

AD _____

Award Number: DAMD17-03-1-0298

TITLE: Improving Symptom Control, QOL, and Quality of Care for
Women with Breast Cancer: Developing a Research Program
on Neurological Effects Via Doctoral Education

PRINCIPAL INVESTIGATOR: Marie Bakitas
Tim A. Ahles, Ph.D.

CONTRACTING ORGANIZATION: Dartmouth College
Hanover, New Hampshire 03755-1404

REPORT DATE: May 2005

TYPE OF REPORT: Annual Summary

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;
Distribution Unlimited

The views, opinions and/or findings contained in this report are
those of the author(s) and should not be construed as an official
Department of the Army position, policy or decision unless so
designated by other documentation.

20050715 058

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 074-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE May 2005	3. REPORT TYPE AND DATES COVERED Annual Summary (15 Apr 2004 - 14 Apr 2005)
--	-----------------------------------	---

4. TITLE AND SUBTITLE Improving Symptom Control, QOL, and Quality of Care for Women with Breast Cancer: Developing a Research Program on Neurological Effects Via Doctoral Education	5. FUNDING NUMBERS DAMD17-03-1-0298
--	---

6. AUTHOR(S)
Marie Bakitas
Tim A. Ahles, Ph.D.

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Dartmouth College
Hanover, New Hampshire 03755-1404

E-Mail: Marie.bakitas@dartmouth.edu

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

8. PERFORMING ORGANIZATION REPORT NUMBER

10. SPONSORING / MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for Public Release; Distribution Unlimited

12b. DISTRIBUTION CODE

13. ABSTRACT (Maximum 200 Words)

The **purpose** of this traineeship is to develop the academic and research skills of an expert advanced practice nurse towards achieving the career goal of becoming a Clinical Breast Cancer Research Scientist. In conjunction with the doctoral program, through a mentored research experience Ms. Bakitas is expanding an established research program on CNS effects of breast cancer treatment by developing a parallel focus on the peripheral nervous system effects of chemotherapy, (Chemotherapy-Induced Peripheral Neuropathy [CIPN]), on quality of life. The major **achievements** of the trainee at this **annual report** are successful accomplishment of the planned training activities/tasks originally outlined for the second year, with an additional achievement of ongoing participation as a consultant in a funded neuropathic pain grant, abstract presentations, acceptance of doctoral proposal and acquiring an ACS doctoral scholarship. The significance of these achievements is that the training has provided for ongoing development of a clinical nurse expert towards development of a program of breast cancer research.

14. SUBJECT TERMS
Cancer control, outcomes research, quality of life, symptom management, neurological effects, doctoral education

15. NUMBER OF PAGES
37

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT
Unclassified

18. SECURITY CLASSIFICATION OF THIS PAGE
Unclassified

19. SECURITY CLASSIFICATION OF ABSTRACT
Unclassified

20. LIMITATION OF ABSTRACT
Unlimited

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. Z39-18
298-102

Table of Contents

Cover.....	
SF 298.....	
Table of Contents.....	
Introduction.....	1
Body.....	1
Key Research Accomplishments.....	3
Reportable Outcomes.....	4
Conclusions.....	4
References.....	4
Appendices.....	5
A. Statement of Work	
Revised Statement of Work	
B. Poster Abstract Presented at the 7 th International Conference on Neuropathic Pain,	
Bermuda (11/04), at the 8 th National Conference on Cancer Nursing Research, Ft.	
Lauderdale, FL and at the 19 th Annual Neuroscience Day, DHMC, (2 /05)	
C. Transcript	
D. Conceptual Model of Trajectory of Neurological Effects	
E. Conceptual Model of CIPN Effects on QOL	
F. Updated Literature Review for Dissertation Proposal	

Introduction

This is the second year of a training grant that proposed an interdisciplinary, mentored, clinical research experience on the understudied area of neurological effects of breast cancer treatment through a doctoral training program. A no cost extension was granted thus extending the grant period to 14 May 06 (Months 25-36). Hence this annual report will summarize the accomplishments of Months 13-24 and will describe the anticipated work of the extension period (Months 25-36). A revised Statement of Work (revisions appear in bold) reflects the activities of the extension and has been modified slightly based on findings from the previous year's work (described below). The revised statement has been submitted (4/20/05) for approval to Ms. Kimbark and is included (in addition to the original statement of work) as Appendix A.

The purpose of this traineeship is to develop the academic and research skills of the trainee within the context of a doctoral nursing program and the mentor's funded program of research on (central nervous system) Cognitive Effects of Chemotherapy. The traineeship supports Ms. Bakitas in the long term career goal of developing as a Clinical Breast Cancer Research Scientist. Ms. Bakitas is expanding the Center for Psycho-oncology Program's focus on Central Nervous System/Cognitive Effects of Chemotherapy, by developing an independent, but related focus on the peripheral nervous system effects of chemotherapy (Chemotherapy-Induced Peripheral Neuropathy [CIPN]) on quality of life. Ms. Bakitas has made significant progress in accomplishing tasks described in the original statement of work. As a result of the findings from the first year and the approved dissertation proposal, the Statement of Work has been revised to focus on the understanding the symptom experience and quality of life effects from the perspective of the patient; a specific gap revealed through the past year's review of literature.

The traineeship continues to be based at two campuses: the Dartmouth Medical School/Norris Cotton Cancer Center, Lebanon, NH and Yale University, New Haven, CT. The trainee's research mentor, Tim Ahles, PhD, Director of Psycho-oncology Research, Norris Cotton Cancer Center supervises the trainee's clinical research skill development at Dartmouth. Professor Ruth McCorkle, PhD and dissertation chair, Tish Knobf, RN, PhD supervise the academic and research components at Yale University.

Body

This section is organized according to the Tasks listed in the revised Statement of Work (Appendix A). Achievements are reviewed and summarized for each of the original three tasks.

Task 1. Develop research skills and abilities, including measurement, data analysis, and conceptual model development in breast cancer research through mentorship and doctoral education. (Months 1-18)

The trainee successfully completed all of the proposed tasks according to the timeline. This was summarized in the accepted 03-04 report Tasks 1.a and 1.b are ongoing throughout the grant period. Tasks 1.f was completed in Dec. 04 when the trainee successfully defended her proposal and passed the Qualifying Exam. Task 1.g, study initiation occurred as of 1 April 05 with scientific review and IRB approval of the study. Task 1. h Dissertation advisement commenced in Summer 04 (see Transcript –Appendix

C) and will continue until successful defense of the dissertation, currently planned for April 06.

Task 2. Collect pilot data on chemotherapy-induced peripheral neurological (CIPN) effects in conjunction with serial neuropsychological and quality of life measures in women enrolled in a longitudinal study of cognitive effects of breast cancer treatment (Months 1-24; extension Months 25-36).

The trainee proposed a series of steps to understand the foundational theoretical, instrumental, and clinical skills necessary to perform appropriate assessment of chemotherapy-induced peripheral neuropathy (CIPN). A major finding from the empirical literature review Task 3a. (Bakitas, Smith, Cohen, & Fadul, 2004) (see Abstract –Appendix B) and consultation with neurological experts demonstrated a lack of consensus or gold standard in physical assessment and self-reported CIPN and quality of life. The multidisciplinary expert panel/project team composed of Dartmouth consultants (Cohen/Fadul/Smith) considered proposing a pilot study to validate a neuropathy tool modified for use in CIPN (the “reduced” Total Neuropathy Score (TNS) (Cavaletti et al., 2003; Chaudhry, Chaudhry, Crawford, Simmons-O'Brien, & Griffin, 2003). However, further study revealed basic flaws in the ability of this new tool to elicit a patient-based understanding of symptoms and quality of life information. Therefore, the trainee has focused the dissertation proposal on addressing this gap in our current understanding of chemotherapy-induced neuropathy. (See further development of this under Task 3).

Per Task 2.c, the FACT-TAXANE was added to the serial measures conducted in two of the mentor's breast cancer studies: (Ahles) A Prospective, Longitudinal Study of the Cognitive Effects of Chemotherapy, and (Ahles/Saykin): Neural Mechanisms of Chemotherapy-Induced Cognitive Disorder. Recruitment is complete on the former study; data will be available on 67 breast cancer patients who have completed baseline, 1 month, 12 month, and 24 month questionnaires. The latter study is in an early stage and recruitment of 50 women receiving chemotherapy is planned. Preliminary analyses of the neurotoxicity data from the FACT is planned during the extension year. A very preliminary review of some completed questionnaires indicates less indication of neurotoxicity as rated in the questionnaire than is apparent in medical record review of these same women. Such discrepancy is what the current study will attempt to address.

Task 3. Identify gaps in knowledge, research hypotheses, and feasible methods to study and develop interventions as a basis for a doctoral dissertation and future program of research (Months 6-24; extension Months 25-36).

The trainee has been extremely productive in this area. The ongoing literature review (updated citations compiled in Appendix F) in conjunction with the Instrument Development Workshop and dissertation advisement provided the scientific basis for continuing development of the conceptual models, dissertation proposal and other activities related to the study of CIPN. The models (included in Appendix D and E) were reviewed and critiqued by the expert panel (Fadul/Cohen/DeLeo) and will next undergo modification based on empirical data from the dissertation.

A variety of activities occurred in relation to Task 3. f:

(1) The trainee attended three conferences in the preceding year that contributed to knowledge, research networking and dissertation proposal development: 1). July 19-

24- University of North Carolina-“Instrument Development”; 2). International Association for the Study of Pain (IASP) Special Interest Group on Pain Conference “Mechanisms and Treatment of Neuropathic Pain” November 4-6, 2004; and 3). 8th National Conference on Cancer Nursing Research, February 3-5, 2005. An abstract representing the trainee’s review of 45 cancer chemotherapy trials (1980-2004) that measured and reported CIPN was developed and submitted to the latter two conferences as well as locally at the 19th Annual Neuroscience Day at Dartmouth Medical School. The abstract was accepted for poster presentation at each forum, and received a 2nd place award at the Cancer Nursing Research Conference in the “Doctoral Student” division.

(2) As a consultant of the ONS Neuropathic Pain Outcomes Grant (described last report) the candidate has prepared and presented a lecture and training session for nurse practitioners to improve their assessment and examination skills in neuropathy and neuropathic pain. This is available on the Norris Cotton Cancer Center website. A related presentation, co-presented with expert, Joyce Deleo, PhD was published in January 2005 in CD Rom format for “Nurses-Digest Medical-Surgical Nursing”.

(3) As a result of research conferences networking on the topic of CIPN two additional activities have occurred: Ms. Bakitas was asked to prepare a summary of “Neurological Effects of Cancer Treatment” for the Oncology Nursing Society Research Agenda (2005-2007); and she also reviewed an evidence-based guideline on chemotherapy-induced peripheral neuropathy to be published on-line on the ONS site.

Task 3.g was completed (passing of Qualifying Exam) with successful preparation and defense of the dissertation proposal in Dec 04. The purpose of this exploratory, descriptive study is to explore, understand and describe the symptoms and quality of life issues that result from neurotoxic chemotherapy agents’ effect on the peripheral nervous system. Patients’ descriptions through open-ended, semi-structured interview will be the primary means used to understand the experience of living with CIPN (See Appendix G- Study Brochure).

The primary specific aims of the study are to:

- 1). Describe the CIPN symptom experience from the patient’s perspective;
- 2). Explore and describe the patient’s experience of living with CIPN.

This investigation will contribute to understanding and likely measurement/instrument refinement and /or development.

Key Research Accomplishments

- Completed doctoral coursework
- Passed Qualifying Examination
- Dissertation proposal completed, accepted by doctoral dissertation committee
- Dissertation proposal approved by Yale University and Dartmouth-Hitchcock Scientific Review and Human Subjects committees
- Dissertation study underway-April 2005
- Continued consultant role on funded research project on CIPN
- Synthesized and Presented CIPN literature for dissertation proposal, 3 accepted poster abstracts, and a manuscript in progress.

