

Best Evidence Statement (BESt)

Date Published / Posted: January 17, 2011

Title: An EBP Project: Retention and Staff Satisfaction on Blood and Marrow Transplant Unit

Clinical Question

P (population/ problem)	Pediatric Registered Nurses in high acuity inpatient setting
I (intervention)	Staff psycho-social support program
C (comparison)	No support program
O (outcome)	Increased Staff satisfaction*

*Note: staff satisfaction includes decreased burnout, increased morale, increased retention and decreased turnover.

Target Population: Registered Nurses on the Blood and Marrow Transplant Unit

Recommendation: There is insufficient evidence and lack of consensus to make a recommendation on implementing a psycho-social support program to increase staff satisfaction on the Blood and Marrow Transplant Unit.

Discussion/summary of evidence: A search of the literature resulted in 95 articles, 2 of which directly discussed the PICO question. Sarantos (1988) [5a] discussed a psycho-social program on an adult and pediatric blood and marrow transplant unit (BMT) that was shown to have an impact on staff satisfaction and burnout. Services this program provided include: education on communication skills, problem solving, stress management and bereavement; interdisciplinary dialogues and an ethics forum; problem-solving discussions and patient care conferences (Sarantos, 1988)[5a]. Molassiotis and Haberman (1996)[4a] studied the above mentioned program and found that staff satisfaction was high and burnout was low on the unit with the psycho-social support program (Molassiotis & Haberman, 1996) [4a]. Grade for the body of evidence was low.

Implications/Directions for Future Research: Although there was little evidence on a psycho-social support program, there are many different interventions to combat compassion fatigue and burnout in the literature. Three main interventions according to the literature are mentoring programs, grief support, and education on coping skills (Halfer, Graf & Sullivan, 2008 [4a], Aycock & Boyle, 2009 [4a], Schaufeli, Leiter & Maslach, 2009 [5a]). These interventions could be incorporated into a psycho-social support program.

References/citations: (evidence grade in []; see Table of Evidence Levels following references)

Aycock, N. & Boyle, D. (2009). Interventions to manage compassion fatigue in oncology nursing. *Clinical Journal of Oncology Nursing*, 13(2), 183-191. [4a]

Halfer, D., Graf, E., & Sullivan, C. (2008). The organizational impact of a new graduate pediatric nurse mentoring program. *Nursing Economics*, 26(4), 243-249. [4a]

Hatcher, B., Bleich, M. R., Connolly, C., Davis, K., Hewlett, P. O., & Hill, K. S. (2006). *Wisdom at work: The importance of the older and experienced nurse in the workplace*. The Robert Wood Johnson Foundation. [5a]

Leiter, M. & Maslach, C. (2009) Nurse turnover: The mediating role of burnout. *Journal of Nursing Management, 17*, 331-339. [4a]

Molassiotis, A. & van den Akker, OBA. (1995) Psychological stress in nursing and medical staff on bone marrow transplant units. *Bone Marrow Transplantation, 15*, 449-454. [4a]

Molassiotis, A. & Haberman, M. (1996). Evaluation of burnout and job satisfaction in marrow transplant nurses. *Cancer Nursing, 19(5)*, 360-367. [4a]

Sarantos, S. (1988). Innovations in psychosocial staff support: A model program for the marrow transplant nurse. *Seminars in Oncology Nursing 4(1)*, 69-73. [5a]

Schaufeli, W., Leiter, M., & Maslach, C. (2009). Burnout: 35 years of research and practice. *Career Development International, 14(3)*, 204-220. [5a]

Stutzer, C. (1989). Work-related stresses of pediatric bone marrow transplant nurses. *Journal of Pediatric Oncology Nursing, 6(3)*, 70-78. [4b]

Note: Full tables of evidence grading system available in separate document:

- [Table of Evidence Levels of Individual Studies by Domain, Study Design, & Quality](#) (abbreviated table below)
- [Grading a Body of Evidence to Answer a Clinical Question](#)
- [Judging the Strength of a Recommendation](#) (abbreviated table below)

Table of Evidence Levels (see note above)

Quality level	Definition
1a† or 1b†	Systematic review, meta-analysis, or meta-synthesis of multiple studies
2a or 2b	Best study design for domain
3a or 3b	Fair study design for domain
4a or 4b	Weak study design for domain
5	Other: General review, expert opinion, case report, consensus report, or guideline

†a = good quality study; b = lesser quality study

Table of Recommendation Strength (see note above)

