

A Comparative Study of First and Third Year Student Nurses' Knowledge and Attitudes on the Elderly and Ageing

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Summary

A comparative study was carried out to assess Year I and Year III student nurses' attitudes and knowledge of the elderly. Significantly more Year I students disagreed that the elderly had a capacity to learn ($\chi^2 = 11.08$, $p = 0.0006$). Year III students were significantly more likely to obtain information about the elderly from the mass media, agencies, and relatives but not from health personnel. Nearly all respondents (96.25%) in the study wanted to know more about the elderly. Only 3 of the 14 questions on ageing revealed significant differences in knowledge between the two groups. The basic course in gerontology should be expanded and revised to dispel erroneous attitudes, allow better understanding of the ageing process, and ensure entry-level competence in caring for older people.

Key Words: Student nurses, Attitudes, Knowledge, Malaysia, Elderly

Introduction

Declining trends in fertility and mortality over the past decades in Malaysia have resulted in a steady increase in the population of the elderly (65 years and above) from 3.2% in the 1970's to a projected 7.7% by 2020¹. It is predicted that their demands on the health care system will continue to rise². Nursing is the largest single component of all health services and will continue to be a primary vehicle for delivering health care to the aged. The knowledge and attitude of nursing personnel toward the elderly patient is of importance in determining the effectiveness of nursing care^{3,4}. This study investigates whether there are differences in knowledge and attitudes of newly enrolled student nurses and the final year (year 3) student nurses towards the elderly and the ageing process.

Method

The study was conducted in the School of Nursing at the University Hospital, Kuala Lumpur. The school has two intakes of new students every year (January and July) for the Basic Nursing Education programme, and has a total of 242 students. Nursing students receive instruction and obtain clinical experience in all the wards of the University Hospital and are supervised by nursing tutors, ward sisters and registered staff nurses. A total of 80 student nurses were recruited in equal numbers from Year I and Year III. All the student nurses from each year were selected. Students who were pretested were excluded. Year I student nurses were newly enrolled and had only 2 weeks of introductory lectures and no lectures or training in the care of the elderly. Year III student nurses have received basic information about normal ageing, pathology and

the problems of the elderly in the second semester of their first year and the fourth semester of their second year of their nursing education.

A comparative study was made to examine the differences between the two groups on their knowledge and attitudes towards elderly people. A standard objective questionnaire was used. Material for the questionnaire was adapted from Palmore's "Facts on Ageing Quiz" which covered basic social, mental and physical facts as well as common misconceptions about ageing⁵. The questionnaire was translated into Malay as this was the medium of instruction in the School of Nursing. This was pre-tested for clarity, sequence and flow on five students from each year who were then excluded from the main study. The selected sample of students were given the questionnaire to complete in their respective Year I and Year III lecture halls to minimise bias. The students were briefed as to how to complete the questionnaire by one of the authors (YCW) and no time constraints were imposed. The statistical package STATCALC in Epi-Info (version 5.01b) was used for analysing the data. The Chi-square test was used to compare the responses of the two groups. Yates correction was applied when one of the cells had fewer than 5 respondents. A probability value of less than 0.05 is considered statistically significant.

Permission to carry out this study was obtained from the Director of the University Hospital, and the Principal of the School of Nursing of the University Hospital, Kuala Lumpur.

Results

The 80 student nurses were aged between 18 to 27 years with the Year III respondents being older by a mean difference of 3.3 years. The nurses comprised of 71 Malay, 7 Indian and 2 Chinese and there were no significant differences in ethnicity between the two groups in the study. Twenty three (57.5%) of Year I and 30 (75%) of Year III students have stayed with elderly relatives aged 60 years and above prior to the study. In response to the question "Who are the elderly?", 57.5% of Year I and 67.5% of Year III students associated retirement with the onset of old age. Twenty-one (52.5%) Year I respondents viewed

menopausal women as elderly as compared to 5 (12.5%) of Year III respondents ($\chi^2 = 10.58$, $p = 0.0011$). When asked about the characteristics of the elderly (Table I) both groups agreed that the elderly were not useless. Thirty-three (82.5%) of Year I respondents disagreed with the statement that the elderly had a capacity to learn whereas only 15 (37.5%) of Year III had a similar view ($\chi^2 = 11.08$, $p=0.0006$). There were no significant differences between the two groups on other characteristics provided in the questionnaire such as withdrawn; isolated and senile and/or confused, although the majority of the respondents in both groups felt that these were common in the elderly.

