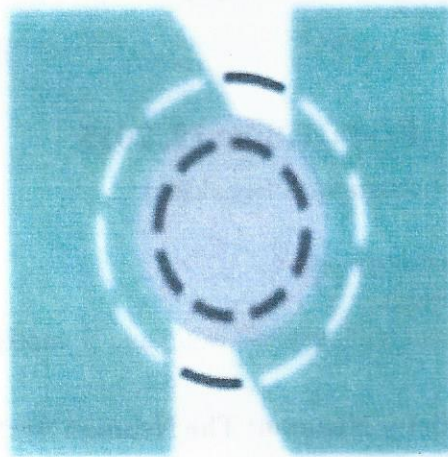


**15<sup>th</sup> International Biennial Neuman  
Systems Model Symposium**

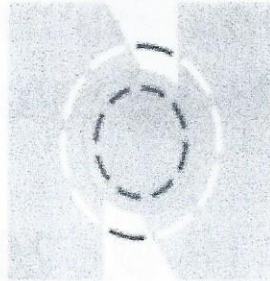
**June 18-20, 2015**

**Philadelphia, Pennsylvania  
USA**



# 15<sup>th</sup> International Biennial Neuman Systems Model Symposium

## *Preventions: A Global Perspective*



**Thursday, June 18, 2015**

3:00 – 6:00 **Registration**

5:00 – 7:00 **Opening Reception: Dr. Betty Neuman Archives @ Barbara Bates Center of History at the University of Pennsylvania**

*Dinner on Own – Enjoy Philadelphia!*

**Friday, June 19, 2015**

7:15 – 8:15 **Registration and Continental Breakfast**

8:15 – 8:30 **Welcome and Greetings**

Dr. Diane Breckenridge

President of the Neuman Trustees Group and Symposium Chairperson

8:30 – 9:30 **A Tribute to Dr. Betty Neuman: The Neuman Systems Model Through the Years**

Diane Breckenridge, PhD, MSN, RN, ANEF

Chair and Professor

National University, San Diego, CA

9:30 – 9:45 **Break**

9:45 – 10:10 **Concurrent Session A**

*Primary Prevention as Intervention: Application of the Neuman Systems Model to Socially Bullied Nurse Academics*

Diane M. Wieland, PhD MSN, RN, PMHCNS-BC; PMHNP-BC, CNE

LaSalle University, Philadelphia, PA, USA

**OR**

*Global Perspectives on Short-Term Medical Missions: Lessons from the Field*

Barbara T. Freese, RN, EdD, FRCNA

Lander University, Greenwood, SC, USA

**OR**

Poster Review/Silent Auction

10:15 – 10:40 **Concurrent Session B**

Testing the Relationships Between NLD Invasion, Lines of Resistance (and Reconstitution), and the Core with Mediation

Nancy Manister, DNS, FNP-BC, John Crawford NSM Research Fellow  
Fairfield University, Fairfield, CT, USA

Eileen Gigliotti, PhD, RN, & NSM Trustee

College of Staten Island, & The Graduate Center, City Univ. of New York, USA

**OR**

Poster Review/Silent Auction

10:45 – 11:10 **Concurrent Session C**

Looking Through the Lens of the Neuman Systems Model in Filipino Americans with Hypertension

Alona D. Angosta, PhD, APRN, NP-C, John Crawford NSM Research Fellow  
University of Nevada at Las Vegas, USA

**OR**

Poster Review/Silent Auction

11:15 – 11:40 **Concurrent Session D**

Social Issues as Neuman Systems Model Client Systems

Teri Aronowitz, RN, PhD, APRN; FNP-C

Jacqueline Fawcett, RN; PhD; FAAN, Professor & NSM Trustee  
University of Massachusetts Boston, USA

**OR**

Application of the Neuman Systems Model to Chronic Obstructive Pulmonary Disease

Victoria P. Randazzo, PhDc, CCRN

Marie Fongwa, PhD, RN

Leslie Van Dover, PhD, RN

Azusa Pacific Univ., Pasadena, CA, USA

**OR**

Poster Review/Silent Auction

11:45 – 12:10 **Concurrent Session E**

Culture of Hand Hygiene in a Pediatric Ambulatory Care Setting

Carol Bloch, PhD, RN, CTN-A, CNS

Carolyn Bloch, PhD, RN, CTN-A, CNS

Los Angeles County and USC Medical Center, Los Angeles, California, USA

**OR**

NSM Applications: Coaching Students to Grasp and Use Abstract Concepts

Sarah Beckman, MSN, BS, RN, & NSM Trustee

Indiana U/Purdue U at Fort Wayne, IN, USA

Dawn Pla, BS, RN, Teaching Assistant

The Dupont Hospital, Fort Wayne, Indiana, USA

**OR**

Poster Review/Silent Auction



- 12:15 - 1:15 **Luncheon & Panel**  
Panel Discussion  
Dr. Betty Neuman, Dr. Callista Roy, and Dr. Jacqueline Fawcett  
Moderator: Dr. Diane Breckenridge
- Silent Auction
- 1:15 – 2:00 **Business Meeting of NSMG Organization**  
Dr. Diane Breckenridge - NSM Trustees President, presiding  
(All Registrants are welcome)
- 2:00 – 2:45 **Staffed Posters**
- 3:00 – 3:25 **Concurrent Session F**  
Applying the Neuman Systems Model to Students' Clinical Experience  
Joan Timalonis RN, MSN, CNE  
Sharon M. Melincavage, DEd, RN, CRNP-BC, CNE  
Cedar Crest College, Allentown, PA, USA
- OR**
- An Evidence-Based Intervention on Parental Risk Perception & Knowledge Awareness to Change Screening Behaviors on Childhood Lead Poisoning in Children Aged 1-5  
Annette M. Minors, MSN, RN – BC  
Kathleen O'Rourke Vito, PhD, PHCNS-BC, RN, & NSM Trustee  
Felician College, Lodi, NJ, USA
- 3:30 – 3:55 **Concurrent Session G**  
Female Genital Mutilation: A Global Problem  
Tamatha Urffer, BSN, RN, MSN Student  
Karen Reesman, PhD, RN, NEA-BC, LNC  
Cedar Crest College, Allentown, PA, USA
- OR**
- Analysis of the Public Health Response to Ebola in the US: Lessons Learned  
Kathie Vito, PhD, PHCNS-BC, RN  
Felician College, Lodi, NJ, USA
- 4:00 – 4:25 **Concurrent Session H**  
Utilizing a Neuman-Based Clinical Evaluation Tool for 30 Years: How it Began and What it is Today  
Becky Salmon, MS, RN, CCRN  
Cheryl Bruick-Sorge MA, RN  
Sanna Boxley-Harges MA, RN, & NSM Trustee & Treasurer  
Indiana U/Purdue U at Fort Wayne, IN, USA
- OR**
- Explanatory Model of Alcohol Consumption: Middle Range Theory  
Mario Enrique Gámez Medina, MCE, PhDc  
Francisco Rafael Guzmán-Facundo, PhD  
Jessica Guadalupe Ahumada-Cortez, MCE, PhDc  
Universidad Autónoma de Nuevo León, UANL, Mexico  
Edilaine Cristina da Silva Gherardi-Donato, PhD  
Nursing School of Ribeirão Preto, University of São Paulo, Brazil



