10-5-2018

# Increasing BSN Student Understanding of Pathology & How the Disease Process Can Effect Multiple Organ Systems

Kathryn M. Ross
*Mount Carmel*

Dale Hilty
*Mount Carmel*

Recommended Citation

Ross, Kathryn M. and Hilty, Dale, "Increasing BSN Student Understanding of Pathology & How the Disease Process Can Effect Multiple Organ Systems" (2018). *Scholars Showcase 2018: Innovations in Leadership and Learning*. 76.
https://fuse.franklin.edu/ss2018/76

# Increasing BSN Student Understanding of Pathology & How the Disease Process can Effect Multiple Organ Systems

## Kathryn M. Ross, MSN, RN, AND ~ Dale Hilty, PhD

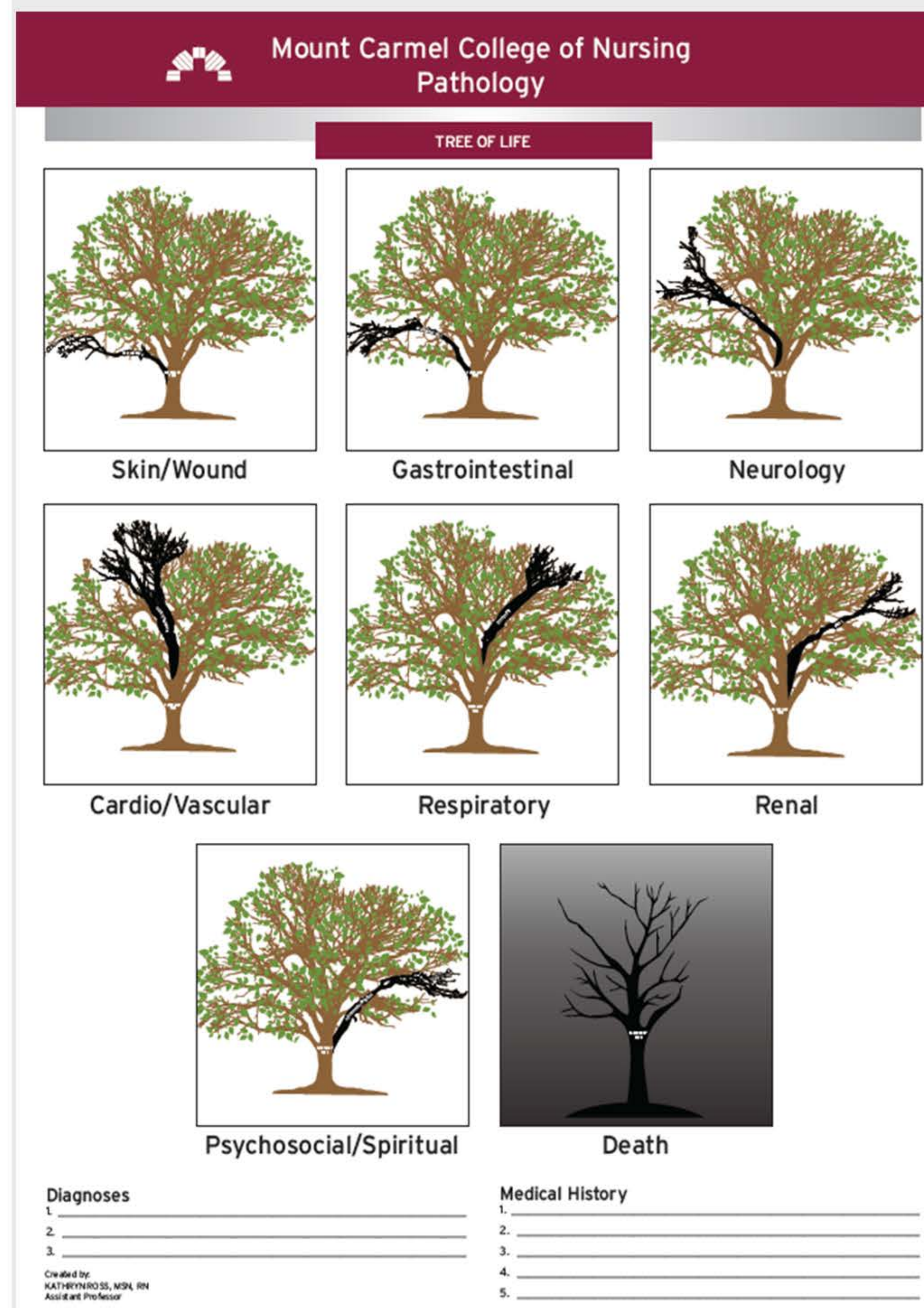MOUNT CARMEL College of Nursing

## Background

The research orientation of the sociological perspective evaluates the environmental impact on humans in the social context. According to Macionis (2017, p. 113), socialization is defined as the "… lifelong social experience by which people develop their human potential and learn culture." A social institution is a set of organized beliefs and rules that establishes how a society will attempt to meets its basic social needs (e.g., medicine, science, family, religion, economy, government) via socialization in the social context. For example, the science social institution influences the study of health and medicine (e.g., Allopatic Scientific Medicine) and its application (i.e., tests, drugs, surgery) to humans in the social environment. By studying the human body and how it works, physicians receive specialized knowledge in their medical school training. Currently, physicians have the highest occupational prestige ranking in high income nations (Line & Xie, 1988; Macionis, 2017, p. 268).

The consequence of the link among science, Allopathic medicine, physicians, and occupational prestige is humans are socialized to receive specialized information from healthcare professionals. Since the scientific method is advancing knowledge of how the body works, medicine slowly increases the amount of statistical variability its test, drugs, and surgery are accounting for in the life of the human patient. Since Allopathic medicine cannot account for 100% of the variability of its tests, drugs, and surgical procedures, patients receive specialized knowledge and procedures with side effects. Frequently, the human patient is left to integrate the medical jargon from the physician specialists which can be a significant challenge depending on how well the human patient understands science and the medical specialized knowledge from physicians.

