# A Bingo Game Motivates Students to Interact with Neurological Nursing Topic

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### Introduction

Neuological nursing is the one topic in adult nursing course required second year nursing student. Neuological nursing topic consists of three hours for case analysis and fourteen students participate in each group. Students must be able to 1) describe the types of brain injuries 2) compare and contrast the signs and symptoms of subdural hematoma, epidural and intracerebral hematoma 3) explain the neurological assessment for monitoring an emergency situation 4) discuss the type of procedure performed to relieve a hematoma in the brain 5) illustrate the pathophysiology of increasing intracranial pressure in a patient who has experienced a severe head injury and 6) list appropriate nursing interventions necessary to provide comprehensive care for a patient who has suffered a head injury.

The bingo game was chosen to encourage student for close attention to required readings and lecture material, and to motivate students to participate better on the required point activities. Sutterluety recently described using a bingo game to decrease student procrastination.<sup>1</sup>

# Objective

To create a bingo game that would increase student interaction with neurological nursing topic. and provide students with options for demonstrating

# Activity

A bingo game was created in which each of the 16 squares contained an activity. The activities were arranged on the bingo card so that achieving bingo required the student to complete the knowledge of neuological nursing (the types of injuries that result from head trauma, the signs and symptoms of subdural hematoma, epidural and intracerebral hematoma, the neurological assessment, the type of procedure performed to relieve a hematoma, the pathophysiology of increasing intracranial pressure, nursing interventions in patients with increasing intracranial pressure). Complete 1 line (4 squares) horizontally, vertically, or diagonally. Submit the completed bingo card and the hardcopy of case analysis; earn 5 points to be added to this topic.

NEUROLOGICAL NURSING BINGO			
Neurological assessment	Radivac drain care	Dilantin Administration	Nursing care in patient with IICP
อธิบายการผ่าตัด Craniectomy with removed blood clot	Pathological of IICP	Nursing care in patient with ventriculostomy	Signs of IICP
Pathological of intracerebral hematoma	การเตรียม ก่อนผ่าตัด สมอง	Mannitol Administration	เชื่อมโยง Pupil 2mm. Sluggish BE กับ พยาธิสภาพ
อธิบาย การแปลผล CT brain	Signs of head injury	Pathological of hydrocephalus	Signs of fracture base of skull
Complete 1 line (5 squares) horizontally, vertically, or diagonally, earn 5 points to be added to this topic.			

### Outcome

All students enrolled in the case analysis of neurological nursing topic participated in the bingo game. Thirty-one percent (31%) of students achieved bingo. The mean number of squares earned by students who achieved bingo was significantly higher than the mean number of squares earned by students who did not achieve bingo (10.4  $\pm$ 1.1; range 9-12 vs. 6.9  $\pm$ 1.6; range 5-9; p<0.001) One-hundred (100%) percent agreed that the bingo component of the course should be continued. The majority of students felt that the bingo game made the course more interesting (93.7%), helped them concentrate the content (87.5%) and motivated them to demonstrate their knowledge (75.0%). Suggestions for improvement included giving more points for completing more than 1 row of squares, giving prizes based on the number of squares earned and have more activity in square game card.



### Impact

The bingo game increased student interaction with course material throughout the class and provided students with options for demonstrating learning.

## Future development

1. Developed more activities in bingo game card to motivate students to perform better on the required graded activities (examinations and competencies), to appeal to students with different learning styles (posters, computer animations, poems, videos, crossword puzzles), and



#### to encourage close attention to required readings and lecture material (identify textbook errors or errors made during class). 2. Design bingo game for pharmacology course in 2/2561 semester.



1. Sutterluety AJ. (2002). Bingo game decreases procrastination, increases interaction with course content. *The Teaching Professor*. November 1, 2002; 4-5.

2. Tietze, K.J. (2007). A Bingo Game Motivates Students to Interact with Course Material. *American Journal of Pharmaceutical Education*, 71 (4) Article 79.