- Compiled and Presented "Neurological Effects of Cancer Treatment" Oncology Nursing Society Research Agenda (2005-2007)-To be published 5/05.
- Reviewer for "Chemotherapy-Induced Peripheral Neuropathy" an Oncology Nursing Society on-line evidence based guideline.
- Achieved American Cancer Society Doctoral Dissertation Scholarship (funding available 9/05-9/06)

Reportable Outcomes

The trainee has continued to participate as a consultant on a Neuropathic Pain funded research grant, and has contributed to national organizations CIPN-related science via serving as a contributor on Neurological Effects portion of the 05-07 ONS research agenda and as a reviewer of a soon to be released evidence-based guideline on CIPN. Poster abstracts, describing the foundational work of the dissertation related to measurement issue of CIPN, were accepted for presentation at international, national, and regional scientific meetings. A manuscript describing this in-depth analysis is being prepared for a peer-reviewed multidisciplinary journal. Lastly, the trainee has received notice of qualification for an American Cancer Society Doctoral Scholarship.

Conclusions

Through this training grant Ms. Bakitas has developed an independent doctoral dissertation proposal that is now underway in an understudied area of breast cancer research, namely chemotherapy-induced peripheral neuropathy. This study examines the patient's symptom experience of CIPN and its impact on quality of life. This research will contribute to an understanding of this dose-limiting effect that can significantly interfere with cancer treatment and quality of life. Furthermore, through this mentored, research training program, the trainee has made significant progress in developing a future career in clinical breast cancer research. This information will be presented this June at the Era of Hope Conference.

References

- Bakitas, M. A., Smith, E., Cohen, J., & Fadul, C. (2004, November 4-6). *Measurement issues in chemotherapy-induced peripheral neuropathy*. Paper presented at the International Conference on the Mechanisms and Treatment of Neuropathic Pain, Bermuda.
- Cavaletti, G., Bogliun G., Marzorati L., Zincone A., Piatti M., Colombo N., et al. (2003). Grading of chemotherapy-induced peripheral neurotoxicity using the Total Neuropathy Scale. *Neurology*, 61(9), 1297-1300.
- Chaudhry, V., Chaudhry, M., Crawford, T., Simmons-O'Brien, E., & Griffin, J. (2003). Toxic neuropathy in patients with pre-existing neuropathy. *Neurology*, 60, 337-340.
- Oncology Nursing Society. (2003). *Oncology Nursing Society: Research Agenda 2003-2005*. Pittsburgh, PA: Oncology Nursing Society.

Appendices

- A. Statement of Work
Revised Statement of Work**
- B. Poster Abstract Presented at the 7th International Conference on Neuropathic Pain, Bermuda (11/04), at the 8th National Conference on Cancer Nursing Research, Ft. Lauderdale, FL and at the 19th Annual Neuroscience Day, DHMC, (2 /05)**
- C. Transcript**
- D. Conceptual Model of Trajectory of Neurological Effects**
- E. Conceptual Model of CIPN Effects on QOL**
- F. Updated Literature Review for Dissertation Proposal**
- G. Recruitment Brochure for CIPN study**

Statement of Work

This statement of work provides an overview of a two year project in which the candidate will spend half of her week on the Yale Campus and half on the Dartmouth Campus.

Task 1. Develop research skills and abilities, including measurement, data analysis, and conceptual model development in breast cancer research through mentorship and doctoral education. (Months 1-18)

1. Weekly meeting with Dr. Ahles for mentored research supervision (Months 1-24)
2. Participate in 15 hrs/wk supervised Research Activities with doctoral faculty (Month 1-18)
3. Complete Year 1-Spring term (Months 1-5) and Year 2 –Fall and Spring (Months 9-17) required doctoral coursework (Yale)
4. Take Research Methods (CECS), Neurology, or Pharmacology Cognates (DMS) (Months 1-5, 9-12, 13-17)
5. Complete Preliminary Exam (at completion of 1st year of coursework) Month 6
6. Complete Qualifying Exam (at completion of 2nd year of coursework) Month 18
7. Dissertation underway (Month 21-completion)
8. Dissertation advisement (Month 21-completion)

Task 2. Collect pilot data on peripheral neurological (PN) effects in conjunction with serial neuropsychological and quality of life measures in women enrolled in a longitudinal study of cognitive effects of breast cancer treatment. (Months 1-18)

1. Precepted Clinical Neurological Examination Skills (Cohen/Fadul) (Months 1-3)
2. Precepted Neuropsychological Assessment Training (Ahles)
3. Refine and produce standardized neuropathy assessment tool (Cohen/Fadul) (Month 1-5)
4. Develop PN Data Management Procedures (Month 5)
5. Attend weekly meetings of Psychooncology Center for Research and Breast Cancer Tumor Board to identify breast cancer patients on study (Months 6-18)
6. Perform neuropathy assessment on breast cancer patients enrolled in Longitudinal Cognitive Effects (Months 6-18)

Task 3. Identify gaps in knowledge, research hypotheses, and feasible methods to study and develop interventions as a basis for a doctoral dissertation and future program of research (Months 6-24)

1. Perform Review of Literature on Neurological Effects (Months 6-9)
2. Perform Secondary analysis of existing data and summarize preliminary data (months 6-9)
3. Develop draft of a model of neurological effects of breast cancer treatment (Month 10)
4. Call expert panel meeting (Month 10 & 17)
5. Incorporate expert panel comments into model (Month 11-12)
6. Generate list of problems/hypotheses and methods to study, determine feasibility of conducting studies of above, determine funding sources, develop patient educational materials on CNS/PNS effects (Months 12-18)
7. g. Develop dissertation defense based on above to prepare for qualifying exam (Months 12-18)

Revised Statement of Work (4/20/05 to completion 5/06)

This statement of work provides an overview of a two year project in which the candidate will spend half of her week on the Yale Campus and half on the Dartmouth Campus. **A no-cost extension has been granted revising the statement of work to cover an additional year through 5/06).**

Task 1. Develop research skills and abilities, including measurement, data analysis, and conceptual model development in breast cancer research through mentorship and doctoral education. (Months 1-18)

- a. Weekly meeting with Dr. Ahles for mentored research supervision (Months 1-24)
 - b. Participate in 15 hrs/wk supervised Research Activities with doctoral faculty (Month 1-18)
 - c. Complete Year 1-Spring term (Months 1-5) and Year 2 –Fall and Spring (Months 9-17) required doctoral coursework (Yale)
 - d. Take Research Methods (CECS), Neurology, or Pharmacology Cognates (DMS) (Months 1-5, 9-12, 13-17)
 - e. Complete Preliminary Exam (at completion of 1st year of coursework) Month 6
 - f. Complete Qualifying Exam (at completion of 2nd year of coursework) Month 18
 - g. Dissertation underway (Month 21-completion)
 - h. Dissertation advisement (Month 21-completion)

Task 2. Collect pilot data on peripheral neurological (PN) effects in conjunction with serial neuropsychological and quality of life measures in women enrolled in a longitudinal study of cognitive effects of breast cancer treatment. (Months 1-18)

- a. Precepted Clinical Neurological Examination Skills (Cohen/Fadul) (Months 1-3)
- b. Precepted Neuropsychological Assessment Training (Ahles)
- c. **Revised: Incorporate FACT-TAXANE (neuropathy assessment) into Cognitive Studies (Months 10-26) and review preliminary data (Months 28-36)**
- d. **Review literature on neuropathy assessment (Cohen/Fadul/Smith) (Month 12-18)**
- e. **Evaluate CIPN measurement methods for use in dissertation proposal (Month 12-24)**
- f. **Submit Abstracts (Month 18) on measurement methods and develop manuscript for publication (Month 18-27).**
- g. Develop PN Data Management Procedures (Month 5)
- h. Attend weekly meetings of Psychooncology Center for Research and Breast Cancer Tumor Board to identify breast cancer patients on study (Months 6-18)
- i. **(Revised and incorporated this task into 2.c above) Perform neuropathy assessment on breast cancer patients enrolled in Longitudinal Cognitive Effects (Months 6-18)**

Task 3. Identify gaps in knowledge, research hypotheses, and feasible methods to study and develop interventions as a basis for a doctoral dissertation and future program of research (Months 6-24 **and extension Months 25-36**)

- a. Perform Review of Literature on Neurological Effects (Months 6-9)
- b. Perform Secondary analysis of existing data and summarize preliminary data (months 6-9)

- c. Develop draft of a model of neurological effects of breast cancer treatment (Month 10)
- d. Call expert panel meeting (Month 10 & 17)
- e. Incorporate expert panel comments into model (Month 11-12)
- f. Generate list of problems/hypotheses and methods to study, determine feasibility of conducting studies of above, determine funding sources, develop patient educational materials on CNS/PNS effects (Months 12-18)
- g. . Develop dissertation defense based on above to prepare for qualifying exam (Months 12-18)
- h. Perform on-going and final analysis of data from dissertation: (Months 25-36).**
- i. Dissertation defense: (proposed for Month 36).**

Appendix C.

Yale University Student Information System

Display Transcript



This is NOT an official transcript. A course for which a grade has not been submitted will appear separately under Courses in Progress.

If your course displays with '***' in the grade column, you must complete a course evaluation or indicate that you choose not to evaluate the course. Click on the link below the asterisks to go to the course evaluation page.

[Transfer Credit](#) [Institution Credit](#) [Courses in Progress](#)

Transcript Data

Registration ID: 1025427

This is NOT an Official Transcript

TRANSFER CREDIT ACCEPTED BY INSTITUTION -Top-

Spring 2003:		Dartmouth College		
Subject	Course	Title	Grade	Credit Hours
SPRG	2003	Survey Research Methods	CR	3.30

Unofficial Transcript

Spring 2004:		Dartmouth College		
Subject	Course	Title	Grade	Credit Hours
SPRG	2004	Health Policy 2	CR	3.30

Unofficial Transcript

INSTITUTION CREDIT -Top-

Fall 2002						
College:		Nursing School				
Subject	Course Title		Grade	Credit Hours	Grade Mode	Instructor
NURS	529	Statistics for Clin Nurs Res	H	0.00	Nursing	M. Funk
NURS	901	Methods for Nursing Research	H	3.00	Nursing	J. Dixon
NURS	913	Conceptual Bas for Nsg Science	H	3.00	Nursing	C. Gilless
						K. Knaff
NURS	915	Doc Research Prac I	H	1.00	Nursing	R. McCorkle
NURS	943	Conceptual Basis Self/Fam Mgt	H	3.00	Nursing	R. McCorkle
						G. Melkus
						K. Knaff

Unofficial Transcript

Spring 2003

College: Nursing School						
Subject	Course Title	Grade	Credit Hours	Grade Mode	Instructor	
NURS	904	Neuro Effects/Breast Canc Trtmt	H	3.00 Nursing	K. Knaff	
NURS	915	Doctoral Research Pract. II	H	1.00 Nursing	R. McCorkle	
NURS	917	Adv Stats for Clin Nurs Resrch	H	3.00 Nursing	G. Knaff	
NURS	943	Mthgcl Iss. Study Mgt Hlth & Illns	H	3.00 Nursing	M. Grey G. Melkus	

Unofficial Transcript

Fall 2003

College: Nursing School						
Subject	Course Title	Grade	Credit Hours	Grade Mode	Instructor	
NURS	805	Cancer Pharmacology	HP	1.50 Nursing	N. Beaulieu	
NURS	903	Measurement of Clin Variables	H	3.00 Nursing	J. Dixon	
NURS	907	Dissertation Seminar	YR	0.00 Nursing	R. McCorkle	
NURS	915	Doctoral Research Pract. II	RE	0.50 Nursing	R. McCorkle	
NURS	925	Qualitative Research in Nrsng	H	3.00 Nursing	K. Knaff	
NURS	961	Hlth Pol for Pub & Priv Sectrs	HP	3.00 Nursing	S. Cohen	