4:30 – 5:00 **Summary of Day & Remarks of Incoming President**

5:45 **Depart for dinner with Trustees & Invited Guests**

### **Saturday, June 20, 2015**

8:15 – 9:00 **Registration and Continental Breakfast**

9:00 – 10:00 **Plenary Session**

How is the NSM Used Globally?

Vision for the Future – Marlou de Kuiper, Incoming President, University of the Applied Sciences, Utrecht, Netherlands

10:00 – 11:00 **Roundtable Discussions with Trustees**

Sign up for interest areas during registration

11:00 – 11:15 **Break**

11:15 – 12:00 **Symposium Summary and Closing Remarks**

Moderator: Dr. Diane Breckenridge

**Evaluations**

## REFEREED POSTERS

### Posting Worries, a Comparative Analysis of Stressors Between Professional Education Majors

Liz McDowell, PhD, RN

Rebecca Cox-Davenport, PhD, RN

Holisa Wharton, PhD, RN

Lander University, Greenwood, SC, USA

### Application of the Neuman Systems Model: Nursing Theory as a Framework for the Development of the Role of the Craniofacial Nurse

Jennifer Huth, BSN, RN, CPN

Akron Children's Hospital, Akron, OH, USA

### The Identification of HIV-Risk Behaviors Among Minority College Students Using the Neuman Systems Model

Darylnet Lyttle, Ph.D., RN, FNP-BC

Arlene J. Montgomery, PhD

Bertha L. Davis, Ph.D., RN, ANEF, FAAN

Dorothy P. Burns

Zina T. McGee, PhD

Hampton University, Hampton, VA, USA

Joshua Fogel, PhD

Brooklyn College, Brooklyn, NY, USA

### Factors Influencing Nursing Students Use, Misuse, & Abuse of Prescription Stimulant Medications

Carol Martin MS, RN, CPNP, DNPc

Regis College, Weston, MA, USA

### A Nursing Education Program Viewed through a Neuman Lens

Betsy M. McDowell, PhD, RN, CNE

Newberry College, Newberry, SC, USA

### Perceived Stress of African American Family Caregivers of Stroke Survivors

Barbara A. Smith-Johnson, RN, PhD

Fayetteville State University, NC, USA

## **2015 SYMPOSIUM PLANNING COMMITTEE**

Dr. Diane Breckenridge, NSM Trustee President, Chair  
Sami Abate, NSM User, Inspira Health Center  
Carol Burkhardt-Fuentes, NSM User, South Jersey Healthcare  
Dr. Cynthia Capers, NSM Trustee Emeritus  
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Monica Simon, NSM User, Abington Memorial Hospital  
Susan Van Atta, NSM User, Inspira Health Center  
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Dr. Kathleen Flaherty, NSM Trustee  
Dr. Barbara T. Freese, NSM Trustee  
Dr. Margaret Louis, NSM Trustee  
Dr. Leslie Myers, NSM User, Lander University  
Dr. Diana Newman, NSM Trustee Emeritus

## **WE WOULD LIKE TO ESPECIALLY THANK THE FOLLOWING SPONSORS FOR THEIR SUPPORT OF THIS SYMPOSIUM**

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International, U of Pennsylvania



## Abstracts for Paper Presentations

## **Looking Through the Lens of the Neuman Systems Model in Filipino Americans with Hypertension**

**Alona D. Angosta, PhD, APRN, NP-C**  
**John Crawford NSM Research Fellow Award Recipient**  
**Assistant Professor, University of Nevada, Las Vegas School of Nursing**  
**Las Vegas, Nevada**  
**USA**

Hypertension is a major risk factor for cardiovascular disease. It affects 77.9 million people in the United States. About 31.9% of Americans are diagnosed with hypertension and approximately 1 of 3 adults have pre-hypertension. The co-morbidity of hypertension occurs most often among minority populations and is highest for Filipino Americans, who die prematurely from hypertension related complications. Several reports indicate that the rates of hypertension among Filipino Americans is increasing rapidly. Approximately, 1 out of 4 Filipino Americans has hypertension and only 8% have their hypertension under control, compared to 25% of the general population with controlled hypertension. The increasing prevalence of hypertension among Filipino Americans and its associated cost to society contribute to the nationwide and global health care burden of cardiovascular disease.

Selecting a framework that addresses the factors leading to hypertension is vital when providing care for Filipino Americans. The Neuman Systems Model is a comprehensive and wholistic framework that offers an innovative method of viewing clients, their families, and the health care system across multiple dimensions. Using the Neuman Systems Model, advanced practice nurses can develop and implement interventions that will help reduce the potential cardiovascular problems of clients with multiple risk factors. This presentation provides insight into the cardiovascular health of Filipino Americans and has implications for nurses and other health care providers working with various Southeast Asian groups in the United States.

The aims of this presentation are to discuss the use of the Neuman Systems Model as a guide for the delivery of care to Filipino Americans with hypertension and to relate implications from the lessons learned in working with Filipino Americans to other Asian groups residing in the United States.

