



## Knowledge regarding non communicable diseases among registered nurses

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### ABSTRACT

The purpose of this study was to assess the knowledge regarding non communicable diseases among registered nurses working in a tertiary care hospital. The objectives of the study were to assess the knowledge regarding non communicable diseases among registered nurses, to determine the association between selected socio-personal variables and knowledge regarding non communicable diseases among registered nurses. Methodology: Quantitative approach was used and convenient sampling technique was adopted. 190 subjects were selected from various department of SGMCH, and data were collected using questionnaire to assess socio personal data and awareness of subjects regarding non communicable diseases. The data were analysed using descriptive and inferential statistics. Results: The results revealed that nearly half of them belongs to the age group of <25 yrs and 26-30 years respectively. Majority (60%) were graduate nurses. 38% had experience ranging from 2-5 years and less than 2 years. 83% did not attend any CNE on non-communicable diseases recently. The present study findings showed that 66.8% have good knowledge regarding non-communicable disease, 24.7% of the subjects have average and 8.4% of the subjects have poor knowledge regarding non-communicable diseases. There was no significant association found between knowledge regarding non communicable diseases and socio personal variables such as age and year of experience. A significant association was found between knowledge regarding non communicable diseases and socio personal variables like qualification and area of work ( $p < 0.05$ ).

**KEYWORDS :** Knowledge; non communicable diseases; registered nurses.

### Introduction

Non communicable diseases (NCDs) are contributing to rising proportion of sickness and deaths worldwide, including India. These include heart diseases, diabetes, hypertension, stroke, cancer, obesity, chronic lung diseases, etc. These are driven by several risk factors mainly tobacco and alcohol consumption, inappropriate diet and physical inactivity, air pollution, stress, etc<sup>1</sup>.

A recent World Health Organization (WHO) document states that 388 million people globally, will die from noncommunicable diseases (NCDs) diseases like diabetes and heart disease in the next decade.

A total of 56 million deaths occurred worldwide during 2012. Of these, 38 million were due to NCDs, principally cardiovascular diseases, cancer and chronic respiratory diseases. Nearly three quarters of these NCD deaths (28 million) occurred in low- and middle-income countries. The number of NCD deaths has increased worldwide and in every region since 2000, when there were 31 million NCD deaths. NCD deaths have increased the most in the WHO South-East Asia Region, from 6.7 million in 2000 to 8.5 million in 2012, and in the Western Pacific Region, from 8.6 million to 10.9 million. While the annual number of deaths due to infectious disease is projected to decline, the total annual number of NCD deaths is projected to increase to 52 million by 2030<sup>2</sup>. The leading causes of NCD deaths in 2012 were cardiovascular diseases (17.5 million deaths, or 46.2% of NCD deaths), cancers (8.2 million, or 21.7% of NCD deaths), respiratory diseases, including asthma and chronic obstructive pulmonary disease (4.0 million, or 10.7% of NCD deaths) and diabetes (1.5 million, or 4% of NCD deaths). Thus, these four major NCDs were responsible for 82% of NCD deaths<sup>3</sup>.

According to WHO report, in most countries, nurses and midwives account for more than 50% of health-care providers, representing the largest group who can make significant contributions to prevent and treat noncommunicable diseases. As professionals, nurses and midwives have the expertise to build on the strengths of individuals and communities to improve health outcomes. It can stimulate discussion on maximizing the contributions of nurses and midwives, in responding to the epidemic of NCDs and the four identified risk factors for NCDs, namely tobacco use, unhealthy diet, physical

inactivity and the harmful use of alcohol. Nursing's holistic approach to the health of individuals and communities will not only prevent diseases, but promote health, building on the strengths and resources of individuals and communities.<sup>7</sup>

The nurses can play an important role in educating individuals through specially designed educational programme in the clinical setting, as well as through community outreach strategies that suit our social & cultural settings. In addition they constitute an important source of information within their social networks. Since the nurses have a major influence on the behaviour of people and are involved in the primary care of patients at the hospital and community level, it is necessary that they should be knowledgeable about the conditions that require long term care and the preventive aspects of these diseases. Studies related to this area are very limited in Kerala. Hence, the purpose of the study is to assess the knowledge of nurses regarding non communicable diseases.

### Statement of the problem

A descriptive study to assess the knowledge regarding non communicable diseases among registered nurses in a tertiary care hospital.

### Objectives of the study

1. To assess the awareness of registered nurses regarding non communicable diseases
2. To determine the association between selected socio personal variables and knowledge of registered nurses regarding non communicable diseases

### Methodology

**Research Approach:** In the present study, quantitative approach is used to assess the knowledge regarding non-communicable diseases

**Research Design:** The design selected for the present study is descriptive research design.

**Setting of the study:** The study was conducted at Sree Gokulam Medical College Hospital (SGMCH).

**Population:** In the present study, the population is all registered

nurses who are working in tertiary care hospitals.

### Inclusion criteria

The study included registered nurses who are working in the hospital for a minimum period of 1 year.