Unofficial Transcript

Spring 2004

College: Nursing School						
Subject	Course Title	Grade	Credit Hours	Grade Mode	Instructor	
CDE	534	Approaches to Data Management	H	3.00 Nursing	M. Desai	
NURS	905	Creating Method/Iss in Nurs Res	H	3.00 Nursing	J. Dixon	
NURS	907	Dissertation Seminar	H	3.00 Nursing	M. Grey	
NURS	915	Doctoral Research Pract. II	H	0.50 Nursing	R. McCorkle	
SOCY	560	Comparative Research Workshop	H	2.00 Nursing	I. Szelenyi A. Schrank	

Unofficial Transcript

Summer 2004

College: Nursing School						
Subject	Course Title	Grade	Credit Hours	Grade Mode	Instructor	
NURS	991	Dissertation Advisement	RE	2.00 Nursing	R. McCorkle	

Unofficial Transcript

Fall 2004

College: Nursing School						
Subject	Course Title	Grade	Credit Hours	Grade Mode	Instructor	
NURS	991	Dissertation Advisement	RE	3.00 Nursing	K. Knaff	

Unofficial Transcript**COURSES IN PROGRESS** [Top](#)

Spring 2005

College:

Nursing School

Subject

Course Title

Credit Hours

Grade Mode

Instructor

NURS

991

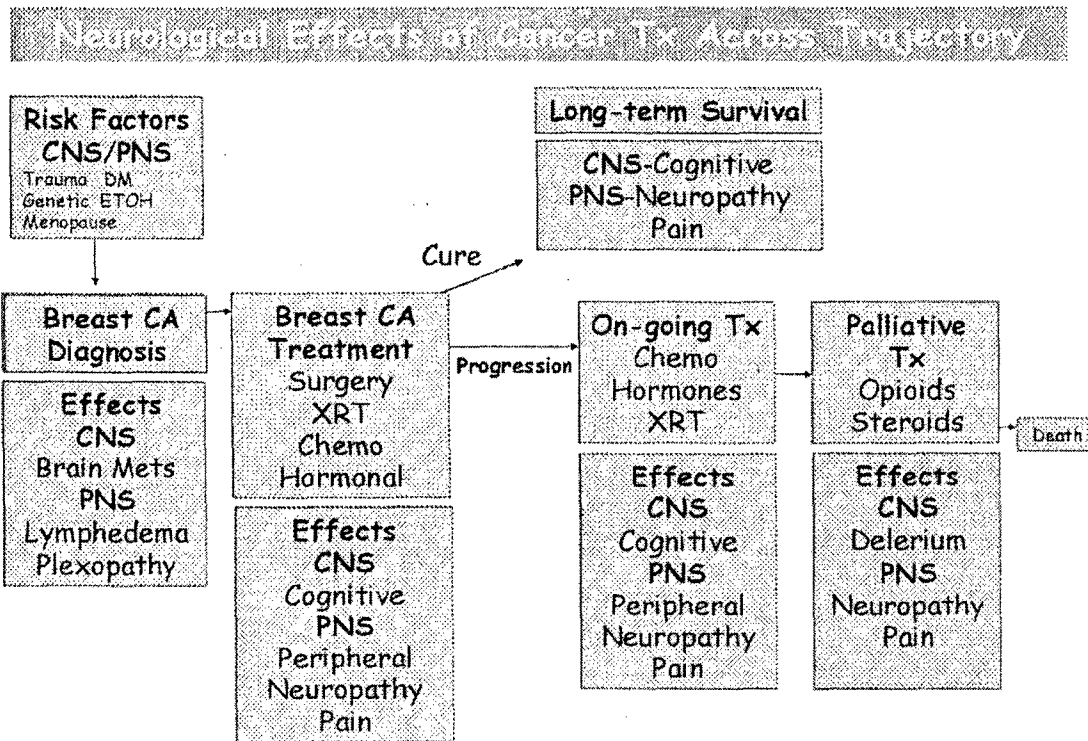
Dissertation Advisement

3.00 Nursing

M. Knobf

RELEASE: 5.5

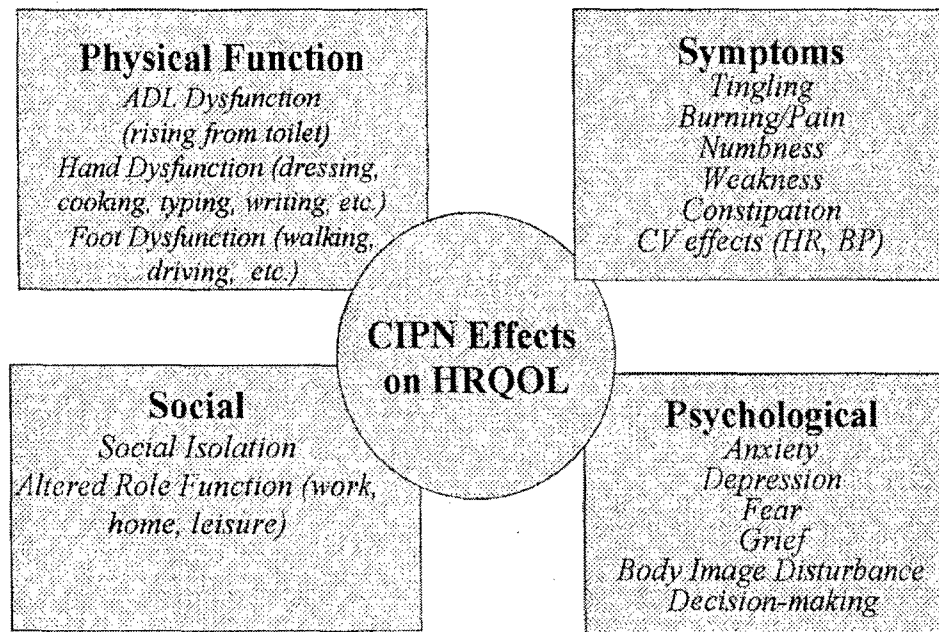
Appendix D.



Bakitas. 2003

Appendix E.

Proposed Model of CIPN Effects on QOL *



*Based on cancer chemotherapy and DM literature

Bakitas 2003

Appendix F.

1. Aaronson N.K. Quality of life research in cancer clinical trials: a need for common rules and language. *Oncology* 1990;4(5):59-66.
2. Aaronson N.K., Ahmedzai S., Bullinger M, et al: The EORTC core quality-of-life questionnaire: interim results of an international field study, in Osoba D (ed): *Effect of Cancer on Quality of Life*. New York: Raven Press, 1991, pp 185-203.
3. Aggarwal A. N., Gupta D., Lal V., et al. Ventilatory management of respiratory failure in patients with severe Guillain-Barre syndrome. *Neurology India*. 2003;51(2):203-205.
4. Ahles Tim A., Tope Denise M., Furstenberg Charlotte , et al. Psychologic and neuropsychologic impact of autologous bone marrow transplant. *Journal of Clinical Oncology* 1996;14(5):1457-1462.
5. Ahles Tim A., Whedon M. Chemo Brain: Cognitive impact of systemic chemotherapy. *Coping with Cancer* 1999;July/August):48.
6. Ahles Tim A., Saykin AJ. Breast cancer chemotherapy-related cognitive dysfunction. *Clin Breast Cancer* 2002;3(Suppl 3):S84-S90.
7. Ahles Tim A., Saykin Andrew J. Breast cancer chemotherapy-related cognitive dysfunction. *Clinical Breast Cancer* 2002;3(Supplement 3):S84-S90.
8. Ahles Tim A., Saykin AJ, Noll WW, al. et. Relationship of APOE genotype to neuropsychological performance in long-term cancer survivors treated with standard dose chemotherapy. *Psycho-Oncology* 2003;12(6):612-619.
9. Ajani JA, Welch SR, Raber MN, et al. Comprehensive criteria for assessing therapy-induced toxicity. *Cancer Investigation* 1990;8(2):147-159.
10. Allen R. Neuropathic Pain in the Cancer Patient. *Neuropathic Pain Syndromes* 1998;16(4):869-888.
11. Almadrones Lois, McGuire Deborah B., Walczak Janet Ruth, et al. Psychometric evaluation of two scales assessing functional status and peripheral neuropathy associated with chemotherapy for ovarian cancer: A Gynecologic Oncology Group study. *Oncology Nursing Forum* 2004;31(3):615-623.
12. Anderson PM, Ramsay NKC, Shu XO, et al. Effect of low-dose oral glutamine on painful stomatitis during bone marrow transplantation. *Bone Marrow Transplantation* 1998;22(3):39-44.
13. Anonymous. Effects of vinorelbine on quality of life and survival of elderly pateints with advanced non-small-cell lung cancer. The Elderly Lung Cancer Vinorelbine Italian Study Group. *Journal of the National Cancer Institute* 1999;91(1):66-72.
14. Arner S, Meyerson B. Lack of analgesic effect of opioids on neuropathic and idiopathic forms of pain. *Pain* 1988;33(1):1-23.
15. Austgen TR, Dudrick PS, Sitren H, et al. The effects of glutamine-enriched TPN on tumor growth and host tissues. *Annals of Surgery* 1992;215(2):107-113.
16. Backonja MM, Galer BS. Pain assessment and evaluation of patients who have neuropathic pain. *Neurologic Clinics* 1998;16(4):775-790.
17. Backonja Misha-Miroslav. Use of anticonvulsants for treatment of neuropathic pain. *Neurology* 2002;59(9):14S-17.
18. Bakitas Marie A.: Developing a Research Program on Neurological Effects of

Breast Cancer Treatment via Doctoral Education, in Department of Defense, Congressionally Directed Medical Research Programs: [Http://cdmrp.army.mil/cgi-bin/search/search_results.pl](http://cdmrp.army.mil/cgi-bin/search/search_results.pl), 2002

19. Bakitas Marie A., Smith EL, Cohen JA, Fadul C: Measurement issues in chemotherapy-induced peripheral neuropathy, in International Conference on the Mechanisms and Treatment of Neuropathic Pain. Bermuda, 2004, p Poster Presentation
20. Barajon I, Bersani M., Quartu M, et al. Neuropeptides and morphological changes in cisplatin-induced dorsal root ganglion neuronopathy. *Experimental Neurology* 1996;138(1):93-104.
21. Barreiro P., de Mendoza C., Camino N., et al. Hydroxyurea plus didanosine as maintenance therapy for HIV-infected patients on long-term successful highly active antiretroviral therapy. *HIV Clinical Trials*. 2003;4(6):361-371.
22. Barroso Julie, Sandelowski Margarete. In the field with the Beck Depression Inventory. *Qualitative Health Research* 2001;11(4):491-504.
23. Bartlett DL, Charland S, Torosian MH. Effects of glutamine on tumor and host growth. *Annals of Surgical Oncology* 1995;2(1):71-76.
24. Beck CT, Gable RK. Ensuring content validity: An illustration of the process. *Journal of Nursing Measurement* 2001;9(2):201-215.
25. Benbow SJ, Wallymahmed ME, Macfarlan IA. Diabetic peripheral neuropathy and quality of life. *Q J Med* 1998;91(733-737).
26. Benedetti F., S. Vighetti, C. Ricco, et al. Neurophysiologic assessment of nerve impairment in posterolateral and muscle-sparing thoracotomy. *Journal of Thoracic & Cardiovascular Surgery* 1998;115(4):841-847.
27. Benner Patricia: *Interpretive Phenomenology: Embodiment, Caring, and Ethics in Health and Illness*. Thousand Oaks, CA: Sage Publications, 1994
28. Beydoun A, Nasreddine W. Pharmacotherapy of Painful Peripheral Neuropathies. *Progress in Neurology*:3-7.
29. Blazeby Jane, Sprangers MAG, Cull A, et al: EORTC Quality of Life Group Guidelines for Developing Questionnaire Modules, 3rd edition, in. Brussels: EORTC, 2001
30. Bokemeyer C, Berger CC, Kuczyk MA, Schmoll H. Evaluation of long-term toxicity after chemotherapy for testicular cancer. *Journal of Clinical Oncology* 1996;14(11):2923-2932.
31. Bolay Hayrunnisa, Moskowitz Michael A. Mechanisms of pain modulation in chronic syndromes. *Neurology* 2002;59(90052):2S-7.
32. Boling W, Fouladi RT, Basen-Engquist K. Health-related quality of life in gynecological oncology: Instruments and psychometric properties. *International Journal of Gynecologic Oncology* 2003;13(5-14).
33. Bookbinder M: Nurse linkage agents efforts to facilitate the use of a research-based innovation, in *Nursing*. New York, New York: New York University, 1992
34. Bookbinder M, Whedon M: QUEST for pain relief: building "best practices"., in *Proceedings from the Twenty-sixth Annual Oncology Nursing Society Congress*. Podium presentation. San Diego, CA, 2001
35. Boyle FM, Wheeler HR, Shenfield GM. Glutamate ameliorates experimental vincristine neuropathy. *Journal of Pharmacology & Experimental Therapeutics* 1996;279(1):410-415.