### Learning Outcomes:

1. Discuss the prevalence of hypertension among Filipino Americans.
2. Explore primary and secondary prevention strategies to decrease the risk of hypertension using the Neuman Systems Model.

## **Social Issues as Neuman Systems Model Client Systems**

**Teri Aronowitz, RN; PhD; APRN; FNP-C, Assistant Professor  
Jacqueline Fawcett, RN; PhD; FAAN, Professor & NSM Trustee  
University of Massachusetts Boston  
Boston, MA  
USA**

The Neuman Systems Model regards individuals, families and other groups, communities, and social issues as client systems. Although a considerable amount of attention has been given to the client systems of individuals, families and other groups, and communities in nursing practice and research, very little attention has been given to the meaning of and examples of social issues as client systems. The purpose of this presentation is to discuss various possible meanings of social issues within the context of the Neuman Systems Model and to offer a framework that can be used to analyze and evaluate Neuman Systems Model-based social issues. Results of a literature search and a survey of the members of the Neuman Systems Model Trustees Group provided data, which were analyzed using content analysis to identify definitions and examples of social issues as Neuman Systems Model client systems. A framework for analysis and evaluation of social issues as client systems was based on the results of the content analysis and review of other nursing frameworks for analysis and evaluation of various phenomena.

### Participant outcomes

1. Participants who attend this session will enhance their knowledge of social issues within the context of the Neuman Systems Model.
2. Participants who attend this session will evaluate a new framework for analysis and evaluation of Neuman Systems Model-based social issues.



## **NSM Applications: Coaching Students to Grasp and Use Abstract Concepts**

**Sarah Beckman, MSN, BS, RN, & NSM Trustee**  
**Associate Professor**  
**Indiana University-Purdue University Fort Wayne**  
**&**  
**Dawn Pla, BS, RN, Teaching Assistant**  
**The Dupont Hospital**  
**Fort Wayne, Indiana**  
**USA**

Challenges exist for educators in teaching students abstract concepts such as those found in nursing theories. Efforts to explain abstract concepts are thwarted unless abstractions can be explained in more concrete terms and interpreted using examples. Keller's ARCS Model for Motivation provides guidance for teaching approaches to engage students in critical thinking to advance learning outcomes that have learners smoothly applying the concepts in meaningful ways in assignments, activities, and eventually in care delivery. Teaching and coaching efforts strive to make transparent the connections between theories (i.e. nursing, teaching and learning, and leadership theories) and the real world of nursing practice. Students today are frank in asking why certain content is required, thus it is necessary to answer and help them understand first the theory and then how to apply theory in meaningful applications. Recognizing that critical teaching moments often occur during one-on-one meetings, it is important to be quick with coaching and reassurance in response to any and all indications that abstractions are being interpreted correctly. Education targets go beyond students to include clinical preceptors as they are integral in influencing knowledge, skills, and attitudes regarding theories, discussions about theories, and most importantly applying theories in everyday practice. Synergy energy can be felt by students when faculty and preceptors both speak theory, especially nursing theory. Join us in a lively presentation as a variety of creative and innovative approaches will be demonstrated. Time for active participation by the audience will be included.

### Participant Outcomes

1. Identify five strategies that apply Keller's ARCS Model for Motivation to engage students in the exploration of theory-based approaches and abstract concepts relevant to real-world healthcare delivery.
2. Apply NSM concepts in teaching and learning scenarios with client as individual and group.

## **Culture of Hand Hygiene in a Pediatric Ambulatory Care Setting**

**Carol Bloch, PhD, RN, CTN-A, CNS**

**Carolyn Bloch, PhD, RN, CTN-A, CNS**

**Los Angeles County and University of Southern California Medical Center  
Los Angeles, California  
USA**

The purpose of this study was to evaluate hand hygiene compliance rate in a pediatric hospital based clinic. Application of the Neuman Systems Model guided the identification of the regulatory requirement for the culture of safety that affects the ethical stressors of administration and delivery of healthcare. The sociocultural variable of the Neuman Systems Model provided the framework to formulate a program that met the preponderance of healthcare and regulatory agency mandates. The sociocultural variable was the underpinning, together with implementation of the model's primary prevention intervention. All interventions were directed toward preventive practices that foster optimal system stability. A concept thus emerged that the culture of hand hygiene was driven by three major dimensions: 1) organizational culture, 2) staff culture, and safety culture. The strategy involved patients' observation of their doctors and nurses performing hand hygiene or not for two days. Findings revealed that on day 1 doctor hand hygiene compliance rate was 89% versus nursing at 65%. The second day showed a 90% doctor compliance with nursing at 83% compliance rate. This was nearly a 20% increase from day 1 by nursing. This could be the result of the Hawthorne Effect. Automatic hand hygiene remains a challenge for nursing apart from doing it because one is being observed. A weakness in the study was inability to assess the increased infection rate when patients are outpatient and there is lack of follow-up should the patient become infected based on break of technique in the clinics. Conclusion of the study is that hand hygiene non-compliance among nursing staff is multifaceted in dimension, and a focused and ongoing campaign to increase compliance rates is needed.

The participant outcome is as follows:

1. Discuss the application of the Neuman's System Model guiding the identification of ethical stressors of administration in regulatory requirements in a specific hospital based clinic.
2. Summarize the influence of isolating the sociocultural variable and its implication to primary prevention strategy in clinical practice.



## **Testing the Relationships Between NLD Invasion, Lines of Resistance (and Reconstitution), and the Core with Mediation**

**Nancy Manister, DNS, FNP-BC  
John Crawford NSM Research Fellow Award Recipient  
Assistant Professor, Fairfield University**

**&**

**Eileen Gigliotti, PhD, RN, & NSM Trustee  
Professor, College of Staten Island, and  
The Graduate Center, City University of New York  
USA**

**Purpose:** To explicate accurate tests of both the lines of resistance and lines of reconstitution.

**Conceptual Framework:** The NSM's lines of resistance can be conceptualized in two ways: 1) Resisting the progress of stressors between the NLD invasion and the Core Response; 2) assisting in Reconstitution to a new steady state (NLD) after a Core Response. In both instances, use of a mediated model is appropriate. Recent developments in use of mediated models pose new implications for testing. Specifically, it is no longer necessary for the antecedent variable (e.g. NLD invasion) to have a direct effect on the outcome variable (e.g., Core Response) before the mediator is considered, only an indirect effect.

