

# Health Promotion in Nursing Education: attitudes among nurse students

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**Abstract.** *Background:* The World Health Organization (WHO) European Strategy for Nursing and Midwifery has called for the explicit inclusion and application of health promotion in all nursing curricula. However, research indicates that there are deficiencies in nursing education regarding health promotion in both the theoretical and practical elements of education. Insight into the experiences of European nursing students' attitudes, positive or negative, about working in health promotion may provide a clue whether health promotion will be regarded as an important task and to what extent it will have priority in different parts of Europe. *Aim:* The aim of this study was to compare Italian and Swedish nursing students' attitudes towards health promotion practice on matriculation to nursing school and after a three-year nursing education, and to explore whether attitudes towards health promotion practice correlate with BMI and smoking. *Method:* The study involved students who started their nursing education in autumn 2009 (n =240). Data were collected via a questionnaire. *Results:* The results show that the Swedish students had a more positive stance on health promotion than Italian students did. After completion of a three-year nursing education programme, Italian students' attitudes on health promotion had improved, while no such development was seen in Sweden. Further, no correlation between lifestyle issues and attitudes to health promotion was found. *Conclusion:* Health promotion in nursing education may have important influence on students' attitudes and thereby on the quantity and quality of future health promotion practice.

**Key words:** attitudes, health promotion, motivation (MeSH®), student nurses, nursing students

## Introduction

In industrialized countries, the cost of lifestyle diseases has increased dramatically, both financially and in terms of human suffering. The World Health Organization (WHO) (1) has long recognized the need to focus not only on treating the illness but also on emphasizing health promotion and the prevention of health risks (2, 3). To succeed, strategies for promoting health must be incorporated at every level of the health-care system.

Nurses compose one category of health professionals who can be important agents in promoting health (4-8), as they represent a large number of total patient/health-care-worker interactions. However, studies show that nurses do not sufficiently practice health promotion (9, 10). A greater emphasis on attitudes and skills concerning promoting health and minimizing health-risk factors may increase the quantity and quality of future practice (11-14). The nurses' own health behaviour may also be important and may be reflected in their attitudes towards health promotion (5, 10).

The WHO European Strategy for Nursing and Midwifery has called for the explicit inclusion and application of health promotion in all nursing curricula (1). However, research indicates that there are deficiencies in nursing education regarding health promotion in both the theoretical and the practical elements of that training (16). Insight into the experiences of European nursing students' attitudes, positive or negative, on working in health promotion may provide a clue whether health promotion will be regarded as an important task and to what extent it will have priority in different parts of Europe. The aim of this study was to compare Italian and Swedish nursing students' attitudes towards health promotion practice on matriculation to nursing school and after a three-year nursing education, and to explore whether attitudes towards health promotion practice correlate with BMI and smoking.

## Methods

This study is part of an international project about lifestyle issues among student nurses and health promotion in nursing education. The study's design is comparative, involving students who started their nursing education in autumn 2009. Two European universities took part in the study, one in the northern Europe (Sweden) and one in the south (Italy).

### *Questionnaire*

Attitudes on health promotion practice were measured using an eight-question Likert scale with five response alternatives ranging from "strongly agree" to "strongly disagree." A low value indicate a favourable answer. The questionnaire was tested for face validity using the "think aloud" method Fonteyn et al. (17); French et al. (18). This evaluation showed that the questionnaire needed minimal revision in both countries. Certified translators converted the questionnaire from Swedish to English and then from English to Italian. Retranslation from English to Swedish was also conducted, as was retranslation from Italian to English.

A construct validity test was performed by means of factor analysis (19). Factors emerged with an eigen-

value of  $> 1$ , which explained 59.8% of the total variance (Table 1). To obtain the best possible model, different combinations of factors were tested. Finally, the principle component analysis model with the varimax rotation method was chosen. This procedure resulted in two factors: (1) attitudes on health promotion in nursing and (2) attitudes on one's own ability and motivation to work with lifestyle issues. The correlation coefficient was measured by means of Cronbach's alpha, which produced an overall correlation of .84 (20).

### *Data analysis*

Descriptive statistics were computed for all study variables and a nonparametric method (Mann-Whitney U-test) was used to analyse the data. The level of significance was set at  $p \leq .05$ . Statistical analysis was performed using SPSS 15.0.

### *Ethical considerations*

The study was carried out in accordance with the Code of Ethics of the World Medical Association (Declaration of Helsinki, <http://www.icmje.org>). Each university's institutional review board approved the study. All participants were informed about the study and were invited to participate on a voluntary basis; their confidentiality was guaranteed. They were aware that they could withdraw from the study at any time, without having to give a reason, and that this would not affect their studies. Informed consent was obtained from those who agreed to participate.