36. Boyle F, Monk R, Davey R, et al: Prevention of experimental paclitaxel neuropathy with glutamate, in 87th Annual Meeting of the American Association for Cancer Research. Washington, D.C., USA, 1996, Vol 37, p 290
37. Boyle F, Monk R, Wheeler H, Shenfield G: The experimental neuroprotectant glutamate does not inhibit cytotoxicity of vinca alkaloids, cisplatin or paclitaxel, in Proceedings American Association for Cancer Research Annual Meeting. Eighty-eighth Annual Meeting of the American Association for Cancer Research, San Diego, California, USA, 1997, Vol 38, p 607
38. Boyle FM, Wheeler HR, Shenfield GM. Amelioration of experimental cisplatin and paclitaxel neuropathy with glutamate. *Journal of Neuro-Oncology* 1999;41(2):107-116.
39. Boyle FM, Beatson C, Monk R, et al. The experimental neuroprotectant leukaemia inhibitory factor (LIF) does not compromise antitumour activity of paclitaxel, cisplatin and carboplatin. *Cancer Chemotherapy & Pharmacology* 2001;48(6):429-434.
40. Bozzetti F, Biganzoli L, Gavazzi C, et al. Glutamine supplementation in cancer patients receiving chemotherapy: a double-blind randomized study. *Nutrition* 1997;13(7-8):748-751.
41. Brady M.J., Peterman A. H., Fitchett G., et al. A case for including spirituality in quality of life measurement in oncology. *Psycho-Oncology* 1999;8(5):417-428.
42. Breitmayer Bonnie J., Ayres Lioness, Knafl Kathleen. Triangulation in qualitative research: Evaluation of completeness and confirmation purposes. *Image: Journal of Nursing Scholarship* 1993;25(3):237-243.
43. Brenner J, Magill GB, Wissel P, Sordillo PP. Chemotherapy of patients with advanced soft tissue sarcoma with use of DVA (vindesine sulfate), adriamycin and cyclophosphamide (DAC). *Cancer* 1983;52(11):1142-1145.
44. Brink Pamela J., Wood Marilyn J.: *Advanced Design in Nursing Research*, Second Edition. Thousand Oaks, CA: SAGE Publications, Inc, 1998
45. Brod M. Pilot Study: Quality of life issues in patients with diabetes and lower extremity ulcers: patients and care givers. *Quality of Life Research* 1998;7(365-372).
46. Bunn PA, Kelly Karen. A phase I study of cisplatin, etoposide, and paclitaxel in small cell lung cancer. *Seminars in Oncology* 1997;24(4):S12-144-S112-148.
47. Burrows M, Dibble S, Miaskowski C. Differences in Outcomes Among Patients Experiencing Different Types of Cancer-Related Pain. *Burrows* 1998;25(4):735-741.
48. Caelli Kate, Ray Lynne, Mill Judy. 'Clear as mud': Toward greater clarity in generic qualitative research. *International Journal of Qualitative Methods* 2003;2(2):Article 1. Retrieved June 2004 from [Http://www.ualberta.ca/~iiqm/backissues/pdf/caellietal.pdf](http://www.ualberta.ca/~iiqm/backissues/pdf/caellietal.pdf).
49. Calhoun E, Fishman D, Roland P, et al. Validity and selective sensitivity of the FACT/GOG-Ntx. *Proceedings of ASCO* 19 2000;:Abstract 1751.
50. Calhoun Elizabeth A., Welshman Emily E., Chang Chih-Hung, et al. Psychometric evaluation of the Functional Assessment of Cancer Therapy/Gynecologic Oncology Group-Neurotoxicity (FACT/GOG-Ntx) Questionnaire for Patients Receiving Systemic Chemotherapy. *International Journal of Gynecologic Oncology* 2003;13(1-8).
51. Cancer Facts and Figures 2003.:
52. Cao Y, Feng Z, Hoos A, Klimberg VS. Glutamine enhances gut glutathione production. *Journal of Parenteral and Neteral Nutrition* 1998;22(224-227).

53. Cassidy J, Paul J, Soukop M, et al. Clinical trials of nimodipine as a potential neuroprotector in ovarian cancer patients treated with cisplatin. *Cancer Chemotherapy & Pharmacology* 1998;41(161-166).
54. Caussanel JP, Levi F, Brienza S, et al. Phase I trial of 5-day continuous infusion of oxaliplatin at circadian rhythm-modulated rate compared with constant rate. *Journal of the National Cancer Institute* 1990;82(12):1046-1050.
55. Cavaletti G, Bogliun G, Marzorati L, et al. Long-term peripheral neurotoxicity of cisplatin in patients with successfully treated epithelial ovarian cancer. *Anticancer Research* 1994;14(3B):1287-1292.
56. Cavaletti G., Bogliun G., Marzorati L., et al. Grading of chemotherapy-induced peripheral neurotoxicity using the Total Neuropathy Scale. *Neurology*. 2003;61(9):1297-1300.
57. Cella David, Cherin E. Quality of life during and after cancer treatment. *Comprehensive Therapy* 1988;14(5):69-75.
58. Cella David, Tulsky DS, Gray G, et al. The Functional Assessment of Cancer Therapy (FACT) Scale: Development and validation of the general measure. *Journal of Clinical Oncology* 1993;11(570-579).
59. Cella David, Bonomi AE. Measuring quality of life: 1995 Update. *Oncology* 1995;November Supplement(47-60).
60. Cella David, Paul Diane, Yount Susan, et al. What are the most important symptom targets when treating advanced cancers? A survey of providers in the National Comprehensive Cancer Network (NCCN). *Cancer Investigation* 2003;21(4):526-535.
61. Cella David, Peterman Amy, Hudgens Stacie, et al. Measuring the side effects of taxane therapy in oncology: The Functional Assessment of Cancer Therapy-Taxane (FACT-Taxane). *Cancer* 2003;98(4):822-831.
62. Cersosimo RJ. Cisplatin neurotoxicity. *Cancer Treatment Reviews* 1989;16(4):195-211.
63. Chakravarty A., Mukherjee S. C. Primary degenerative cerebellar ataxias in ethnic Bengalees in West Bengal: some observations. *Neurology India*. 2003;51(2):227-234.
64. Chang V.T., Ingham Jane. Symptom control. *Cancer Investigation* 2003;21(4):564-578.
65. Chaudhry V, Rowinsky EK, Sartious SE, et al. Peripheral neuropathy from taxol and cisplatin combination chemotherapy: Clinical and electrophysiological studies. *Annual Neurology* 1994;35(304-344).
66. Chaudhry V, Chaudhry M., Crawford TO, et al. Toxic neuropathy in patients with pre-existing neuropathy. *Neurology* 2003;60(337-340).
67. Cleeland CS: Measurement of pain by subjective report, in Chapman C, Loeser J (eds): *Advances in Pain Research and Therapy: Issues in Pain Measurement*. New York: Raven Press, 1989, Vol 12, pp 391-403.
68. Cockerham MB, Weinberger BB, Lerchie SB. Oral glutamine for the prevention of oral mucositis associated with high-dose paclitaxel and melphalan for autologous bone marrow transplantation. *Annals of Pharmacotherapeutics* 2000;34(300-303).
69. Coghlin Dickson TM, Wong RM, Negring RS, et al. Effect of oral glutamine supplementation during bone marrow transplantation. *Journal of Parenteral and Enteral Nutrition* 2000;24(61-66).
70. Colevas AD, Busse PM, Norris CM, et al. Induction chemotherapy with

docetaxel, cisplatin, fluorouracil, and leukovorin for squamous cell carcinoma of the head and neck: A Phase I/II trial. *Journal of Clinical Oncology* 1998;16(4):1331-1339.

71. Collins J, Grier H, Sethna N, et al. Regional anesthesia for pain associated with terminal pediatric malignancy. *Pain* 1996;65(63-69).

72. Connelly Lynne M, Bott Marge, Hoffart Nancy, Taunton Roma Lee. Methodological triangulation in a study of nurse retention. *Nursing Research* 1997;46(5):299-302.

73. Cornblath D, Chaudhry M., Carter K, et al. Total neuropathy score: Validation and reliability study. *Neurology* 1999;53(1660-1664).

74. Corson J, Schneider. The Dartmouth Pain Questionnaire: an Adjunct to the McGill Pain Questionnaire. *Pain* 1984;19(59-69).

75. Cox K. Assessing the quality of life of patients in phase I and II anti-cancer drug trials: interviews versus questionnaires. *Social Science & Medicine* 2003;56(921-934).

76. Cramond T: Invasive Techniques for Neuropathic Pain in Cancer, in Bruera E, Portenoy R (eds): *Topics in Palliative Care*. New York: Oxford University Press, 1998, pp 63-86.

77. Creswell John W.: *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications, 1998

78. Cros Didier: *Peripheral Neuropathy: A Practical Approach to Diagnosis and Management*. Philadelphia: Lippincott Williams and Wilkins, 2001

79. Daniele B, Perrone F, Gallo C, et al. Oral glutamine in the prevention of fluorouracil induced intestinal toxicity: a double blind, placebo controlled, randomised trial. *Gut* 2001;48(28-33).

80. Davies H, Crombie I, Macrae W. Why use a pain clinic? Management of neurogenic pain before and after referral. *Journal of Royal Society of Medicine* 1994;87(382-385).

81. Davies H, Crombie I, Macrae W, et al. Audit in pain clinics: Changing the management of low-back and nerve-damage pain. *Anaesthesia* 1996;51(641-646).

82. Decker GM. Glutamine: indicated in cancer care? *Clinical Journal of ONcology Nursing* 2002;6(2):112-115.

83. Decker-Baumann C, Buhl K, Frohumuller S, et al. Reduction of chemotherapy-induced side-effects by parenteral glutamine supplementation in patients with metastatic colorectal cancer. *European Journal of Cancer* 1999;35(2):202-207.

84. DeLeo J, Colburn R, Nichols M, Malhotra A. Interleukin-6-Mediated Hyperalgesia/Allodynia and Increased Spinal IL-6 Expression in a Rat Mononeuropathy Model. *Journal of Interferon and Cytokine Research* 1996;16(695-700).

85. DeLeo J, Colburn R, Rickman A. Cytokine and growth factor immunohistochemical spinal profiles in two animal models of mononeuropathy. *Brain Research* 1997;759(1):50-57.