The students' response to behavioural problems in the elderly are shown in Table II. Year I students were more likely to resort to restraining the elderly person with behavioural problems ($\chi^2 = 5.91$ with Yates correction, $p = 0.015$). Significantly more Year III students (80%) knew where to obtain information about the elderly than their Year I (50%) counterparts ($\chi^2 = 7.91$, $p = 0.005$). Differences in the knowledge of the possible sources of information about the elderly are shown in Table III. Seventy seven of the 80 respondents in the study said that they would like to know more about the elderly. When asked about their preference for nursing adults, children or elderly patients, none of the Year I students chose to nurse elderly patients as their first preference. Four (10%) amongst the Year III respondents preferred nursing elderly patients. Although 19 (47.5%) Year III students compared to 11 (27.5%) Year I students selected elderly nursing as their second preference, the difference between the two groups did not reach statistical significance.

Table IV shows the distribution of the respondents providing the correct answers to some stated facts of ageing. Three questions showed significant differences in the knowledge of the nurses concerned. Year III students were more likely to answer correctly that all five senses tend to decline in old age, that the elderly still have interest in sexual relations, and that the majority of the elderly are healthy and able to carry out their normal activities of daily living. There were no significant differences between the two groups on the other 11 questions in the questionnaire.

Table I
Characteristics of the elderly

Statement	Response	Year I		Year III		Significance
		no. (%)	no. (%)	no. (%)	no. (%)	
1. Useless	Yes	2 (5)	3 (7.5)		N.S.	
	No	37 (92.5)	37 (92.5)			
	Don't Know	1 (2.5)	0			
2. Withdrawn/ Social Isolation	Yes	26 (65)	31 (77.5)	$\chi^2=1.15$ $\chi=0.283$	N.S.	
	No	13 (32.5)	9 (22.5)			
	Don't Know	1 (2.5)	0			
3. Senile/Confused	Yes	29 (72.5)	23 (57.5)	$\chi^2=2.08$ $\chi=0.149$	N.S.	
	No	10 (25)	16 (40)			
	Don't Know	1 (2.5)	1 (2.5)			
4. Capacity to learn	Yes	7 (17.5)	19 (47.5)	$\chi^2=11.08$ $p = 0.0006^*$		
	No	33 (82.5)	15 (37.5)			
	Don't Know	0	6 (15)			

N.S. = Not Significant

Table II
Students' response to behavioural problems in the elderly

Statement	Response	Year I		Year III		Significance
		no. (%)	no. (%)	no. (%)	no. (%)	
Restrain Patient	Yes	11 (27.5)	2 (5)		$\chi^2=5.91$ $p=0.015^*$ (Yates correction)	
	No	28 (70)	37 (92.5)			
	Don't Know	1 (2.5)	1 (2.5)			
Determine cause for behaviour	Yes	38 (95)	39 (97.5)		N.S.	
	No	1 (2.5)	0			
	Don't Know	1 (2.5)	1 (2.5)			
Medicate the elderly patient	Yes	27 (67.5)	17 (42.5)		N.S.	
	No	12 (30)	17 (42.5)			
	Don't Know	1 (2.5)	6 (15)			
Change the patient's environment	Yes	36 (90)	33 (82.5)		N.S.	
	No	3 (7.5)	3 (7.5)			
	Don't Know	1 (2.5)	4 (10)			

N.S. = Not Significant

Table III
Information on the elderly

Sources of information about the elderly*	Year 1 No.(%)	Year3 No.(%)	Significance
1. Mass Media (Radio, TV, newspapers, magazines)	15 (37.5)	30 (75)	$\chi^2=11.43$ $p=0.0007^*$
2. Agencies (Old folks Homes, Nursing homes)	9 (22.5)	29(72.5) $p<0.001^*$	$\chi^2=20.05$
3. Family members	10 (25)	21(52.5)	$\chi^2=6.37$ $p=0.012^*$
4. Health personnel	16(40)	19(47.5)	$\chi^2 = 0.46$ $p=0.5, N.S.$

* = More than one response allowed

N.S. = Not Significant

Discussion

There is little doubt that the need for nursing in geriatric care will rise in tandem with the increasing proportion of elderly in Malaysia. The respondents in this study showed that many start their nursing education with some negative attitudes and misconceptions toward the elderly. These attitudes are expressed in many ways and is widely present in society^{6,7,8}. The unwillingness to choose geriatric nursing as a first preference for the majority of the nurses surveyed further reflects this attitude but there is hope that with more exposure and knowledge pertaining to the elderly, that this will change. Comparisons of attitudes between various levels of nursing personnel have been done^{9,10,11}. These studies suggest that the level of education, time spent in direct contact with the elderly and age of the subject (nurse) had a positive influence on their attitude towards the elderly. In this study, the difference in the level of education and age of the subjects studied was not significant. The four Year III students who expressed a preference for nursing the elderly suggests an encouraging trend that may be related to the presence of the short basic introduction in gerontology.

