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# Psychosocial Effects and Coping Interventions for Hematopoietic Stem Cell Transplantation Patients Nursed in Isolation

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# Funding

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# Background

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- Infection control is among the top priorities during the bone marrow/stem cell transplantation process (Schlesinger et al., 2009).
- Infection prevention and isolation practices vary greatly between inpatient transplant centers (Dadd et al., 2003; Lee et al., 2008; van Tiel et al., 2005).
- A systematic review and meta-analysis of 29 studies was conducted to evaluate the existing evidence for infection control practices for stem-cell transplants and high risk cancer patients (Schlesinger et al., 2009).

# Background

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- Psychological intolerance of protective isolation was identified as a problem, leading to discontinuation of isolation in 2-42% of patients (Schlesinger et al., 2009).
- Positive coping has been associated with statistically significant impact on 5-year survival in bone marrow transplant patients (Tuschuschke et al., 2001).

# Context

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- Specialty BMT unit Academic Medical Center
- Stages of BMT
  - Decision
  - Preadmission
  - Conditioning
  - Transplantation
  - Discharge

# Research Aims

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(1) to explore isolated HCST patients perceptions of isolation

(2) to elicit suggestions for interventions to mediate the experience of isolation

# Participants

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- Purposive Sampling techniques engaged 10 participants ranging in age from 20-57
- Inclusion Criteria:
  - Isolated patients (one week or more) on the inpatient Bone Marrow Transplantation (BMT) unit of an academic medical center
  - Allogeneic Hematologic Stem Cell Recipients

# Participant Characteristics

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- Male 50% Female 50%
- Married 70% Single 30%
- High School 10% Some College 80%  
Graduate Degree 10%
- Had Children in the home 60%
- Faith-based Group 60%



# Research Design



- Qualitative methods
  - Action Research Model (Avison et al., 1999; Badger, 2000)
  - Photo Voice (Wang, 1999) in a subset of 4 participants
  
- Human Subjects Protection

# Data Collection

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- Demographic Information
- In-depth interviews
  - Sessions recorded and subsequently transcribed as verbatim narratives
- Participant generated photos
- Follow-up interviews centering on the participant photos

# Data Analysis

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- Comparative analysis methodology (Denzin & Lincoln, 2000; Lincoln and Guba, 1984).
- Themes identified from the narrative data and refined as the data analysis process proceeds.
- Participants selected the images most important to them to be represented

# Central Themes

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- ***Whatever it takes***

- *Getting Through*

- Connections
    - Environment
    - Routine
    - Expectations

- *Protecting Self*

- Attitude

# Experience of Protective Isolation



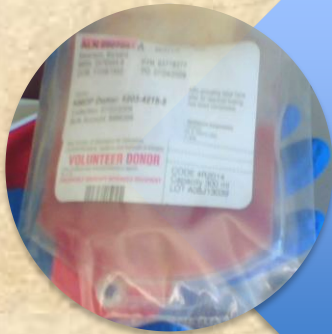
# Finding Out, Journey to Transplantation



Unique process  
leading to the  
journey of the stem  
cell transplantation



**Whatever it takes,  
that was my attitude**



*The most important thing is getting through this...I want to live, the focus had to be in doing this one thing well and forgetting about everything else, because if this doesn't happen nothing else matters.*



*When you come in here it's a commitment, there is no going back on it*

# Protecting Self



*...it was very easy for me to stay in my room. I do not want to be out there, you know I am in a vulnerable spot and this is for my protection.*



# Attitude



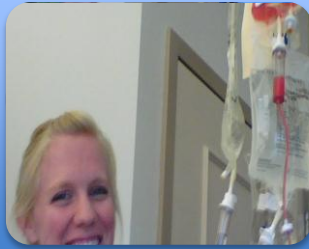
*...a positive  
attitude and  
make a  
difference.*



# Getting Through



*There is not a whole heck of a lot you could do, you just have to live through it*



## Connections

- Human & Virtual



## Expectations

- Formed expectations from experiences
- Information



## Environment

- Physical hospital room- creating a personal space
- Nursing unit, Procedural areas