86. Derry WB, Wilson L, Jordan MA. Substoichiometric binding of taxol suppresses microtubule dynamics. *Biochemistry* 1995;34(7):2203-2211.

87. DeVellis RF: *Scale development: Theory and applications*. Thousand Oaks: Sage, 2003, Vol 26

88. Dickenson AH, Matthews EA, Suzuki R: Central nervous system mechanisms of pain in peripheral neuropathy, in Hansson P, Fields H, Hill R, et al (eds): *Neuropathic Pain: Pathophysiology and Treatment*. Seattle: IASP Press, 2001, Vol 21, pp 85-106.

89. Diekelmann Nancy I., Schuster Robert, Lam Sui-Lun: MARTIN, a Computer Software Program, in Benner P (ed): Interpretive Phenomenology. Thousand Oaks, CA: Sage, 1995, pp 129-138.
90. Dixon Jane K: Factor Analysis, in Munro B (ed): Statistical methods for health care research. Philadelphia: Lippincott, 2001, pp 303-329.
91. Dworkin Robert H., Backonja Miroslav, Rowbotham Michael C., et al. Advances in Neuropathic Pain: Diagnosis, Mechanisms, and Treatment Recommendations. Archives of Neurology 2003;60(1524-1534.
92. Dzurec LC, Abraham IL. The nature of inquiry: linking quantitative and qualitative research. Advances in Nursing Science 1993;16(1):73-79.
93. Ellison N, Loprinzi C, Kugler J, et al. Phase III Placebo-Controlled Trial of Capsaicin Cream in the Management of Surgical neuropathic Pain in Cancer Patients. Journal of Clinical Oncology 1997;15(8):2974-2980.
94. Engersoll Gail L. Evidence-Based Nursing: What It Is and What It Isn't. Nursing Outlook 2000;42(151-152.
95. Espy KA, Moore IM, Kaufman PM, et al. Chemotherapeutic CNS prophylaxis and neuropsychologic change in children with acute lymphoblastic leukemia: A prospective study. Journal of Pediatric Psychology 2001;26(1-9.
96. Fahr MJ, Kornbluth J, Blossom S, et al. Glutamine enhances immunoregulation of tumor growth. Journal of Parenteral and Enteral Nutrition 1994;18(6):471-476.
97. Ferrell Betty R., Grant Marcia: Quality of life and symptoms, in King C, Hinds P (eds): Quality of Life From Nursing and Patient Perspectives. Boston: Jones and Bartlett Publishers, 2003, pp 199-217.
98. Fielding N.G., Lee R. M.: Computer analysis and qualitative research. London: Sage, 1998
99. Fisher, McPherson. Gabapentin (Neurontin, Parke-Davis). American Journal of Hospice and Palliative Care 1997;:311-312.
100. Fleury Julie. Preserving qualitative meaning in instrument development. Journal of Nursing Measurement 1993;1(2):135-144.
101. Foley KM. Opioids and chronic neuropathic pain. The New England Journal of Medicine 2003;348(13):1279-1281.
102. Forsyth P, Cairncross G, Stewart D, et al. Phase II trial of docetaxel in patients with recurrent malignant glioma: a study of the National Cancer Institute of Canada Clinical Trials Group. Investigational New Drugs 1996;14(203-206.
103. Forsyth P, Balmaceda C, Peterson K, et al. Prospective study of paclitaxel-induced peripheral neuropathy with quantitative sensory testing. Journal of Neuro-Oncology 1997;35(47-53.
104. Fossey Ellie, Harvey Carol, McDermott Fiona, Davidson Larry. Understanding and evaluating qualitative research. Australian and New Zealand Journal of Psychiatry 2002;36(717-732.
105. Fountzilas G, Tsavdaridis D, Kalogera-Fountzila A, et al. Weekly paclitaxel as first-line chemotherapy and trastuzumab in patients with advanced breast cancer: A Hellenic Cooperative Oncology Group phase II study. Annals of Oncology 2001;12(1545-1551.
106. Franklin Gary M.: Peripheral neuropathy, in Nelson LM, Tanner CM, Van Den Eeden SK, et al (eds): Neuroepidemiology: From Principles to Practice. Oxford: Oxford

University Press, 2004, pp 279-302.

107. Frasci G, Comella P, D'Aiuto G, et al. Weekly paclitaxel-cisplatin administration with G-CSF support in advanced breast cancer. A phase II study. *Breast Cancer Research and Treatment* 1998;49(13-26).
108. Freilich RI, Balmaceda C, Seidman AD, et al. Motor neuropathy due to docetaxel and paclitaxel. *Neurology* 1996;47(1):115-118.
109. Freyer Gilles, Hennebert Philippe, Awada Ahmad, et al. Influence of Amifostine on the Toxicity and Pharmacokinetics of Docetaxel in Metastatic Breast Cancer Patients: A Pilot Study. *Clin Cancer Res* 2002;8(1):95-102.
110. Fusco B, Giancovazzo M. Peppers and Pain: The Promise of Capsaicin. *Drugs* 1997;53(6):909-914.
111. Galer BS. Painful polyneuropathy: diagnosis, pathophysiology, and management. *Seminars in Neurology* 1994;14(3):237-246.
112. Galer Bradley S. Neuropathic pain of peripheral origin: Advances in pharmacologic treatment. *Neurology* 1995;45(9):S17-S25.
113. Galer B, Jensen M. Development and preliminary validation of a pain measure specific to neuropathic pain: The Neuropathic Pain Scale. *Neurology* 1997;48(2):332-338.
114. Galer BS. Painful polyneuropathy. *Neurologic Clinics* 1998;16(4):791-812.
115. Galer Bradley S, Gianas Ann, Jensen Mark P. Painful diabetic polyneuropathy: epidemiology, pain description, and quality of life. *Diabetes REsearch & Clinical Practice* 2000;47(2):123-128.
116. Gamelin Erick, Gamelin Lawrence, Bossi Laura, Quasthoff S. Clinical aspects and molecular basis of oxaliplatin neurotoxicity: Current management and development of preventative measures. *Seminars in Oncology* 2002;29(5, suppl 15):21-33.
117. Garcia J, Altman R. Chronic Pain States: Invasion Procedures. *Seminars in Arthritis and Rheumatism* 1997;27(3):156-160.
118. Garcia J, Altman R. Chronic Pain States: Pathophysiology and Medical Therapy. *Seminars in Arthritis and Rheumatism* 1997;27(1):1-16.
119. Garcia-Alvarez Ercilia, Lopez-Sintas Jordi. Contingency table: A two-way bridge between qualitative and quantitative methods. *Field Methods* 2002;14(3):270-287.
120. Gasparini G, Caffo O, Barni S, et al. Vinorelbine is an active antiproliferative agent in pretreated advanced breast cancer patients: A phase II study. *Journal of Clinical Oncology* 1994;12(10):2094-2101.
121. Gelmon K, Eisenhauer E., Bryce C., et al. Randomized phase II study of high-dose paclitaxel with or without amifostine in patients with metastatic breast cancer. *J Clin Oncol* 1999;17(10):3038-3047.
122. Gilron Ian, Bailey Joan M., Tu Dongsheng, et al. Morphine, Gabapentin, or Their Combination for Neuropathic Pain. *N Engl J Med* 2005;352(13):1324-1334.
123. Glaser B.G., Strauss A.L.: The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldine, 1967
124. Gogas H, Shapiro F, Aghajanian C, et al. The impact of diabetes mellitus on the toxicity of therapy for advanced ovarian cancer. *Gynecologic Oncology* 1996;61(1):22-26.
125. Goodwin Pamela J., Black Jeanne T., Bordeleau Louise J., Ganz Patricia A. Health-related quality-of-life measurement in randomized clinical trials in breast cancer--

- Taking stock. *Journal of the National Cancer Institute* 2003;95(4):263-281.
126. Gralla RJ, Casper ES, Kelsen DP, et al. Cisplatin and vindesine combination chemotherapy for advanced carcinoma of the lung: A randomized trial investigating two dosage schedules. *Annals of Internal Medicine* 1981;95(4):414-420.
127. Gregg RW, Molepo JM, Monpetit VJ, et al. Cisplatin neurotoxicity: the relationship between dosage, time, and platinum concentration in neurologic tissues, and morphologic evidence of toxicity. *Journal of Clinical Oncology* 1992;10(5):795-803.
128. Grond S, Radbruch L, Meuser T, et al. Assessment and treatment of neuropathic cancer pain following WHO guidelines. *Pain* 1999;79(15-20).
129. Haase Joan E., Bradden Carrie Jo: Conceptualization and measurement of quality of life and related concepts: Guidelines for clarity, in King C, Hinds P (eds): *Quality of Life: From Nursing and Patient Perspectives* 2nd edition. Boston: Jones and Bartlett Publishers, 2003, pp 65-91.
130. Haberman Mel R., Bush Nigel, Young K, Sullivan KM. Quality of life of adult long-term survivors of bone marrow transplantation: A qualitative analysis of narrative data. *Oncology Nursing Forum* 1993;20(10):1545-1553.
131. Haberman Mel R., Bush Nigel: Quality of life: Methodological and Measurement Issues, in King C, Hinds P (eds): *Quality of Life: From Nursing and Patient Perspectives* 2nd edition. Boston: Jones and Bartlett Publishers, 2003, pp 171-198.
132. Hainsworth JD, Burnett LS, Jones HW, et al. High-dose cisplatin combination chemotherapy in the treatment of advanced epithelial ovarian carcinoma. *Journal of Clinical Oncology* 1990;8(3):502-508.
133. Hansen SW. Late-effects after treatment for germ-cell cancer with cisplatin, vinblastine, and bleomycin. *Danish Medical Bulletin* 1992;39(5):391-399.
134. Hassey Dow K, Ferrell Betty R., Haberman Mel R., Eaton L. The meaning of quality of life in cancer survivorship. *Oncology Nursing Forum* 1999;26(3):519-528.
135. Henderson I. Craig, Berry Donald A., Demetri George D., et al. Improved Outcomes From Adding Sequential Paclitaxel but Not From Escalating Doxorubicin Dose in an Adjuvant Chemotherapy Regimen for Patients With Node-Positive Primary Breast Cancer. *J Clin Oncol* 2003;21(6):976-983.
136. Henderson-Martin B. Adverse effects of paclitaxel in patients with alcohol abuse histories. *Clinical Journal of Oncology Nursing* 2000;4(1):11-13.
137. Hensley ML, Schuchter LM, Lindley C, et al. American Society of Clinical Oncology clinical practice guidelines for the use of chemotherapy and radiotherapy protectants. *Journal of Clinical Oncology* 1999;17(10):3333-3355.
138. Hewitt D, Portenoy R: *Adjuvant Drugs for Neuropathic Cancer Pain*, in Bruera E, Portenoy R (eds): *Topic in Palliative Care*. New York: Oxford University Press, 1998, pp 41-62.
139. Hilken PHE, van der Burg MEL, Moll JWB, et al. Neurotoxicity is not enhanced by increased dose intensities of cisplatin administration. *European Journal of Cancer* 1995;31A(5):678-681.
140. Hilken PHE, Verweij J, Stoter G, et al. Peripheral neurotoxicity induced by docetaxel. *Neurology* 1996;46(1):104-108.
141. Hilken PHE, van den Bent MJ. Chemotherapy-induced peripheral neuropathy. *Journal of the Peripheral Nervous System* 1997;2(4):350-361.
142. Hogan JW, Laird NM. Mixture models for the joint distribution of repeated

measures and event times. *Statistics in Medicine* 1997;16(239-257).