<i>Strength</i>	<i>Definition</i>
“Strongly recommended”	There is consensus that benefits clearly outweigh risks and burdens (or visa-versa for negative recommendations).
“Recommended”	There is consensus that benefits are closely balanced with risks and burdens.
No recommendation made	There is lack of consensus to direct development of a recommendation.
<p>Dimensions: In determining the strength of a recommendation, the development group makes a considered judgment in a consensus process that incorporates critically appraised evidence, clinical experience, and other dimensions as listed below.</p> <ol style="list-style-type: none"> 1. Grade of the Body of Evidence (see note above) 2. Safety / Harm 3. Health benefit to patient (<i>direct benefit</i>) 4. Burden to patient of adherence to recommendation (<i>cost, hassle, discomfort, pain, motivation, ability to adhere, time</i>) 5. Cost-effectiveness to healthcare system (<i>balance of cost / savings of resources, staff time, and supplies based on published studies or onsite analysis</i>) 6. Directness (<i>the extent to which the body of evidence directly answers the clinical question [population/problem, intervention, comparison, outcome]</i>) 7. Impact on morbidity/mortality or quality of life 	

Supporting information

Introductory/background information:

The pediatric bone marrow transplant unit at CCHMC is a 24 bed critical care unit that treats immunological diseases and several different cancers. Most families stay an average of at least a month and up to a year depending on complications that arise. This extended stay gives staff the opportunity to develop personal relationships while providing care to the patients and families. Grief and emotional stress can take a toll on staff as they meet the needs of the families as they go through the transplant process.

Work-related stress on the BMT unit impacts nurse retention, job satisfaction, and the quality of care being provided to patients. Work-related stressors include interpersonal communication, level of knowledge and skill, environment, patient care issues, management interaction, life events, and ethical/ philosophical issues (Stutzer, 1989) [4b]. Sources of emotional stress may be regularly working with dying patients, high job responsibility, rapidly advancing technology, and meeting the demands of patients and families (Molassiotis & van den Akker, 1995) [4a]. Work-related stress and emotional stress can lead to burnout. Burnout is defined as a combination of exhaustion, cynicism and detachment, and feelings of ineffectiveness or lack of accomplishment (Schaufeli, Leiter & Maslach, 2009 [5a], Leiter & Maslach, 2009 [4a]).

Burnout is influential in staff turnover and can lead to significant costs to an organization (Leiter & Maslach, 2009) [4a]. According to the Robert Wood Johnson Foundation (2006)[5a], the cost is one to two times the annual salary to replace an experienced staff RN, and specialty trained staff RNs have an even higher replacement cost. This report also stated that in hospitals with greater than 1000 RNs, the average cost to replace an RN was from \$43,667 to \$90,000.

Group/team members:

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Support Staff:

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Search strategy

A literature search was conducted from February 2010 through May 2010. Search terms included: job satisfaction, compassion fatigue, critical care, nursing, reflective supervision, secondary traumatization, support program, mentorship, burnout, Bone Marrow Transplant. The databases searched include: Ovid MEDLINE, Ovid CINAHL, and PsycINFO, and Cochrane. The search was limited to articles that were printed in English. No filters were applied for dates of publication of the literature. Listserv questions were also submitted to National Association of Children's Hospitals and Related Institutions (NACHRI) and Association for Pediatric Hematology Oncology Nurses (APHON).

Copies of this Best Evidence Statement (BEST) are available online and may be distributed by any organization for the global purpose of improving child health outcomes. Website address: <http://www.cincinnatichildrens.org/svc/alpha/h/health-policy/ev-based/default.htm>

Examples of approved uses of the BEST include the following:

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- the BEST may be adopted or adapted for use within the organization, provided that CCHMC receives appropriate attribution on all written or electronic documents; and
- copies may be provided to patients and the clinicians who manage their care.

Notification of CCHMC at HPCEInfo@cchmc.org for any BEST adopted, adapted, implemented or hyperlinked by the organization is appreciated.

For more information about CCHMC Best Evidence Statements and the development process, Center for Professional Excellence/Research and Evidence based Practice office at CPE-EBP-Group@chmcc.org

Note

This Best Evidence Statement addresses only key points of care for the target population; it is not intended to be a comprehensive practice guideline. These recommendations result from review of literature and practices current at the time of their formulation. This Best Evidence Statement does not preclude using care modalities proven efficacious in studies published subsequent to the current revision of this document. This document is not intended to impose standards of care preventing selective variances from the recommendations to meet the specific and unique requirements of individual patients. Adherence to this Statement is voluntary. The clinician in light of the individual circumstances presented by the patient must make the ultimate judgment regarding the priority of any specific procedure.

Reviewed against quality criteria by two independent reviewers.