### Exclusion criteria

The study excludes registered nurses who are included in any other on-going research regarding non communicable diseases.

**Sample:** The sample constitutes registered nurses who are working in Sree Gokulam Medical College Hospital, Thiruvananthapuram.

**Sample size:** Sample size was calculated based on pilot study. Sample for the present study consisted of 190 registered nurses who are working in Sree Gokulam Medical College Hospital, Thiruvananthapuram.

**Sampling technique:** In this study the researcher had used convenient sampling to select subjects who fulfils the inclusion criteria.

### Tool/Instruments of the study

The tool was developed by the investigator and used for the study. Section A: Socio personal data

Section B: Questionnaire to assess the knowledge regarding non communicable diseases

**Section A:** Socio demographic data consist of variables such as age, professional qualification, years of experience, area of work and previous information on non-communicable diseases.

**Section B:** Questionnaire to assess knowledge consists of definition, aetiology, prevention and management of non-communicable diseases like diabetes, cardiovascular diseases, cancer, and stroke.

### Data collection procedure

The study was conducted to assess the level of knowledge regarding non-communicable diseases among registered nurses. 190 registered nurses who met the inclusion criteria were identified from different departments in the hospital. The investigator introduced herself and explained regarding the study and assured confidentiality of the information provided by the study participants. Informed consent was obtained from each study participants to ensure their willingness to participate in the study. The data was collected using structured questionnaire regarding socio-personal variables, knowledge of subjects regarding non-communicable diseases.

### Results

Frequency, distribution and percentage of subjects based on socio personal variables

- Among the subjects, 40% belonged to the age group of <25 years, 42.1% subjects belonged to 26-30 years and 17.9% subjects belonged to 31-35 years.
- Nearly half of the subjects (38.4%) had less than 2 years of experience and 37.4% had 2-5 years of experience. Only 24.2% had more than 5 years of experience and 41.5% subjects were females.
- Among the subjects majority (60%) were graduates. 38.9% were diploma holders and only 1.1% were post graduates.
- 40.5 % of the subjects were working in different intensive care units, 32.1% were in medical ward and 18.9% were working in surgical wards.
- Most of the subjects (83%) did not attend any continuing nursing education regarding non-communicable diseases recently.

### Level of knowledge regarding non-communicable disease.

**Table 2: Frequency, distribution and percentage of subjects**

### based on level of knowledge

Sl.no	Level of knowledge	Frequency	Percentage
1	Adequate	127	66.8
2	Average	47	24.7
3	Poor	16	8.4

- 66.8% have good knowledge regarding non-communicable disease, 24.7% of the subjects have average and 8.4% of the subjects have poor knowledge regarding non-communicable diseases.

Association between level of knowledge and selected socio personal variables

**Table 3: Association between level of knowledge and selected socio personal variables**

Sl.no	Characteristics	$\chi^2$	df	P
1	Age	2.501	4	.644
2	Qualification	14.84	4	.005*
3	Experience	3.45	4	0.485
4	Area of work	16.11	6	0.013*

- There was no significant association found between knowledge and socio personal variables such as age and year of experience. A significant association was found between knowledge and socio personal variables like qualification and area of work ( $p < 0.05$ ).

### Discussion

One of the major challenges that we are faced with in the international public health arena is the recent increase in non-communicable diseases (NCDs) in developing as well as industrialized countries. However, chronic diseases account for about 60% of the 565 million total deaths in the world. The share of the burden of NCDs in these deaths is about 46% of the global burden of these diseases in developing countries.

In the present study, it was found that only 66.8% have good knowledge regarding coronary artery disease. This results are consistent with the study findings of C Johnson et al which revealed that 60% of the nurses had adequate knowledge regarding non-communicable diseases. This study is contradictory with the study findings of Khadka M et al (2012) which revealed that, among 196 participants, only 22% had good level of knowledge regarding modifiable risk factors of coronary atherosclerotic heart disease.

Another paper that studied the attitudes to cardiovascular health promotion among FPs and practice nurses reported that health promotion involves more than the provision of simple information and advice and the FPs and nurses lack confidence in lifestyle counselling.

### Conclusion

The study concludes that the knowledge among nurses regarding non-communicable disease is satisfactory. Still, it recommends the need for curriculum-based education that includes healthy lifestyle training and motivation of the nurses to incorporate these practices into their daily lives to build the foundation for a healthy generation tomorrow and also to pave the way to curb the menace of non-communicable diseases in the general public in the early stage itself. This study highlights the huge gap that exists between awareness about non-communicable diseases among nurses and the ever increase in these diseases and lifestyle practices adopted by people. There are many studies which reveals the lack of awareness regarding these diseases among general public. Creating awareness regarding non-communicable diseases, devising different strategies for different groups and providing enabling environment to motivate them to adopt healthy dietary and exercise related behaviors has to be taken on a war footing to reap the benefits in the future. The challenge for the nurse is especially to rope in laggers to adopt healthy behaviour patterns. Patient

Education needs to be an integral component in the treatment of NCDs and it is crucial for the nurses to involve in this.

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