**Methodology:** Examples of use of the Lines of Resistance as either resistors or reconstitutors are presented. This is followed by a presentation of the new recommendations for the use of the mediated model. Use of Bootstrapping in a mediated model is also discussed.

**Discussion and Implications:** Use of the revised mediator model has implications for the further development of the NSM by expanding conceptualizations of the Core Response. That is, the stressor that invaded the NLD does not actually have to result in a Core Response in order for mediation to take place. What is required is that the stressor invasion of the NLD has an effect on the Lines of Resistance, and the Lines of Resistance have an effect on the core, thereby the stressor invasion indirectly affects the core. In fact, true mediation would result in warding off the Core Response. Likewise, in the event that a Core Response does take place, the revised mediated model allows for the Lines of Reconstitution to be conceptualized as moving one back toward their steady state (NLD), and evaluating how reconstitution acts as a mediator in this relationship.

### Participant Outcome:

At the completion of the presentation, the participant will be able to describe testing of the relationships between NLD stressors, Lines of Resistance (and Lines of Reconstitution), and the core.



# **Global Perspectives on Short-Term Medical Missions: Lessons from the Field**

**Barbara T. Freese, RN, EdD, FRCNA, & NSM Trustee  
Professor of Nursing Emeritus, Lander University  
Greenwood, South Carolina  
USA**

## **Purpose**

This presentation will offer participants an easy-going look at short-term medical mission work in Spanish-speaking Latin American countries, including some of the lessons learned along the way. In addition, it will present a brief overview of a Village Health Worker Project, used in Honduras to provide basic ongoing care and referral for people in remote villages with no other access to health care.

The author has used the Neuman Systems Model in education and practice since 1985. She has completed about 18 short-term medical mission trips to Central and South America and the Caribbean. On each of these trips, the team treats between 800 and 1200 patients over the course of one week. Each team includes 12 – 25 multidisciplinary health care professionals and support staff, each with an individual perspective and approach to care.

The patients and families who are the recipients of care on these mission trips all experience stress that affects them physiologically, psychologically, socioculturally, developmentally, and spiritually. The Neuman Systems Model provides a wholistic perspective for understanding the lived reality of these clients. It serves as a helpful framework to enable the author to work effectively with team members from other conceptual mindsets, and to reach out to patients and families wholistically. This presentation will provide glimpses of the model in action across language and cultural barriers.

## **Participant Outcomes**

1. Examine short term medical mission outreach from the perspective of the Neuman Systems Model.
2. Consider one approach to establish ongoing health care in geographically remote settings.
3. Increase understanding of the realities of providing health care in a foreign culture.

## **Explanatory Model of Alcohol Consumption: Middle Range Theory**

**Mario Enrique Gámez Medina, MCE, PhD Student in Nursing Sciences**  
**Francisco Rafael Guzmán-Facundo, PhD, Research Professor**  
**Jesica Guadalupe Ahumada-Cortez, MCE, PhD Student in Nursing Sciences**  
**Universidad Autónoma de Nuevo León, UANL**  
**Mexico**

**&**

**Edilaine Cristina da Silva Gherardi-Donato, PhD, Researcher**  
**Dept of Psychiatric Nursing & Human Sciences, Nursing School of Ribeirão Preto**  
**University of São Paulo**  
**Brazil**

The purpose of this study was to generate a middle range theory derived of Neuman Systems Model to explain the phenomenon of alcohol consumption behavior on the part of adolescents. Fawcett's theoretical derivation method was used to develop the conceptual-theoretical-empirical structure of the proposed theory. An extensive literature review was done to adapt the concepts in to the conceptual-theoretical-empirical structure that integrates the normal line of defense (alcohol), psychological variable in the flexible line of defense (self-esteem), the ambient extrapersonal stressor (use Facebook) and intrapersonal environmental stressor (child abuse). The middle range theory proposed supports the empirical validity the Neuman Systems Model and increases knowledge about alcohol consumption among adolescents. The model also provides scientific basis for nursing and related areas, so that in the future may serve as a basis for the design of alcohol consumption prevention programs and provide care that has been scientifically substantiated.

### Participant outcomes

- Identify concepts derived from Neuman Systems Model for generating middle range theory.
- Explaining of concepts derived from the Neuman Systems Model and the selected variables for the explanatory model of alcohol consumption.
- Knowing the development of conceptual-theoretical-empirical structure of the explanatory model of alcohol consumption.



# **An Evidence-Based Intervention on Parental Risk Perception and Knowledge Awareness to Change Screening Behaviors on Childhood Lead Poisoning in Children Aged 1-5**

**Annette M. Minors, MSN, RN – BC**  
**Kathleen O'Rourke Vito, PhD, PHCNS-BC, RN, & NSM Trustee**  
**Felician College**  
**Lodi, New Jersey**  
**USA**

## Background:

Early childhood exposure is a national health problem, despite the availability of programs to increase screening for lead exposure in children ages 1-5. The stressors of lead poisoning can result in cognitive and behavioral problems in children that can last into adulthood. The Center for Disease Control (CDC) and Healthy People 2020 have set challenges for healthcare providers and county health departments to effect change through public education and screening. The Neuman Systems Model (1994) and Health Belief Model (1997) theories were applied to promote parental knowledge and risk awareness through an evidence-based intervention

## Methodology:

This clinical improvement project was aimed at increasing risk perception in parents through awareness of the dangers of lead poisoning in children, and to bring about recognition that their child are at risk and should be screened. Preventions were designed to be primary and early secondary for health promotion and early screening. In this project the screening was of the home environment for the presence of lead. The project survey evaluated the effects of an evidence-based intervention using a one group analysis with a pre and posttest knowledge assessment survey questionnaire from The Chicago Lead Knowledge Test (Mehta & Binns, 1998). The project evaluated the return rate of the self-test results for the presence of lead, and the intention of the parent to have their child screened. Data was collected during the fall of 2014 and will indicate the perception of risk from the stressor of lead in the home environment and the intent of the parents to have their child screened for lead poisoning.

