THE VARK LEARNING STYLE OF NURSING AND MIDWIFERY STUDENTS

Model Pembelajaran VARK pada Mahasiswa Keperawatan dan Kebidanan

Janno Sinaga, Rinco Siregar, Amila, Rinawati Sembiring
Faculty of Nursing and Midwifery
Sari Mutiara Indonesia University, Kapten Muslim Road, 79 Medan Indonesia
Email: rincosiregar@yahoo.co.id

ABSTRAK

Pendahuluan. VARK sangat penting dalam memfalsilitasi perkembangan mahasiswa keperawatan dan kebidanan, membantu menterjemahkan teori dalam praktik, dan membuat apa yang dipelajari dalam kelas seperti kenyataan di lapangan. Penting untuk mengkaji tipe pembelajaran mahasiswa untuk memenuhi kebutuhan belajar yang berbeda. Tujuan penelitian ini adalah 1) mengidentifikasi model pembelajaran mahasiswa keperawatan dan kebidanan, dan 2) perbedaan model pembelajaran antara mahasiswa keperawatan dan kebidanan. **Metode.** Penelitian ini menggunakan *descriptive cross-sectional study* dengan menggunakan kuesioner VARK versi 7.8. Total responden adalah 241 mahasiswa, 125 mahasiswa keperawatan dan 116 mahasiswa kebidanan diambil menggunakan teknik *stratified random sampling*. Analisis data menggunakan *Chi square test* dan *One Way ANOVA* (α=0.05). **Hasil.** Hasil penelitian menunjukkan bahwa 61.7% mahasiswa keperawatan dan 67.8% mahasiswa kebidanan di tingkat pertama; 70.8% dan 63.3% pada tingkat kedua menggunakan pembelajaran multimodal. Tidak ada perbedaan signifikan pembelajaran antara mahasiswa tingkat pertama dan tingkat kedua begitupun antara mahasiswa keperawatan keperawatan dan kebidanan (p>0.05). **Diskusi.** Mahasiswa keperawatan dan kebidanan memiliki model pembelajaran yang disukai tetapi mayoritas mahasiswa menggunakan multimodal. Oleh karena itu, direkomendasikan penggunaan metode pembelajaran aktif.

Kata kunci: Model pembelajaran, mahasiswa keperawatan dan kebidanan, VARK

ABSTRACT

Introduvtion. VARK is very important to facilitate the development of nursing and midwifery students, helping translate theory into practice, and making what is learned in the classroom a reality. It is important to assess the learning style of students to cater for differing learning needs. The aim of the study were: 1) to identify learning style nursing and midwifery students, and 2) the differences of learning style between nursing and midwifery students. Method. A descriptive cross-sectional study was performed by using VARK questionnaire version 7.8. A total of 241 students including 125 nursing and 116 midwifery students were participated in this study that selected using stratified random sampling techniques. Data analysis used Chi square test and One Way ANOVA (α=0.05). Result. The study showed that 61.7% and 67.8% nursing and midwifery students in the first year; 70.8% and 63.3% in the second-year were used multimodal learning preferences, respectively. There was no significantly differences learning preferences between the first and the second-year as well as between nursing and midwifery students (p>0.05). Discussion. The nursing and midwifery students have varies on the learning preferences however the majority of the students used multimodal. Therefore, an active learning method was recommended.

Keywords: Learning style, Nursing and midwifery students, VARK

INTRODUCTION

Students at colleges or universities are struggling to cope with their studies and the unique demands imposed by particular courses (Boström, 2011a). Nursing and midwifery students are became more sophisticated in knowledge driven by cultural and economic factors and traditional teaching methods, such as lectures, should be modified by the use of advanced, more liberal teching methods driven by students learning styles.

There are various definitions of learning styles, based on the ways that and individual learns, perceives, interacts with and responds to learning environments (Vorhous, 2010). Felder and Brent (2005) considered learning preferences or styles as about how the brain worksmost efficiently to process, comprehend, and learn new information. Varied definitions can point to major agreement that learning style is an individual's preferred way to learn, a definition that was set early in 1984 by Kocinski. Learning preferences are about the ways that people want to interchange information, and it includes auditory (learning by hearing), visual (learning by seeing), and

kinesthetic (learning by doing) (Felder and Brent, 2005; Fleming, 2010).

One method that helps in acquiring information about students' learning styles is a questionnaire called 'VARK' developed by Neil Fleming in 1998 (Murphy et al., 2004). VARK is an acronym for four sensory modalities that we use to perceive information. V denotes visual preference, A denotes aural preference, R denotes read/write preference and K denotes kinaesthetic preference. Visual learners prefer to learn by seeing information presented as flow charts or enhanced with graphics. Aural learners may love hearing others and themselves speak. Kinaesthetic learners learn best by doing things involving many senses. Visual learners prefer the use of diagrams and symbolic devices such as graphs, flow charts, hierarchies, models, and arrows that represent printed information. Aural learners prefer to listen rather than take notes. Read/Write learners prefer printed words and text. Kinesthetic learners use live experience and practice in order to learn (Fleming, 2010).