Educating nursing students at the senior level of a baccalaureate program, students often had difficulty understanding pathology or the disease process of a client and how the disease process can effect multiple organ systems of the body. The purpose of creating a visual learning aide of the pathology tree, was to elevate the students understanding of pathology processes and the inter-relatedness of the disease, enhancing the thought process of caring for the patient holistically. Using the example of a tree, as it grows and reaches maturity, the root system, its trunk representing the core, the environment in which it had to endure, was used to provide a visual representation for the human body.



Mount Carmel College of Nursing
Pathology

TREE OF LIFE

Skin/Wound     Gastrointestinal     Neurology

Cardio/Vascular     Respiratory     Renal

Psychosocial/Spiritual     Death

Diagnoses
1.
2.
3.

Medical History
1.
2.
3.
4.
5.

Created by:
KATHRYN ROSS, MSN, RN
Assistant Professor

## Methods

The participants are senior nursing student in Nursing 405 Adult Acute Care course. All students were assigned a critical patient for consecutive days. They were required to demonstrate the pathology processes of their patient in great detail using the pathology tree as a guide to demonstrate interdisciplinary

## Methods

processes. A poster with eight tree images and a drawing by the first author (see below) is used by the students to insert their patient information.

Participants respond to an 11-item set of questions (Likert 5-point scale, strongly agree to strongly disagree) measuring the degree to which the students perceive their progress in understanding the inter-relationship the skin/wound, gastrointestinal, neurology, cardio/vascular. Respiratory, renal, and psycho/social systems. Behavioral measures will also be included as dependent variables in this educational, clinical intervention. One hypothesis will be the student self-ratings (dependent variable) will be different based on the us of the pathology tree processes intervention (independent variable).

## Findings

The hypothesis will include a pre- and post-test data set based on the 11-items Likert measure using SPSS 25, dependent t-test. Other quantitative analyses (independent t-test, reliability estimates, regression analyses will evaluate other dependent variables designed to monitor student progress behaviorally.

## References

- All, A., Huycke, L., Fisher, M. (2003). Instructional tools for nursing education: Concept maps. Nursing Education Perspectives, 24(6), 311-317.
- Mohamed, E. Salyers, V., & Osuji, J. (2018). Evaluating the effectiveness of visual narrative illustrations used to teach pathophysiology to undergraduate nursing students. Nursing Education Perspectives 39(2), 96-98.
- Lin, Nan, and Wen Xie. (1988, January). Occupational Prestige in Urban China. American Journal of Sociology, 93 (4), 793-832.
- Macionis, John J. (2017). Sociology (16th Edition). Boston: Pearson.
- Ross, K. (2018). Mt. Carmel College of Nursing Pathology Tree of Life Poster Image.