## Participant Outcomes

Following this presentation the participants will be able to:

1. Discuss the application of the NSM to a clinical improvement project to increase the rate of children being screened for lead poisoning.
2. Identify the impact that primary interventions have to increase perception of risk for childhood lead poisoning has on a parent taking action to have their child tested.

**Keywords:** children, lead exposure, lead poisoning, screening, awareness, perception, action, intent, evidence-based intervention, and lead self-test kits



## Application of NSM to Chronic Obstructive Pulmonary Disease

Victoria Randazzo, PhD, RN, CCRN

Marie Fongwa, PhD, RN

Leslie Van Dover, PhD, RN

Azusa Pacific University

Pasadena, California

USA

**Study Purpose:** Examined the relationships among patient's demographics, stages of chronic obstructive pulmonary disease (COPD), levels of anxiety, depression, loneliness, and spirituality with the number of exacerbation episodes in 30 days, and severity of symptoms for each episode.

**Conceptual Framework:** Neuman Systems Model (NSM) suggests COPD patients have impaired functional health (altered spirometry measurements), resulting in compromise of their normal lines of defense. *Environmental stressors* (ES) are impacted by both the *internal* (IE) and *external environments* (EE). Patients' fears of breathlessness (ES) may trigger anxiety (IE) and COPD symptoms may precipitate worry about embarrassment. Further, the patient's breathing status is influenced by the interactions between the IE (anxiety and depression) and the EE (loneliness), together known as the *created environment*.

**Methodology:** A correlational, longitudinal design, with a convenience sample of 34 explored relationships among (a) COPD stages; (b) levels of anxiety, depression, and loneliness; (c) patients' demographics (d) daily spirituality experiences, (d) levels of spirituality, (f) COPD exacerbation frequency; (g) and severity symptom of each exacerbation. Measures: *demographic information, Hospital anxiety and depression scale, UCLA loneliness scale, Daily spirituality experience scale* and the *EXAcacerbations of Chronic Obstructive Pulmonary Disease Tool: A Patient Reported Outcome*. Statistics: descriptive, Pearson's  $r$  and multiple regression.

**Results:** Thirty percent of the sample had depression and anxiety. Loneliness was significantly and positively related to depression ( $r = 0.746$ ,  $p < 0.001$ ). Loneliness and anxiety predicted 32% of COPD exacerbation episodes.

**Discussion:** Based on the NSM, loneliness has a direct positive relationship with levels of depression and anxiety (ES) and exacerbation episodes. The relationships among the ES can expand or contract the flexible line of defense, depending on the patient's compensatory system.

**Implications:** This study provides a full depiction of the NSM via the patient's interacting variables and their impact on each line of defense.

### Participant Outcomes:

1. The participant will be able to identify the interacting variables within the chronic obstructive pulmonary disease (COPD) client's system.
2. The participant will be able to differentiate the client's environment (intrapersonal, extrapersonal, and created).
3. The participant will be able to have a better understanding of the relationship between the client's environments and their impact on the line of defenses.

## **Utilizing a Neuman-Based Clinical Evaluation Tool for 30 Years: How it Began and What it is Today**

**Becky Salmon MS, RN, CCRN, Associate Professor**  
**Cheryl Bruick-Sorge MA, RN, Associate Professor**  
**Sanna Boxley-Harges MA, RN, Professor Emeritus, NSM Trustee & Treasurer**  
**Indiana University-Purdue University Fort Wayne**  
**Fort Wayne, Indiana**  
**USA**

The Neuman-based clinical performance evaluation tool developed by the Department of Nursing was utilized for over twenty years in an associate degree program and is still used today in a four year bachelor degree program. This instrument remains based on the Neuman Systems Model as well as the nursing process, communication, and professional behaviors. The tool was created in the mid 1980's with the goal that it be concise, leveled, user friendly, objective, and flexible. This instrument has been implemented across the curriculum in the majority of the clinical courses for the program. Each course has specific student outcomes that align to the tool which are student orientated, measurable, and course specific.

This instrument has remained viable over time. It has survived multiple curriculum revisions and program accreditations. Over the years, the tool has not only proven to be accurate but also adaptable to diverse clinical settings and educational changes. Much of the tool's concepts have remained constant but leadership, evidence-based practice, cultural sensitivity, information literacy, and IOM/QSEN initiatives have been added over time. With advances in technology, this instrument has been converted to an on-line format which allows easier access for students and faculty. This presentation will examine the original clinical performance evaluation tool and demonstrate how it has transformed into its current design. Faculty and student feedback related to the utilization of the tool will be discussed.

### References:

- Beckman, S., Boxley-Harges, S., Burick-Sorge, C., & Eichenauer, J. (1998). Evaluation modalities for assessing student and program outcomes and critical thinking and the Neuman Systems Model, in Lois Lowry (Ed.) *The Neuman Systems Model and Nursing monograph*.
- Beckman, S., Boxley-Harges, S., & Bruick-Sorge, C. (1995). Neuman-Based Associate Degree Programs: Past, Present and Future, in Betty Neuman (Ed.) *The Neuman Systems Model (3<sup>rd</sup> ed.) Norwalk, Conn: Appleton-Lange*.

### Outcomes:

Participants will

1. Identify the concepts of a Neuman-based clinical evaluation tool.
2. Explore the modifications of a Neuman-based clinical evaluation tool over time.