Learner with a single learning style preference are referred to as unimodal, whereas other preferring a variety of styles are known as multimodal. Of the multimodal learners, there are subclassifications for bi-, tri- and quadmodal learners, who prefer to use two, three or four styles, respectively. VARK is very important to facilitate the development of nursing and midwifery students, helping translate theory into practice, and making what is learned in the classroom a reality (James, S. *et al.* 2011).

Due to the learning preferences of the nursing and midwifery students never been observed, this study is very important. The objectives of the study were: 1) to identify learning style nursing and midwifery students, and 2) the differences of learning style between nursing and midwifery students.

METHODS

A descriptive cross-sectional study was carried out between May and June 2014, and VARK questionnaire version 7.8. was performed that consisting of 16 questions with multiple choice of four sensory of modality and has been translated into Indonesia language. A total of 241 students including 125 nursing and 116 midwifery students were participated in this study that selected using stratified random sampling techniques. Questionnaires were evaluated on the basis of previously validated scoring instructions and a chart (Flemming, 2006).

Chi-square test was used to analyze difference between nursing and midwifery students. Statistical significance was set at $p < 0.05$.

RESULT

The sample consisted of 241 nursing and midwifery students, 125 nursing students, 188 were females and 53 were male. The dominant of learning style of first year and second year (70.80% and 61.67%) nursing and 67.80% and 63.30% midwifery students had a multi modal learning style (dimodal, trimodal and quadmodal) (table 1).

Table 1 showed that the majority of the students used multimodal (61,67% first year and 70,80% second year nursing students) and (67,80% first year and 63,30% second year midwifery).

Table 1. The Learning Styles of Nursing and Midwifery Students

Learning Styles	Nursing		Midwifery	
	First Year (%)	Second Year (%)	First Year (%)	Second Years (%)
Unimodal	38.33	29.20	32.20	36.70
Multimodal	61.67	70.80	67.80	63.30
- Bimodal	30.00	30.76	30.35	25.00
- Trimodal	20.00	16.94	17.85	16.64
- Quadmodal	11.67	23.10	19.60	21.66

Table 2. The Differences in Learning Styles of Nursing and Midwifery Students

	Leraning Style		(N)	df	X^2	p
	Unimodal (n)	Multimodal (n)				
Year of study						
Year 1	41	75	116	1	.174	.677
Year 2	41	84	125			
Study program						
Nursing	42	83	125	1	.021	.885
Midwifery	40	76	116			

N = Total sampling, n = sampling, df = degree of freedom, X^2 = Chi square test, p = significant value

DISCUSSION

This study finding was consistent with Sabo et al., (2012) in which 62% were multimodal to health profession students. Likewise the study finding that was conducting by Samarakoon et al., (2013), showed 69,9% first year medical students preferred multimodal learning style. Alkhasawneh, (2012) also found that the first year nursing students, 55% of students preferred multimodal. The learning method that was used by nursing and midwifery faculty at Sari Mutiara Indonesia University use Problem Based Learning. Problem Based Learning methods used scenarios, case study, simulated laboratorium, and evidence based practice. However, our finding of this study was inconsistent with Shenoy et al., (2012) towards the first students MBBS course, found that unimodal learning style was 62,3%. Other studies showed that unimodal learning style more dominant, 67% (Brown et al., 2008).

Multimodal learners can be more flexible in taking in the information than learners with a single preference (Alkhasawneh et al, 2008). They are more likely to be able to match their preferences with whatever mode(s) are being used. However, multimodal learners can be challenging for the educators since they need to have at least two, three or four modes involved in learning before they are satisfied. For example, someone with an Aural-Read-Kinesthetic preference would want to read about it and talk about it with others and receive examples before they would accept the incoming information. A single preference learner would understand the information from just their preferred mode – if it was available in that form. Such finding should notify educators to the significance of using multi-teaching modalities in their classes.

While the differences in learning styles with year of study and study program between nursing and midwifery students was found that no significantly different (Table 2). The learning method that was used in year 1 and year 2 in nursing and midwifery study program are same, both of them were using Problem Based Learning. However, the result of this study was inconsistent with Alkhasawneh (2012), revealed that learning preferences of nursing students significantly differed from the first academic to the third academic year.

CONCLUSION

There was no differences learning preferences between the first and the second-year in nursing and midwifery students.

RECOMMENDATION

The nursing and midwifery students have varies on the learning preferences however the majority of the students used multimodal. Therefore, an active learning method is recommended.

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