143. Holland N, Crawford T, Hauer P, et al. Small-Fiber Sensory Neuropathies: Clinical Course and Neuropathology of Idiopathic Cases. *Annals of Neurology* 1998;44(1):47-59.
144. Huang EY, Leung SW, Wang CJ, et al. Oral glutamine to alleviate radiation-induced oral mucositis: a pilot randomized trial. *International Journal of Radiation Oncology, Biology, and Physics* 2000;46(3):535-539.
145. Imle Margaret A., Atwood Jan R. Retaining qualitative validity while gaining quantitative reliability and validity: Development of the transition to parenthood concerns scale. *Advances in Nursing Science* 1988;11(1):61-75.
146. Jadad A: Opioids in the Treatment of Neuropathic Pain: A Systematic Review of Controlled Clinical Trials, in Bruera E, Portenoy R (eds): *Topics in Palliative Care*. New York: Oxford University Press, 1998, pp 31-40.
147. Jebb SA, Osborne RJ, Maughant TS, Elia M. 5-fluorouracil and folinic acid induced mucositis: no effect of oral glutamine supplementation. *British Journal of Cancer* 1994;70(732-35)
148. Jemal A., Thomas A. , Murray T., Thun M. Cancer statistics, 2002. *CA Cancer Journal for Clinicians* 2002;52(1):23-45.
149. Jensen N. Accurate diagnosis and drug selection in chronic pain patients. *Postgrad Medicine Journal* 1991;67(2):S2-S8.
150. Jensen JC, Schaefer R, Nwokedi E, et al. Prevention of chronic radiation enteropathy by dietary glutamine. *Annals of Surgical Oncology* 1994;1(2):157-163.
151. Jones M, Munson J, Thompson S. A role for nerve growth in sympathetic sprouting in rat dorsal root ganglia. *Pain* 1999;79(21-29).
152. Juretic A. Glutamine requirements in the generation of LAK cells. *Clinical Nutrition* 1994;13(42).
153. Kandel ER, Schwartz JH, Jessell TM: *Principles of neural science*, ed 3rd. Norwalk, Conn: Appleton & Lange, 1991
154. Kelly Karen, Pan Z, Wood Marie E, et al. A Phase I study of paclitaxel, etoposide, and cisplatin in extensive stage small cell lung cancer. *Clinical Cancer Research* 1999;5(3419-3424).
155. Kelsen DP, Gralla RJ, Stoopler M, et al. Cisplatin, doxorubicin, cyclophosphamide, and vindesine combination chemotherapy for non-small cell lung cancer. *Cancer Treatment Reports* 1982;66(247-251).
156. Kingery W. A critical review of controlled clinical trials for peripheral neuropathic pain and complex regional pain syndromes. *Pain* 1997;73(123-139).
157. Klimberg VS, Souba WW, Dolson DJ, et al. Prophylactic glutamine protects the intestinal mucosa from radiation injury. *Cancer* 1990;66(62-68).
158. Klimberg VS, Kornbluth J, Cao Y, et al. Glutamine suppresses PGE2 synthesis and breast cancer growth. *Journal of Surgical Research* 1996;63(1):293-297.
159. Knafl Kathleen, Howard MJ. Interpreting and reporting qualitative research. *Research in Nursing and Health* 1984;7(17-24)
160. Knobf M. Tish. Symptom distress before, during, and after adjuvant breast cancer therapy. *Developments in Supportive Cancer Care* 2000;4(1):13-16.
161. Knobf M. Tish. The menopausal symptom experience in young mid-life women with breast cancer. *Cancer Nursing* 2001;24(3):201-210.

162. Knobf M, Tish. Carrying on: The experience of premature menopause in women with early stage breast cancer. *Nursing Research* 2002;51(1):9-16.
163. Kojiro Shimozuma MD, PhD,, Yasuo Ohashi PhD, Ayano Takeuchi, et al: Abstract # 6037; Validation of the Patient Neurotoxicity Questionnaire (PNQ) During Taxane Chemotherapy in a Phase III Randomized Trial in Patients with Breast Cancer: N-SAS BC 02, in Breast Cancer Symposium. San Antonio, 2004
164. Kornblith AB, Hollis DR, Zuckerman E, et al. Effect of megestrol acetate on quality of life in a dose-response trial in women with advanced breast cancer. The Cancer and Leukemia Group B. *Journal of Clinical Oncology* 1993;11(11):2081-2089.
165. Krarup-Hansen A, Fugleholm K, Helweg-Larsen S, et al. Examination of distal involvement in cisplatin-induced neuropathy in man. An electrophysiological and histological study with particular reference to touch receptor function. *Brain* 1993;116(Pt 5):1017-1041.
166. Labow BI, Souba WW. Glutamine. *World Journal of Surgery* 2000;24(12):1503-1513.
167. Lacave AJ, Baron FJ, Anton LM, et al. Combination chemotherapy with cisplatin and 5-fluorouracil 5-day infusion in the therapy of advanced gastric cancer: A phase II trial. *Annals of Oncology* 1991;2(751-754).
168. Lincoln Y.S., Guba E.G.: *Naturalistic inquiry*. Beverly Hills, CA: Sage, 1985
169. Lipman A. Analgesic Drugs for Neuropathic and Sympathetically Maintained Pain. *Clinics in Geriatric Medicine* 1996;12(3):501-515.
170. Lipton SA, Kater SB. Neurotransmitter regulation of neuronal outgrowth, plasticity and survival. *Trends in Neurosciences* 1989;12(265-270).
171. Lipton SA, Rosenberg PA. Excitatory amino acids as a final common pathway for neurologic disorders. *New England Journal of Medicine* 1994;330(613-622).
172. Lo Y. L., Leoh T. H., Dan Y. F., et al. An electrophysiological study of the deep peroneal sensory nerve. *European Neurology*. 2003;50(4):244-247.
173. Lowe DK, Benfell K, Smith RJ, et al. Safety of glutamine-enriched parenteral nutrient solutions in humans. *American Journal of Clinical Nutrition* 1990;52(6):1101-1106.
174. Lowenberg June S. Interpretive research methodology: Broadening the dialog. *Advances in Nursing Science* 1993;16(2):57-69.
175. Lynn MR. Determination and quantification of content validity. *Nursing Research* 1986;35(382-385).
176. Magari E, Hamel M, Wasson J. An Easy Way to Measure Quality of Physician-Patient Interactions. *Journal Ambulatory Care Manage* 1998;21(3):27-33.
177. Magy L., Chassande B., Maisonneuve T., et al. Polyneuropathy associated with IgG/IgA monoclonal gammopathy: a clinical and electrophysiological study of 15 cases. *European Journal of Neurology*. 2003;10(6):677-685.
178. Malgrange B, Delree P, Rigo JM, et al. Image analysis of neuritic regeneration by adult rat dorsal root ganglion neurons in culture: quantification of the neurotoxicity of anticancer agents and of its prevention by nerve growth factor or basic fibroblast growth factor but not brain-derived neurotrophic factor or neurotrophin-3. *Journal of Neuroscience Methods* 1994;53(1):111-122.
179. Markman M, Kennedy A, Webster Kenneth, et al. Combination chemotherapy

- with carboplatin and docetaxel in the treatment of cancers of the ovary and fallopian tube and primary carcinoma of the peritoneum. *Journal of Clinical Oncology* 2001;19(7):1901-1905.
180. Markman M. Can we do a better job preventing clinically-relevant peripheral neuropathy resulting from carboplatin/paclitaxel chemotherapy? *Cancer Investigation* 2004;22(3):471-473.
181. Marshall C, Rossman GB: *Designing qualitative research*. Thousand Oaks, CA: Sage, 1999
182. Martin L, Hagen N. Neuropathic Pain in Cancer Patients: Mechanisms, Syndromes, and Clinical Controversies. *Journal of Pain and Symptom Management* 1997;14(2):99-117.
183. Masse R. Qualitative and quantitative analyses of psychological distress: Methodological complementary and ontological incommensurability. *Qualitative Health Research* 2000;10(3):411-423.
184. Mast Merle Erb. Definition and measurement of quality of life in oncology nursing research: Review and theoretical implications. *Oncology Nursing Forum* 1995;22(6):957-964.
185. McDonald DD, Poudrier S, Gonzalez T, et al. Pain problems in young adults and pain reduction strategies. *Pain Management Nursing* 2002;3(81-86).
186. McGuire William P, Hoskins William J., Brady Mark F., et al. Cyclophosphamide and cisplatin compared with paclitaxel and cisplatin in patients with stage III and stage IV ovarian cancer. *The New England Journal of Medicine* 1996;334(1):1-6.
187. McQuay H, Carroll D, Jadad A, et al. Anticoliculants drugs for management of pain: a systematic review. *BMJ* 1995;311(1047-1052).
188. McQuay H, Tramer M, Nye B, et al. A systematic review of antidepressants in neuropathic pain. *Pain* 1996;68(2-3):217-227.
189. Medina MA, Sanchez-Jimenez F, Marquez J, et al. Relevance of glutamine metabolism to tumor cell growth. *Molecular & Cellular Biochemistry* 1992;113(1):1-15.
190. Meehan JL, Johnson BL. The neurotoxicity of antineoplastic agents. *Current Issues in Cancer Nursing Practice Updates* 1992;1(18):1-11.
191. Meggs W. J. Permanent paralysis at sites of dermal exposure to chlorpyrifos. *Journal of Toxicology - Clinical Toxicology*. 2003;41(6):883-886.
192. Mendell Jerry R, Sahenk Zarife. Painful sensory neuropathy. *New England Journal of Medicine* 2003;348(13):1243-1255.
193. Meyer-Rosberg K, Kvarnstrom A, Kinnman E, et al. Peripheral neuropathic pain - a multidimensional burden for patients. *European Journal of Pain* 2001;5(379-389).
194. Miles M., Huberman M.: *Qualitative data analysis: An expanded sourcebook*, 2nd edition. Thousand Oaks, CA: Sage, 1994
195. Miller AL. Therapeutic considerations of L-glutamine: a review of the literature. *Alternative Medicine Review* 1999;4(4):239-248.
196. Mollman JE, Glover DJ, Hogan WM, Furman RE. Cisplatin neuropathy: Risk factors, prognosis, and protection by WR-2721. *Cancer* 1988;61(2192-2195).
197. Moore RA, Tramer MR, Carroll D, et al. Quantitative systematic review of topically applied non-steroidal anti-inflammatory drugs. *BMJ* 1998;316(333-338).
198. Moore David H, Donnelly James, McGuire William P, et al. Limited access trial using amifostine for protection against cisplatin- and three-hour paclitaxel-induced

- neurotoxicity: A phase II study of the Gynecologic Oncology Group. *Journal of Clinical Oncology* 2003;21(22):4207-4213.
199. Morgan David L. Practical strategies for combining qualitative and quantitative methods: Applications to health research. *Qualitative Health Research* 1998;8(3):362-376.
200. Morita S, Kobayashi K, Eguchi K, et al. Influence of clinical parameters on quality of life during chemotherapy in patients with advanced non-small cell lung cancer: Application of a general linear model. *Japanese Journal of Clinical Oncology* 2003;33(9):470-476.
201. Morse Janice M., Hutchinson Sally A., Penrod Janice. From theory to practice: The development of assessment guides from qualitatively derived theory. *Qualitative Health Research* 1998;8(3):329-340.
202. Moulin D: Neuropathic Cancer Pain: Syndromes and Clinical Controversies, in Bruera E, Portenoy R (eds): *Topics in Palliative Care*. New York: Oxford University Press, 1998, pp 7-29.
203. Moustakas C.: *Phenomenological research methods*. Thousand Oaks, CA: Sage, 1994
204. National Cancer Institute: Common Terminology Criteria for Adverse Events (CTCAE), in. Bethesda, MD: National Institutes of Health, 2003
205. National Cancer Institute: Common Terminology Criteria for Adverse Events (CTCAE) Version 3.0, in. Bethesda: US Department of Health and Human Services: National Institute of Health; National Cancer Institute, 2003
206. Nelson EC, PB Batalden, JC Ryer: *Clinical Improvement Action Guide*. Oakbrook Terrace, IL: Joint Commission on Accreditation of Healthcare Organizations, 1998
207. Nunnally J. , Bernstein IH: *Psychometric theory* (3rd edition). New York: McGraw-Hill, 1994
208. Olin JJ. Cognitive function after systemic therapy for breast cancer. *Oncology* 2001;15(6):613-624.
209. Oncology Nursing Society: *Oncology Nursing Society: Research Agenda 2003-2005*, in. Pittsburgh, PA: Oncology Nursing Society, 2003
210. Ostchega Yechiam, Donohue Maggie, Fox Nina. High-dose cisplatin-related peripheral neuropathy. *Cancer Nursing* 1988;11(1):23-32.
211. Padilla GV, Ferrell Betty R., Grant Marcia, Rhiner M. Defining the content domain of quality of life for cancer patients with pain. *Cancer Nursing* 1990;13(2):108-115.
212. Parker James N., Parker Philip M.: *The Official Patient's Sourcebook On Peripheral Neuropathy: A Revised and Updated Directory for the Internet Age*. San Diego, CA: ICON Group International, Inc., 2002
213. Partridge AH, Burnstein HJ, Winer EP. Side effects of chemotherapy and combined chemohormonal therapy in women with early stage breast cancer. *Journal of the National Cancer Institute* 2001;30(135-142).
214. Passik SD, Kirsh KL: Diagnosis of psychiatric and psychological disorders in patients with cancer, in, ed 12.3: *UpToDate*, 2005, Vol 2005
215. Payne R. Practice Guidelines for Cancer Pain Therapy: Issues Pertinent to the Revision of National Guidelines. *NCCA Proceedings* 1998;12(11A):169-175.