# **Applying the Neuman Systems Model to Students' Clinical Experience**

**Joan Timalonis, MSN, RN, CNE**  
**Assistant Professor of Nursing**

**&**

**Sharon M. Melincavage, DEd, RN, CRNP-BC, CNE**  
**Associate Professor of Nursing, and Director of the Graduate Nursing Program**  
**Cedar Crest College**  
**Allentown, Pennsylvania**  
**USA**

For a fundamentals nursing course the Neuman Systems Model was used as the basis to transform the existing clinical and concept map assignments. The revised assignments help students consider the interplay of multiple factors that comprise client care rather than focusing primarily on the client's medical diagnosis. The revision of the clinical assignment sheet directs students to gather data pertaining to the biophysical, psychological, developmental, sociocultural, and spiritual variables of client care that are essential elements of the Neuman Systems Model. Concurrent with this revision, the SBAR communication technique was incorporated into the clinical assignment to help students understand how to use this method of interdisciplinary communication. In revising the concept map assignment the Neuman Systems Model was used so that students understand how environmental stressors affect the client's state of wellness or illness. In the concept map assignment the client is depicted at the core of the graphic organizer surrounded by stressors with varying degrees of penetration to the client's normal and flexible lines of defense and lines of resistance. Students are to prioritize stressors that penetrate the core, normal and flexible lines of defense and lines of resistance and develop goals, outcomes, and nursing interventions for these stressors. By developing goals, outcomes, and nursing prevention interventions students identify how to stabilize the client's defenses against the invading environmental stressors. Students are also to consider positive variables that aid in defense and resistance. Identifying these positive variables help students to understand how the client's strengths aid in overcoming the stressors that penetrate the core and lines of defense and resistance. The purpose of this presentation is to describe the re-structuring of clinical and concept assignments using the Neuman Systems Model and incorporating the SBAR communication method into the clinical assignment.

## Participant Objectives:

Following the presentation, participants will be able to:

1. Discuss the use of the Neuman Systems Model as a framework for helping students understand the gestalt of caring for patients during clinical experiences.
2. Apply the SBAR method of communication to students' clinical assignment.



## **Female Genital Mutilation: A Global Problem**

**Tamatha Urffer, BSN, RN, MSN Student**  
**Karen Reesman, PhD, RN, NEA-BC, LNC, Associate Professor**  
**Cedar Crest College, Department of Nursing**  
**Allentown, Pennsylvania**  
**USA**

Western society has come to expect and demand safe and effective healthcare. This is not the standard in all areas of the world. Many countries continue to allow outdated practices to prevail. Many mid-evil cultural and religious practices are still carried out today; despite the devastating consequences study and research illuminate. Women are still undervalued and abused in many areas of the world, so subsequently they unknowingly fall prey to abusive and dangerous situations. This paper explores the specific practice of female genital mutilation, which is still carried out in several areas of the world. It will show, through literature review, the short and long term detrimental and life-threatening effects this stressor can have on women. It will discuss in detail the health complications these antiquated practices can create. The paper will conclude with primary prevention and other interventions required eradicating this tradition, and place focus on the positive impact nurses, working for optimum client system stability, can collectively have, well beyond their local level, in the global community.

### Outcomes:

At the end of the presentation the participant will:

1. Identify a known stressor of female genital mutilation.
2. Identify a possible stressor of female genital mutilation.
3. List one primary, secondary, and tertiary prevention for female genital mutilation.

## **Analysis of the Public Health Response to Ebola in the US: Lessons Learned**

**Kathleen O'Rourke Vito, PhD, RN, PHCNS-BC, & NSM Trustee**

**Associate Professor**

**Felician College, School of Nursing**

**Lodi, New Jersey**

**USA**

This presentation is an analysis of the public health response to actual and probable cases of Ebola in the US. The analysis is guided by the Neuman Systems Model. Intrapersonal, interpersonal and the extra personal systems were impacted by this virus outbreak. This was the first outbreak of a deadly, communicable disease in some decades where isolation and quarantine were used as primary prevention to protect individuals, families and the community.

Surveillance and control of the spread of Ebola required skills and processes that the public was not familiar with as they had last been in wide use in the 1950's and early 1960's with polio.

What was different with the response to Ebola from the onset of AIDS, SARS, H1N1, and Swine flu among global epidemics is that the world had known about Ebola since 1976 and the potential it had at anytime to go global.

This analysis includes the response by health care delivery systems, federal government, state and local health departments, schools and businesses. Conflicting information from leading health organizations from the US and abroad compounded the difficulties in planning and implementation of an effective response plan to strengthen the flexible lines of defense, normal lines of defense and lines of resistance in all client systems.

Lessons learned from this disaster as it unfolded and the changes in policy related to the control of the spread of the disease that resulted are the conclusions presented in this analysis. In the context of a global world, it is no more a hypothetical scenario that communicable diseases in other countries will eventually impact us. Infectious disease research, surveillance, and primary prevention when there is no vaccine developed yet, will not just improve the lives of people in other countries but will save lives here at home.

### Objectives:

The participants will:

1. Relate the variables and subsystems of the NSM to an analysis of the public health response to an outbreak of Ebola in the US
2. Identify key policy changes and challenges to principles of communicable disease surveillance and control



## **Primary Prevention as Intervention: Applying the Neuman Systems Model to Socially Bullied Nurse Academics**

**Diane M. Wieland, PhD MSN, RN, PMHCNS-BC; PMHNP-BC, CNE**  
**Associate Professor, LaSalle University**  
**Philadelphia, Pennsylvania**  
**USA**

**Purpose:** The purpose of this qualitative phenomenological study was to describe the lived experience of nurse educators and nurse educator administrators who have been socially bullied. **Conceptual Framework:** Descriptive phenomenology (Colaizzi) was the conceptual framework for this study. This presentation will incorporate the Neuman Systems Model as a means to describe the phenomena of socially bullying in nurse educators and nurse education administrators.

**Method:** Using Colaizzi's methodology, a purposive sample of 16 nurse educators and nurse educator administrators were individually interviewed. Each interview was audiotaped and transcribed verbatim. Analysis was per Colaizzi's methods.

**Results:** Nine major themes were identified: Bullying Tactics/Tricks of the Trade; Psychological Responses; Bully Culture; Fighting Back Strategies; Physical Responses; Targeting; Cyberbullying; Power and Control; and Leadership and Management.

**Discussion:** Having knowledge of the phenomena of social bullying in nursing academia could serve as primary prevention interventions for nurse educators who experience bullying. To better understand the themes of this study would strengthen the nurse academic's flexible line of defense.

**Implications:** Academic bullying is a devastating stressor for nurse educators, as such behavior targets a faculty member. It is not the same as incivility because bullying requires a power differential between the perpetrator and the target. Prevention of negative physical, psychological, social, and spiritual outcomes in the bullied faculty member by intervening via primary prevention strategies will stabilize the well-being and health of nursing faculty members, that is, strengthen their normal line of defense.