When asked about the commonest sources of

information about the elderly and the ageing process (table III), there were significant differences between the first and third year student nurses. The exposure of the Year III students to the elderly during their clinical attachments may have stimulated interest and may have encouraged some to make further enquiries from accessible sources of information such as the mass media, agencies, and from their family members. Attitudes, positive or negative, can be passed on by these social agents (family, school, peers, books and the mass media). Since people rarely question the validity of what they learn through their own senses, beliefs acquired by direct observation tend to be the most enduring¹¹. There was no significant difference between the two groups in obtaining information from health personnel. This suggests that the Year III nurses have learned through personal experience and self interest and that insufficient relevant information about the elderly was obtained from the basic nursing course. Nearly all (96.3%) of the students in the study wanted to know more about the elderly. Information provided by the health personnel (doctors and nurse tutors) should attempt to take into consideration the specific queries of the students. A further study into the type of information the students wish to know about the elderly might be useful in curriculum development. The minimal difference found in the assessment of the

Table IV
Knowledge on the elderly and aging

Facts of Aging Respondents answering correctly	Year I no (%)	Year III no (%)	Significance
1. All five senses decline	23 (57.5)	32 (80)	$\chi^2=4.71$ $p=0.03^*$
2. Will still have interest in sex	6 (15)	15 (37.5)	$\chi^2=5.23$ $p=0.022^*$
3. Majority feel miserable most of the time	5 (12.5)	10 (25)	N.S.
4. Physical strength declines	37 (92.5)	36 (90)	N.S.
5. Cannot work as effectively as younger workers.	5 (12.5)	3 (7.5)	N.S.
6. About 80% of elderly are healthy and able to carry out daily activities	10 (25)	26 (65)	$\chi^2=12.93$ $p=0.0003^*$
7. Many are set in their ways	5 (12.5)	3 (7.5)	N.S.
8. Slower reaction time	32 (80)	33 (82.5)	N.S.
9. Most elderly people are very similar	19 (47.5)	20 (50)	N.S.
10. Elderly are seldom bored.	13 (32.5)	8 (20)	N.S.
11. Older workers have fewer accidents	12 (30)	6 (15)	N.S.
12. Almost impossible for elderly to learn new things.	19 (47.5)	25 (62.5)	N.S.
13. Over 10% of Malaysians are >65years	7 (17.5)	10 (25)	N.S.
14. Health and socio-economic status of elderly in 2020 will be the same	27 (67.5)	29 (72.5)	N.S.

N.S. = Not Significant

two groups of students' knowledge of the aging process and the elderly may reflect the fact that the basic nursing course in 1994 had only 8 hours of basic introductory gerontology. Gerontology content in any form ranges from little or none to "adequate" in

undergraduate nursing curricula even in America¹². Traditionally, basic nursing programmes have included very little geriatric nursing content. Some have rotations in nursing homes, where the students learn basic nursing skills. In hospital rotations, students care

primarily for elderly patients. Unfortunately, because most faculties lack preparation in geriatric nursing, they focus on patients general nursing and medical conditions rather than aspects of care such as functional ability and cognition which are the hallmark of geriatric practice¹³. In a regional study, Yurchuck and Brower¹⁴, found that in 75% of the programs they surveyed, students were only sometimes assigned to older clients in their clinical courses and only 20% of the programmes required gerontological textbooks.

Preparation to teach such a course will no doubt be a learning experience for both teacher and student as there is a dearth of specialised nurse tutors locally. It will be essential for the teaching personnel to interact

with the students, elderly people and their families, and other health professionals involved in the care of the elderly to enhance their knowledge levels and awareness. The positive attitudes towards aging and the elderly person imparted to the students will improve the standard of care. The special psychological, physical and social needs of the elderly differ from the younger age groups. It is important for nurses and other health personnel to recognise these differences and incorporate them in the care of the elderly¹⁵. Having a required undergraduate clinical course will help dispel erroneous beliefs and attitudes, allow more nurses to understand better the aging process, ensure entry-level competence in caring for older people and encourage more nurses to take up the challenge of caring for the elderly.

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