## Results

The number of participants in the study at baseline was 239, and after three years' education the number was 208; most were females. In Italy, there were more male students than in Sweden (26.6% and 7.9%, respectively). The students' birth years varied, the youngest was born in 1991 and the oldest in 1950; the mean age of the students in Italy was 29 years and in Sweden 27. Of the Swedish students, 42% lived with a partner, compared with 3.4% of the Italian students, and after three years 10 of the Swedish students had

**Table 1.** Validity and reliability tests calculated by means of Factor analysis and Cronbac's alpha (Attitude questions about health promotion in nursing)

	Mean	SD	Communalities extraction	Cumulative variance %	Factor I	Factor II
Working with health promotion is an important task in nursing	1.42	0.61	0.52		0.68	
My opinion is that the nursing education should prepare me for health promotion work	1.59	0.66	0.49		0.68	
I would collaborate with patients and their next-of-kin in health promotion work	1.74	0.76	0.61		0.67	
Nurses are important persons in influencing patients lifestyle	1.98	0.78	0.38		0.57	
My opinion is that patients should be participants in health promotion work	1.68	0.70	0.43		0.56	
I am not sure I will have time for health promotion work among patients	3.13	0.97	0.31		0.48	
				26.51		
I believe that I can work with lifestyle issues	2.15	0.83	0.73			0.85
I feel motivated to work with lifestyle issues	2.04	0.81	0.67			0.76
I believe in my ability to motivate patients in changing lifestyle	2.15	0.81	0.59			0.74
My opinion is that the nursing education should prepare for innovation and entrepreneurship	2.04	0.80	0.37			0.52
				25.98		

Kaiser-Meyer-Olkin measure of sampling adequacy (KMO):0.85. Bartlett's test sphericity:p<0.0001.

Factor I: Attitudes on health promotion in nursing

Factor II: Attitudes on own ability and motivation to work with lifestyle issues in nursing

Overall Cronbach's alpha: 0.84

become parents but none of the Italian students had. Non-smokers in Sweden at baseline were 79%, compared with 63.8% in Italy. No correlations were found between countries concerning smoking and attitudes towards health promotion. BMI did not change during the three years of education. The mean value for BMI was 23.1 for the Swedish students and 21.9 for the Italians. No correlations between BMI and attitudes to health promotion were found.

#### *Attitudes on health promotion in nursing*

No difference was found concerning attitudes towards health promotion in nursing among the Swed-

ish students over time. In Italy, the students were more positive regarding health promotion practice after three years than they had been at baseline ( $p = .012$ ) (Table 2). However, both at their entry to nursing education and after three years, the Swedish students demonstrated a more positive stance than their Italian counterparts did on health promotion practice ( $p < .0001$ ) (Table 3).

#### *Attitudes on own ability and motivation to work with lifestyle issues in nursing*

When it comes to students' attitudes regarding their own ability and motivation to work with lifestyle

**Table 2.** Nursing students' attitudes to health promotion practice at baseline and after three years of education. Comparisons within groups

	N	Mean rank	Sum of ranks	<i>p</i> -Value
<b>Factor 1</b>				
Sweden at baseline	62	64.08	3973.0	0.073
Sweden after 3 years	55	53.27	2930.0	
Italy at baseline	177	177.63	31441.0	0.012
Italy after 3 years	153	151.46	23174.0	
<b>Factor 2</b>				
Sweden at baseline	62	59.41	3683.5	0.887
Sweden after 3 years	55	58.54	3219.5	
Italy at baseline	177	175.85	31125.0	0.031
Italy after 3 years	153	153.53	23490.0	

Mann-Whitney *U*-test

Factor 1. Attitudes on health promotion in nursing

Factor 2. Attitudes on own ability and motivation to work with lifestyle issues in nursing

**Table 3.** Nursing students' attitudes to health promotion practice at baseline and after three years education. Comparisons between groups

	N	Mean rank	Sum of ranks	<i>p</i> -Value
<b>Factor 1</b>				
Sweden at baseline	62	66.90	4147.5	0.0001
Italy at baseline	177	138.60	24532.5	
Sweden after three years	55	55.96	3078.0	0.0001
Italy after three years	153	121.95	18658.0	
<b>Factor 2</b>				
Sweden at baseline	62	87.56	5429.0	0.0001
Italy at baseline	177	131.36	23251.0	
Sweden after three years	55	79.12	4351.5	0.0001
Italy after 3 years	153	113.62	17384.5	

Mann-Whitney *U*-test

Factor 1. Attitudes on health promotion in nursing

Factor 2. Attitudes on own ability and motivation to work with lifestyle issues in nursing

issues, there were no differences over time among the Swedish students, but the Italian students were more positive after three years than they had been at baseline ( $p = .031$ ) (Table 2). The Swedish students were more positive concerning their own ability and motivation to work with lifestyle issues than the Italian students, both at baseline ( $p < .0001$ ) and after three years ( $p < .0001$ ) (Table 3).