### Outcomes:

1. To describe nine themes that emerged from the qualitative study data on bullied nurse academics.
2. To apply primary prevention as interventions per the Neuman Systems Model to the study findings.



## Abstracts for Poster Presentations

# **Application of the Neuman Systems Model: Nursing Theory as a Framework for Development of the Role of the Craniofacial Nurse**

**Jennifer Huth, BSN, RN, CPN  
Coordinator, Akron Craniofacial Center  
Akron Children's Hospital  
Akron, Ohio  
USA**

Background/purpose: The application of a nursing theory can provide a framework to guide and define the practice of the craniofacial team nurse coordinator. Theory provides interrelated concepts that can explain and predict outcomes. Application of theory to nursing practice in this instance provided guidance for the nurse new to the position of nurse coordinator of a multidisciplinary team in recognizing variables within the client/team system and the client's environment. Using this blueprint, the nurse can plan interventions to stabilize the client system.

## Methods

The Neuman Systems model was implemented by the nurse coordinator, new to the role, to visualize the craniofacial team specific stressors and the anticipated responses to stress, and to plan interventions to maintain stability or reconstitute the team. This poster will include diagrams to demonstrate the value of application of an open systems theory, in this instance, the Neuman Systems theory. Within the framework of the Neuman Systems Model (NSM) the craniofacial team becomes the client system. The Neuman System describes five variables: psychological, physiological, socio cultural, developmental, and spiritual, which are included in all facets of the craniofacial team system. These variables will be defined within the craniofacial team system and their potential impact on buffering or stressing the protective lines of defense will be addressed. By recognizing the craniofacial team as an open system in a constant state of flux, the craniofacial team coordinator can benefit from recognition of real and potential stressors to the team. The NSM helps the nurse coordinator apply the nursing concepts of the environment, the client system, and nursing interventions to promote the health and stability of the team. Illustration of nursing theory to practice situations can assist the nurse to describe the value of the discipline of nursing and define the role of the nurse on the craniofacial team.

## Main objectives:

1. Learners will recognize common craniofacial team stressors addressed by concepts within a systems theory model.
2. Learners will be able to identify primary, secondary and tertiary interventions employed to maintain stability of the craniofacial team



# The Identification of HIV-Risk Behaviors Among Minority College Students Using the Neuman Systems Model

Darylnet Lyttle, PhD, RN, FNP-BC, Doctoral Student  
Arlene J. Montgomery, PhD, Associate Professor, Nursing  
Bertha L. Davis, Ph.D., RN, ANEF, FAAN, Professor, Nursing  
Dorothy P. Burns, Associate Professor, Nursing  
Zina T. McGee, PhD, Endowed University Professor, Sociology  
Hampton University, Hampton, Virginia

&

Joshua Fogel, PhD, Professor, Finance & Business Management  
Brooklyn College, Brooklyn, New York  
USA

**Background:** According to Patel (2013), there has been a 21% increase in the overall incidence of HIV/AIDS from 2006–2009 among those aged 13-29 and a 48% increase among young African Americans and men who have sex with men (MSM).

**Purpose:** The purposes of this study were to describe: 1) the sexual behaviors of minority college students, 2) the relationship of the Neuman Systems Model (NSM) client system variables and the intrapersonal and interpersonal stressors and participation in risky sexual behaviors, and 3) future models for HIV primary prevention strategies among minority college students.

**Conceptual Framework:** The NSM selected client system variables (physiological, psychological, sociocultural, development, spiritual) and intrapersonal and interpersonal stressors were used to further develop methods to protect the flexible line by identifying variables that influence participation in risky sexual behaviors. Data were collected using a demographic survey, SF-12v2 Health Survey that measured the subscales of physical and mental health, and Black College Students in an AIDS Era survey that measured sexual behaviors, NSM spiritual variable, intrapersonal and interpersonal stressors and participation in risky sexual behaviors.

**Results:** The investigator recruited a convenience sample (N = 292) African American adolescents and young adults, 17 to 25 years of age, attending an historically Black college or university. The use of bivariate and multivariate analyses provided outcomes. Findings revealed statistically significant predictors of risky sexual behavior among the developmental and spiritual client system variables, and the intrapersonal (attitude), and interpersonal stressors.

**Discussions:** Overall, the NSM generated new theory that contributes to nursing science. The significant variables identified in the study coincided with other research studies in HIV primary prevention.

**Implications:** There is a need for primary prevention intervention studies on the influence of these variables on minority student participation in risky sexual behaviors. Findings provide direction for creating HIV primary prevention methods.

## Participant Outcomes:

1. At the end of the presentation participant will be able to identify Neuman Systems Model client system variables that are relevant to risky sexual behaviors in minority college students.
2. At the end of the presentation the participant will be able to identify Neuman Systems Model concepts that can be used to develop a HIV primary prevention studies in minority college students.



## **A Nursing Education Program Viewed through a Neuman Lens**

**Betsy M. McDowell, PhD, RN, CNE, & NSM Trustee and Secretary  
Professor and Chair of Nursing, Newberry College  
Newberry, South Carolina  
USA**

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The Neuman Systems Model has been used extensively as the theoretical basis for care of individuals and families as client systems for many years. The NSM also has been used as the basis of care for groups and communities as client systems but on a less frequent basis. Numerous educational programs around the globe have chosen to use the NSM as the conceptual basis of their curricula, teaching students to assess their client system(s) holistically including all five variables, set goals, and subsequently utilize preventions as interventions at three levels to assist the client system in retaining, attaining, and/or maintaining optimal wellness. Rather than just using the NSM as a curricular framework, this presentation examines a typical baccalaureate nursing education program from a Neuman Systems Model perspective, applying the NSM to the organization as the client system, assessing its variables, identifying its stressors, determining its goals for achieving optimal wellness, and planning its care accordingly. Neuman's three levels of nursing preventions as interventions will be emphasized. This presentation will be of interest to any nursing educator or student who uses the NSM as the theoretical basis for his/her care.