## Routine

- Personal elements
- Hospital flow

# Work & Finance



Sick Leave; Health Insurance; Work Relationships

# Suggestions to Mediate

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- Suggestions included:
  - Open Internet connectivity
  - Exercise support
  - More comfortable chairs
  - Consistent use of whiteboard
- High level of satisfaction with the care they had received

# Implications for Practice

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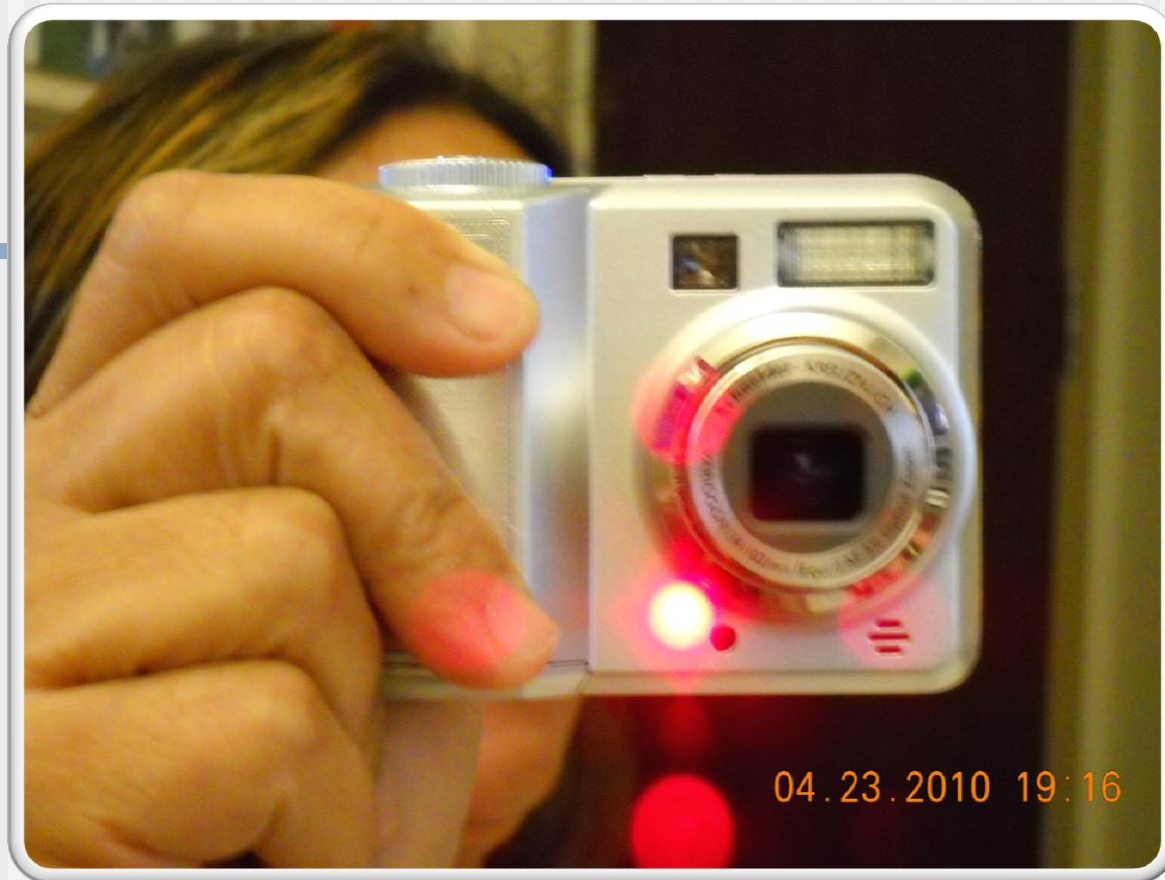
- Collaboration with information systems to open internet access for social networks for our patients.
- Collaboration with patient advocates to acquire several loaner laptops and network cards for patients without this resource.
- Informed the hospital design for the new cancer center under construction.

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