AYA Autonomy Support: Understanding AYA's
 Ways of Coping

Acknowledgment of Funding

National Institutes of Health

- National Institute of Nursing Research R01 NR008583 (Haase, PI; Robb, Co-PI)
- Children's Oncology Group ANUR0631 National Cancer Institute U10 CA098543 & U10 CA095861 (Co-chairs: Haase & Robb)
- National Institute of Nursing Research NR011071-02 (Co-PI)
 Hendricks-Ferguson & Haase

American Cancer Society

Institutional Grant for Pilot Study (Burns, PI)

Dialogue? Questions?

- Positive Health Perspective?
- Cross-cultural Perspectives of Resilience in Illness?
- Adaptations?
- Measurement?