### Participant outcomes

At the conclusion of this presentation, attendees will be able to

1. Examine a typical BSN nursing education program from a Neuman Systems Model perspective.
2. Identify possible nursing preventions as interventions that can be used in support of baccalaureate nursing education in the United States.

## **Posting Worries, a Comparative Analysis of Stressors Between Professional Education Majors**

**Liz McDowell, PhD, RN  
Rebecca Cox-Davenport, PhD, RN  
Holisa Wharton, PhD, RN  
Lander University School of Nursing  
Greenwood, South Carolina  
USA**

The purpose of this study was to examine and compare nursing major students and education major students perceived stressors related to starting their selected majors. Both groups were just beginning their core education, and the researchers of this study wished to know the two groups' perceived and actual stressors. Design: A qualitative phenomenological approach was used for this study. Method: One question was purposed to the students "What is your biggest worry about starting the education or nursing major?" Students were asked to write their worry on a self-adhesive note paper, and anonymously post their note to a poster board. The timing of this study was at the first few days of their first semester in their chosen major. Sixty-nine nursing students and 62 education students consented to participate in this study. Findings: Nursing majors were primarily focused on the internal and external stressors of surviving and sustaining in the major. Their focus was much more in line with immediate stress of passing exams and staying in the program. The education majors also had the stress of passing tests, but much more their stressors indicated long-term issues such as finding a job, financial security, and meeting teaching standards. Conclusions: Although similar in age and context of beginning a course of study, the two groups varied in the type of stress sensed. Although both groups reported both internal and external stressors, the nursing major had greater immediate stressors that could affect their flexible line of defense and normal line.

### Outcomes:

- 1) At the end of this session, the learner will be able to describe the unique stressors of the beginning nursing student.
- 2) At the end of this session, the learner will formulate a strategy to reduce potential and actual stressors affecting students in their beginning education.



## **Perceived Stress of African American Family Caregivers of Stroke Survivors**

**Barbara A. Smith-Johnson, PhD, RN**  
**Adjunct Assistant Professor (Part Time)**  
**Fayetteville State University, Department of Nursing**  
**Fayetteville, North Carolina**  
**USA**

Stroke survivor caregivers often interact with loved ones who have severe physical as well as emotional deficits. According to Pierce, Finn, and Steiner (2004), increasing numbers of stroke survivors, the largest patient population living with long-term disabilities in the United States, received care by family members in the home between 2006 and 2012. Stroke continues to be more common among African Americans than other ethnic or racial groups in the United States (National Institute of Neurological Disorders and Stroke, 2012). In order to understand the needs of this population, a quantitative study was conducted to examine African American family caregivers of survivors and their caregivers.

African American participants ( $N=38$ ) from rural communities in the southeastern region of North Carolina participated in the study. The Neuman Systems Model (Neuman & Fawcett, 2002) was used to guide the study, and an adapted version of Pearlin's Caregiving and Stress Tool was used to identify and measure stressful situations occurring in the family system.

Neuman's Conceptual Model was used to assess the family caregiver's stressful experiences. The study findings revealed that the greatest caregiver stressor impact dealt with 1) the family's ability to work together as a family unit and 2) heavy demands of caregiver responsibilities. The least caregiver impact was sharing of caregiver tasks among family members. Demographics related to stressors revealed that the majority of participants were spouses and 63.2 were currently married. These findings were consistent with Pearlin et al. (1990). The study findings also revealed that self confident participants indicated satisfactory coping mechanism regardless to increased demands in providing care. Nursing Implication includes the management of stressors experienced by the family caregiver. Therefore, it is recommended that family care intervention plans be developed to assist families with managing stressors.

### Outcomes:

1. As a nurse consultant, the information could be used to inform health care professionals and managers about the need to include in discharge planning, stress management of the family care giver and development of family care intervention accordingly.
2. Perceived Stress of Family Care Givers: Further research publication on stress management with regards to family care givers of disabled relatives to include stroke victims

# Factors Influencing Full-Time Nursing Students Use, Misuse, and Abuse of Prescription Stimulant Medication

Carol Martin, MS, RN, CPNP, DNPc  
Regis College  
Weston, Massachusetts  
USA

## Study Purpose

The purpose of this research study was to explore full-time nursing students' use, misuse, and abuse of prescription stimulant medication. There has been minimal research done solely within this population. The outcomes will be of interest in healthcare and college settings.

## Conceptual Framework

The Neuman Systems Model (NSM) subconcepts of *intrapersonal*, *interpersonal*, and *extrapersonal* blended well with the purpose of the study and the Stimulant Medication Assessment Tool (SMAT). The NSM strongly supported this research study as it reflects nursing students' internal and external relationship to stressors experienced in college.

## Methodology

A descriptive, quantitative design study using the online survey service, SurveyMonkey® was distributed nationally to 55,468 nursing students by email through the National Student Nurse Association (NSNA). Descriptive statistics and regression analysis were performed. Of the 1,348 nursing students who responded, 695 qualified to continue the survey after answering the three screening questions. This represents a response rate of 1.3%.

## Results

115 (17%) of the 695 were diagnosed with ADHD/ADD, 40 reported that they misused, 45 reported they abused, and 73-82 reported they started abusing medication in sophomore year. Primary reason reported for abusing stimulant medications was *to improve attention/focus*. The *Extrapersonal* and *Intrapersonal* stressor categories represented 71% of the use, misuse, and abuse. Reasons reported were to study for exams and improve GPA. Regression analysis indicated an association with the demographics of age, GPA, and living situation with parents.

## Discussion

Average nursing student age was 21.6, female, Caucasian, senior, GPA of 3.56, and worked 1-20 hours/week. 302 belonged to social clubs/organizations and lived in either dorms or apartments. Students felt comfortable self-reporting their ADHD/ADD status. Findings revealed that Adderall is the most prescribed and abused.

## Implications

Healthcare providers and educators need to educate populations at risk surrounding prescription stimulant medication use, misuse and abuse.

## Participant Outcomes:

1. Describe the demographic characteristics of the nursing students who misuse, or abuse prescription stimulant medication.
2. Describe the stressors prevalent in college that increase the misuse, and abuse of prescription stimulant medication among nursing students.