216. Pearce IA, Cambray-Deakin MA, Burgoyne RD. Glutamate acting on NMDA receptors stimulates neurite outgrowth from cerebellar granule cells. *FEBS Letter* 1987;223(143-147).
217. Pearce S., Richardson A. Fatigue in cancer: a phenomenological perspective. *European Journal of Cancer* 1996;5(111-115).
218. Peltier AC, Russell JW. Recent advances in drug-induced neuropathies. *Current Opinion in Neurology* 2002;15(5):633-638.
219. Polomano Rosemary C., Bennett Gary J. Chemotherapy-evoked painful peripheral neuropathy. *Pain Medicine* 2001;2(1):8-14.
220. Portenoy RK (ed): *Neuropathic Pain*. Philadelphia: F.A. Davis, 1996
221. Portenoy R: Introduction: Neuropathic Pain: From Unresolved Questions to Clinical Practice, in Bruera E, Portenoy R (eds): *Topics in Palliative Care*. New York: Oxford University Press, 1998, pp 3-5.
222. Portenoy Russell. K. , Bruera Eduardo: *Issues in Palliative Care Research*. Oxford: Oxford University Press, 2003
223. Posner JB: Side effects of chemotherapy, in Reinhardt R, Wissler B, Massey R (eds): *Neurologic Complications of Cancer*. Philadelphia: F. A. Davis Company, 1995
224. Postma TJ, Vermorken JB, Liefting AJM, et al. Paclitaxel-induced neuropathy. *Annals of Oncology* 1995;6(489-494).
225. Postma T.J., Heimans J. J., Muller M.J., et al. Pitfalls in grading severity of chemotherapy-induced peripheral neuropathy. *Annals of Oncology* 1998;9(739-744).
226. Postma T.J., Heimans J. J., Aaronson N.K., et al. The impact of chemotherapy induced peripheral neuropathy on quality of life [Proceedings]. *Journal of Neurology, Neurosurgery, and Psychiatry* 1999;67(6):838-839.
227. Postma T.J., Heimans J. J. Grading of chemotherapy-induced peripheral neuropathy. *Annals of Oncology* 2000;11(509-513).
228. Pud D, Eisenberg E, Spitzer A, et al. The NMDA receptor antagonist amantadine reduces surgical neuropathic pain in cancer patients: a double blind, randomized, placebo controlled trial. *Pain* 1998;75(349-354).
229. Quasthoff S, Hartung HP. Chemotherapy-induced peripheral neuropathy. *Journal of Neurology* 2002;249(9-17).
230. Raja Srinivasa N., Haythornthwaite Jennifer A. Combination Therapy for Neuropathic Pain -- Which Drugs, Which Combination, Which Patients? *N Engl J Med* 2005;352(13):1373-1375.
231. Recchia F, Rea S, Nuzzo A, et al. Oxaliplatin fractionated over two days with bimonthly leucovorin and 5-fluorouracil in metastatic colorectal cancer. *Anticancer Research* 2004;24(1935-1940).
232. Rew Lynn, Bechtel Deborah, Sapp Aida. Self-as-instrument in qualitative research. *Nursing Research* 1993;42(300-301).
233. Rihoux Benoit. Bridging the gap between the qualitative and quantitative worlds? A retrospective and prospective view on qualitative comparative analysis. *Field Methods* 2003;15(4):351-365.
234. Roelofs RI, Hrushesky W, Rogin J, Rosenberg L. Peripheral sensory neuropathy and cisplatin chemotherapy. *Neurology*. 1984;34(7):934-938.
235. Rogers EM: *Diffusion of innovations*. New York: The Free Press, 1995, Vol 4th
236. Rose PG, Smrekar M. Improvement of paclitaxel-induced neuropathy by

- substitution of docetaxel for paclitaxel. *Gynecologic Oncology* 2003;91(423-425).
237. Rosner H, Rubin L, Kestenbaum A. Gabapentin Adjunctive Therapy in Neuropathic Pain States. *The Clinical Journal of Pain* 1996;12(1):56-58.
238. Rowinsky EK, Chaudhry V, Cornblath DR, Donehower RC. Neurotoxicity of taxol. *Journal of the National Cancer Institute. Monographs* 1993;15(107-115).
239. Rowinsky EK, Chaudhry V, Forastiere AA, et al. Phase I and pharmacologic study of paclitaxel and cisplatin with granulocyte colony-stimulating factor: Neuromuscular toxicity is dose-limiting. *Journal of Clinical Oncology* 1993;11(10):2010-2020.
240. Rudnik-Schoneborn S., Goebel H. H., Schlote W., et al. Classical infantile spinal muscular atrophy with SMN deficiency causes sensory neuronopathy. *Neurology*. 2003;60(6):983-987.
241. Ruppert Mary, Croarkin Earllaine. A review of four vibration sensation assessments used to examine chemotherapy induced neuropathy. *Rehabilitation Oncology* 2003;21(3):11-18.
242. Rushing EJ, Bouffard JP. Basic pathology of the peripheral nerve. *Neuroimaging Clinics of North America* 2004;14(43-53).
243. Rutledge DN, Bookbinder M. Processes and outcomes of evidence-based practice. *Seminars in Oncology Nursing* 2002;18(1):3-10.
244. Ryan GW, Bernard HR: Data Management and Analysis Methods, in Denzin NK, Lincoln YS (eds): *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage, 1994, pp 769-802.
245. Sandelowski Margarete, Davis Diane Holditch, Harris Betty Glenn. Artful design: Writing the proposal for research in the naturalist paradigm. *Research in Nursing and Health* 1989;12(77-84).
246. Sandelowski Margarete. Combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed-method studies. *Research in Nursing and Health* 2000;23(246-255).
247. Sandelowski Margarete. Whatever happened to qualitative description. *Research in Nursing and Health* 2000;23(334-340).
248. Savy GK. Enteral glutamine supplementation: clinical review and practical guidelines. *Nutrition in Clinical Practice* 1997;12(259-262).
249. Schagen Sanne B., van Dam Frits S.A.M., Muller Martin J., et al. Cognitive deficits after postoperative adjuvant chemotherapy for breast carcinoma. *Cancer* 1999;85(3):640-650.
250. Schloerb PR, Amare M. Total parenteral nutrition with glutamine in bone marrow transplantation and other clinical applications (A randomized, double-blind study). *Journal of Parenteral and Enteral Nutrition* 1993;17(407-413).
251. Schloerb PR, Skikne BS. Oral and parenteral glutamine in bone marrow transplantation: a randomized, double-blind study. *23* 1999;3(117-22)
252. Segal A, Rordorf G. Gabapentin as a novel treatment for postherpetic neuralgia. *American Academy of Neurology* 1996;46(4):1175-1176.
253. Senneff John A.: *Numb Toes and Aching Soles: Coping with Peripheral Neuropathy*. San Antonio, TX: MedPress, 1999
254. Senneff John A.: *Numb Toes and Other Woes*. San Antonio, TX: MedPress, 2001
255. Senneff John A.: *Nutrients for Neuropathy*. San Antonio, TX: MedPress, 2002

256. Seski JC, Edwards CL, Herson J, Rutledge FN. Cisplatin chemotherapy for disseminated endometrial cancer. *Obstetrics and Gynecology* 1982;59(225-228).
257. Shackney S, Pugh RP, Zidar BL, et al. ViVACCy-A drug schedule based on G2 blockade and prolonged infusion of multiple tubulin-binding agents: A pilot study. *Cancer* 1990;66(411-417).
258. Shade RJ, Pisters KMW, Huber MH, et al. Phase I study of paclitaxel administered by ten-day continuous infusion. *Investigational New Drugs* 1999;16(237-243).
259. Shimozuma K, Ohashi Y, Takeuchi A, et al: Validation of the Patient Neurotoxicity Questionnaire (PNQ) during Taxane chemotherapy in a phase III randomized trial of breast cancer: N-SAS BC O2, in *Breast Cancer*. San Antonio, 2004
260. Shy ME, Frohman EM, So YT, et al. Quantitative sensory testing: Report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. *American Academy of Neurology* 2003;60(898-904).
261. Skalla Karen, Bakitas Marie A., Furstenberg Charlotte, et al. Patients' need for information about cancer therapy. *Oncology Nursing Forum* 2004;31(2):313-319.
262. Smith G, Henderson IC. New treatments for breast cancer. *Seminars in Oncology* 1996;23(506-528).
263. Smith EL, Whedon MB, Bookbinder M. Quality improvement of painful peripheral neuropathy. *Seminars in Oncology Nursing* 2002;18(1):36-43.
264. Sommer C: Cytokines and neuropathic pain, in Hansson P, Fields H, Hill R, et al (eds): *Neuropathic Pain: Pathophysiology and Treatment*. Seattle: IASP Press, 2001, Vol 21, pp 37-62.
265. Sorrell JM, Redmond GM. Interviews in qualitative nursing research: differing approaches for ethnographic and phenomenological studies. *Journal of Advanced Nursing* 1995;21(1117-1122).
266. Souba WW, Smith RJ, Wilmore DW. Glutamine metabolism by the intestinal tract. *Jpn: Journal of Parenteral & Enteral Nutrition* 1985;9(5):608-617.
267. Souba WW. Glutamine and cancer. *Annals of Surgery* 1993;218(6):715-728.
268. Sprangers MAG, Cull A, Bjordal K, et al. The European Organization for Research and Treatment of Cancer approach to quality of life assessment: Guidelines for developing questionnaire modules. *Quality of Life Research* 1993;2(287-295).
269. Streiner DL, Norman GR: *Health Measurement Scales: A practical guide to their development and use*, 2nd edition. Oxford: Oxford Medical Publications, 2003
270. Sullivan-Bolyai Susan. Triangulation: Does data collection order matter? Unpublished manuscript 2003;
271. Sun Weijing, Stevenson James P., Gallagher Maryann L., et al. Phase I and pharmacokinetic trial of the novel taxane BMS-184476 administered as a 1-hour intravenous infusion in combination with cisplatin every 21 days. *Clinical Cancer Research* 2003;9(5221-5227).
272. Takahashi H, Miyazaki M, Nanbu T, et al. The NMDA-receptor antagonist ketamine abolishes neuropathic pain after epidural administration in a clinical case. *Pain* 1998;75(391-394).
273. Takimoto Chris H., Rowinsky Eric K. Dose-Intense Paclitaxel: Deja Vu All Over Again? *J Clin Oncol* 2003;21(15):2810-2814.
274. Tashakkori Abbas, Teddlie Charles: *Mixed methodology: Combining qualitative*