## Discussion

This study was undertaken in order to highlight nursing students' attitudes, ability and motivation regarding health promotion practice and to shed light on important implications for improving health promotion in nursing education. The subject of health promotion is an important issue in the European Strategy for Nursing and Midwifery (1) and ought to influence the content of nursing education. Health promotion in nursing education may have important influence on students' attitudes and thereby on the quantity and quality of future health promotion practice. Our results show that the Italian students' attitudes were more positive on health promotion practice after three years than they had been at baseline; the same pattern emerged concerning their perceived ability and motivation to work with lifestyle issues. This may indicate that the Italian nursing education influenced the students' attitudes and motivation to practice health promotion. In Sweden, however, the students reported a more positive attitude towards health promotion and greater ability and motivation to work with lifestyle issues both at baseline and after three years, which seems to indicate that factors other than nursing education had influenced them. Apart from education, different cultures and traditions may of course play a significant role in students' attitudes and motivation regarding health promotion practice. Differences may exist, for example, in societies' propaganda promoting a healthy diet, physical activity, or smoking cessation—these are important and also influence students' attitudes. Research has shown that nursing students' own lifestyles significantly affect their attitudes and motivation to work with lifestyle issues (15, 21–23). Our study shows that smoking was more common among the Swedish students than the Italian at start of the nursing education but that the number of smokers decreased in both Italy and Sweden during the students' three years of training. However, no correlations between smoking, BMI, and attitudes on health promotion were found, a phenomenon that aligns with the findings of Steptoe et al. (24), which in contrast to recent research show that there is no correlation between personal health behaviour and attitudes towards HP among nurses and general practitioners.

The present study used a sample drawn from two universities in two European countries and cannot be seen as representative of nursing students in general; a health promotion approach may be stronger in some countries and weaker in others. Further, the pathogenic approach may be quite strong in some countries, making it difficult for health professionals to embrace a salutogenic perspective (25). This naturally also affects education, including nursing programmes. Research has found impediments to implementing reforms in European nursing education concerning health promotion (26), and difficulties have also arisen in interpreting nurses' role in health promotion (10). However, it is important that all nursing education take WHO's call seriously and incorporate health promotion in the education, as the role nurses should play in health promotion is evident (4-8).

The strength of this study is its use of a comparative research design; this allowed us to study similarities and differences in student nurses from two different European countries, one in the south and one in the north, in terms of their attitudes towards health promotion. The WHO European Strategy for Nursing and Midwifery has called for the explicit inclusion and application of health promotion in all nursing curricula (1), and this has been implemented in both Swedish and Italian nursing education. However, it is not known how much students read about health promotion or whether it permeates the entire educational programmes. Nor is it possible to comment on whether it was the education itself that influenced students' attitudes to health promotion; this is a weakness of the study.

Other strengths of the study are that the questionnaire was tested for internal validity using the "think aloud" method (17, 18) and that translation and retranslation by certified translators was carried out in both countries.

## Conclusions

In Sweden and Italy attitudes about health promotion and lifestyle among nursing students exhibited different patterns over time. At matriculation to nursing school, Swedish students were more positive

regarding health promotion than Italian students were. After completing a three-year nursing education programme, Italian students demonstrated improved, more positive attitudes to health promotion than they had at the programme's start. No such development was seen in Sweden. Students' attitudes on health promotion when they started nursing education in Italy and Sweden may mirror the general attitude of these societies. The evolution of attitudes may relate to education. Attitudes towards health promotion were not associated with lifestyle issues like smoking or BMI, either in Sweden or in Italy. Teaching health promotion in nursing education is important in influencing students' attitudes and thereby the quantity and quality of future health promotion practice.

### Key points:

Our findings show, in contrast to recent research, that there were no correlations between nursing students' personal health behaviours and their attitudes and motivation to work with lifestyle issues.

Teaching health promotion in nursing education improve positive attitudes to health promotion practice.

Nursing students' attitudes to health promotion when they started their education in Sweden and Italy respectively may mirror different attitudes to health promotion in society.

### Empirical research study

This empirical research study consists of an article on original research that has not been previously been published in its current format

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