- and quantitative approaches. Thousand Oaks, CA: Sage, 1998, Vol 46
275. Teunissen LL, Eurelings M, Notermans NC, et al. Quality of life in patients with axonal polyneuropathy. *J Neurol* 2000;247(195-199).
276. Thant M, Hawley RJ, Smith MT, et al. Possible enhancement of vincristine neuropathy by VP-16. *Cancer* 1982;49(859-864).
277. Thigpen TJ, Blessing SA, Ball H, et al. Phase II trial of paclitaxel in patients with progressive ovarian carcinoma after platinum-based chemotherapy. *Clinical Oncology* 1994;12(1748-1753).
278. Thorne Sally, Kirkham Sheryl Reimer, MacDonald-Emes Janet. Interpretive description: A noncategorical qualitative alternative for developing nursing knowledge. *Research in Nursing and Health* 1997;20(169-177).
279. Tilden VP, Nelson CA, May BA. Use of qualitative methods to enhance content validity. *Nursing Research* 1990;39(172-175).
280. Tosi P, Zamagni E, Cellini C, et al. Salvage therapy with thalidomide in patients with advanced relapsed/refractory multiple myeloma. *Haematologica* 2002;87(408-414).
281. Tseng C. H. Abnormal current perception thresholds measured by neurometer among residents in blackfoot disease-hyperendemic villages in Taiwan. *Toxicology Letters*. 2003;146(1):27-36.
282. Vahdat L, Papadopoulos K, Lange D, et al. Reduction of paclitaxel-induced peripheral neuropathy with glutamine. *Clinical Cancer Research* 2001;7(1192-1197).
283. van Dam Frits S.A.M, Schagen Sanne B., Muller Martin J., et al. Impairment of cognitive function in women receiving adjuvant treatment for high-risk breast cancer: High-dose versus standard-dose chemotherapy. *Journal of the National Cancer Institute* 1998;90(3):210-218.
284. van den Bent MJ, van Putten WLJ, Hilken PHE, et al. Retreatment with dose-dense weekly cisplatin after previous cisplatin chemotherapy is not complicated by significant neuro-toxicity. *European Journal of Cancer* 2002;38(387-391).
285. Van Manen Max: Researching Lived Experience: Human Science for an Action Sensitive Pedagogy. New York: State University of New York, 1990
286. Vaur-Barriere C., Wong K., Weibel T. D., et al. Insertion of mutant proteolipid protein results in missorting of myelin proteins. *Annals of Neurology*. 2003;54(6):769-780.
287. Verstappen Carla C.P., Heimans J. J., Hoekman Klaas, Postma T.J. Neurotoxic complications of chemotherapy in patients with cancer: Clinical signs and optimal management. *Drugs* 2003;63(15):1549-1563.
288. Verstappen Carla C.P., Postma T.J., Hoekman Klaas, Heimans J. J. Peripheral neuropathy due to therapy with paclitaxel, gemcitabine, and cisplatin in patients with advanced ovarian cancer. *Journal of Neuro-Oncology* 2003;63(201-205).
289. Vickrey BG, Hays RD, Beckstrand M. Development of a health-related quality of life measure for peripheral neuropathy. *Neurorehabilitation and Neural Repair* 2000;14(93-104).
290. Vigano A, Fan D, Bruera E. Individual use of methadone and opioid rotation in the comprehensive management of cancer pain associated with poor prognostic indicators. *Pain* 1996;67(115-119).
291. Vileikyte Loretta, Peyrot Mark, Bundy Christine, et al. The development and validation of a neuropathy-and foot ulcer-specific quality of life instrument. *Diabetes*

Care 2003;26(9):2549-2555.

292. Visovsky C.: Characterization of chemotherapy-induced peripheral neuropathy, in School of Graduate Studies. Cleveland: Case Western Reserve University, 2002, p 123

293. Visovsky C. Chemotherapy-induced peripheral neuropathy. *Cancer Investigation* 2003;21(3):439-451.

294. Vorobiof DA, Rapoport BL, Chasen MR, et al. Phase II clinical trial of carboplatin and docetaxel in patients with metastatic ovarian cancer: Active combination with low incidence of peripheral neuropathy. *International Journal of Gynecologic Oncology* 2003;13(287-291).

295. Walch SE, Ahles Tim A., Saykin AJ: Cognitive sequelae of treatment in children, in Holland JF, al e (eds): Text book for Psycho-Oncology. New York: Oxford University Press, 1998

296. Walsh T. Antidepressants in Chronic Pain. *Clinical Neuropharmacology* 1983;6(4):271-295.

297. Wechsler R, E Frank, Halpern E, et al. Percutaneous Lumbar Sympathetic Plexus Catheter Placement for Short- and Long-Term Pain Relief: CT technique and Results. *Journal of Computer Assisted Tomography* 1998;22(4):518-523.

298. Weitzman Eben A. Analyzing qualitative data with computer software. *Health Services Research* 1999;34(5):1241-1263.

299. Weitzman Eben A.: Software and qualitative research, in Denzin NK, Lincoln YS (eds): *Handbook of Qualitative Research* 2nd edition. Thousand Oaks, CA: Sage Publications, Inc., 2000, pp 803-820.

300. Wen Patrick Y, Plotkin Scott R: Neurologic complications of cancer therapy, in: UpToDate Online 12.3, 2005, Vol 2005

301. Whedon Marie, Ferrell Betty R. Quality of life in adult bone marrow transplant patients: Beyond the first year. *Seminars in Oncology Nursing* 1994;10(1):42-57.

302. Whedon Marie, Stearns Diane, Mills Letha E. Quality of life and long-term adult survivors of autologous bone marrow transplantation. *Oncology Nursing Forum* 1995;22(10):1527-1537.

303. Wieneke MH, Dienst ER. Neuropsychological assessment of cognitive functioning following chemotherapy for breast cancer. *Psycho-Oncology* 1995;4(61-66).

304. Wiener S. Topical Capsaicin for Painful Diabetic Neuropathy. *ACP Journal Club* 1992;;50.

305. Wilson RH, Lehky Tanya, Thomas RR, et al. Acute oxaliplatin-induced peripheral nerve hyperexcitability. *J Clin Oncol* 2002;20(7):1767-1774.

306. Yoshida S, Matsui M, Shirouzu Y, et al. Effects of glutamine supplements and radiochemotherapy on systemic immune and gut barrier function in patients with advanced esophageal cancer. *Annals of Surgery* 1998;227(4):485-491.

307. Yoshida S, Kaibara A, Ishibashi N, Shirouzu K. Glutamine supplementation in cancer patients. *Nutrition* 2001;17(9):766-768.

308. Zieger TR, Young LS, Benefell K, et al. Clinical and metabolic efficacy of glutamine-supplemented parenteral nutrition after bone marrow transplantation. *Annals of Internal Medicine* 1992;116(10):821-828.

309. Zieger TR. Glutamine supplementation in bone marrow transplantation. *British Journal of Nutrition* 2002;87(1):S9-15.

310. Ziegler TR, Benfell K, Smith RJ, et al. Safety and metabolic effects of L-

glutamine administration in humans. Jpen: Journal of Parenteral & Enteral Nutrition 1990;14(4 Suppl):137S-146S.

311. Ziegler TR, Bye RL, Persinger RL, et al. Effects of glutamine supplementation on circulating lymphocytes after bone marrow transplantation: a pilot study. American Journal of the Medical Sciences 1998;315(1):4-10.

312. Ziegler TR. Glutamine supplementation in cancer patients receiving bone marrow transplantation and high dose chemotherapy. Journal of Nutrition 2001;131(2578S-2584S).

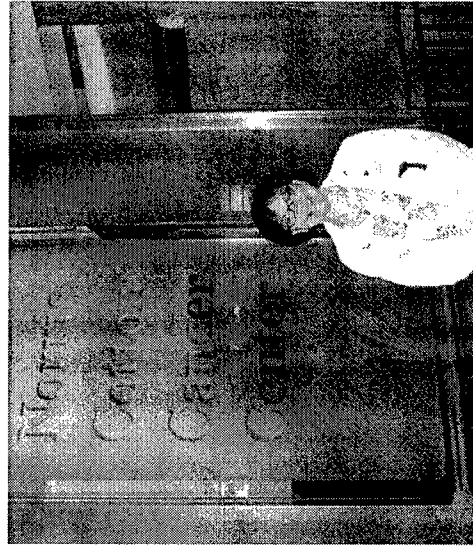
**Whom Do I Contact for More Information
Or To Enroll In the Study?**

Provide your Oncologist or Nurse Practitioner with your name, phone number or email. Marie Bakitas will contact you or you may contact Marie Bakitas by phone or email.

Who Is Conducting This Study?

Marie Bakitas, MS, ARNP
Nurse Practitioner
Norris Cotton Cancer Center,
Dartmouth-Hitchcock Medical Center

Doctoral Candidate
Yale University School of Nursing



 **NORRIS COTTON CANCER CENTER**
DARTMOUTH-HITCHCOCK MEDICAL CENTER
One Medical Center Drive / Lebanon, NH 03756 / 603-650-6300

Funded by:
Department of Defense,
Breast Cancer Research Program
and
American Cancer Society



Contact the Study:

Marie Bakitas, MS, ARNP
Phone: 603-653-3524

Email: marie.bakitas@dartmouth.edu

Dartmouth-Hitchcock Medical Center
1 Medical Center Drive
Lebanon, NH 03756

DMS 0505

UNDERSTANDING THE EXPERIENCE OF
**CHEMOTHERAPY-INDUCED
PERIPHERAL NEUROPATHY**

**WE NEED YOUR HELP WITH A
RESEARCH STUDY**



Do you have NUMBNESS, TINGLING,
BURNING or PAIN in your FEET and/or

HANDS from

CANCER CHEMOTHERAPY?

 **NORRIS COTTON CANCER CENTER**
DARTMOUTH-HITCHCOCK MEDICAL CENTER

Am I eligible?

If all of the statements below describe you, you may be eligible to participate in this study.

- If you have **peripheral neuropathy** caused by chemotherapy.
 - Peripheral neuropathy feels like “**pins and needles**”, **burning, numbness, or tingling in the feet and/or hands.**

- If you are receiving **chemotherapy** for any type of cancer.

-Platinums

- cisplatin (Platinol)
- carboplatin (Paraplatin)
- oxaliplatin (Eloxatin)

-Taxanes

- paclitaxel (Taxol)
- docetaxel (Taxotere)

-Plant Alkaloids

- vincristine (Oncovin)
- vinblastine (Velban)
- vinorelbine (Navelbine)

-Other

- thalidomide (Thalidomid)
- bortezomib (Velcade)

- If you did not have neuropathy before receiving chemotherapy.

- If you are 18 years of age or older.

What is the Study About?

The purpose of the study is to understand what it is like to have the chemotherapy side effect called **peripheral neuropathy**.

What Will I Be Asked To Do?

We will ask you to participate in an **interview** and complete **2 questionnaires**.

- In the interview a researcher will ask you to talk about your symptoms and how these may affect your everyday life.
- The two questionnaires will also ask about your symptoms.

The interview and questionnaires may take about an hour or longer. It will be done at a time and location that is convenient to you.

Why Is This Research Being Done?

This study will help doctors and nurses better understand the symptoms of peripheral neuropathy and how they can affect everyday life. When doctors and nurses understand these symptoms, they may be able to better recognize them. Better recognition may lead to improved treatment, comfort, and function during and after chemotherapy.

