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Knowledge on Non-Communicable Disease among Patient Visitors Attending to a Tertiary Level Hospital of Chitwan, Nepal

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ABSTRACT

Background: Non communicable diseases are a major contributor to the burden of disease in developed countries and are increasing rapidly in developing countries. This is mainly due to demographic transitions and changing lifestyle of population associated with urbanization. The impact of NCDs is devastating in term of premature morbidity, mortality, and economic loss. This study aimed to ware to find out the knowledge on non-communicable disease among patient visitors attending tertiary level hospital.

Methods: A descriptive Cross sectional study design was used where122 patient visitors aged 24-44 years were purposively selected and enrolled in the study. Data were collected using face to face Interview questionnaire. Obtained data was analyzed in SPSS version 27 for window using descriptive and inferential statistics.

Results: The finding of the study revealed that 59.8% respondents were from 24-44 years where 80.9% of the respondents were female. All most all (92.6%) of respondents were married,96.7% of respondents were literate. Regarding heard about NCDs, all most all (99.2%) of respondent were heard. Regarding family history of NCDs, more than half (59.8%) of respondent had present. This study showed 87.7% had good knowledge where 3.3% has poor Knowledge on overall Non-Communicable Disease.

Conclusion: This study concluded that majority of respondents have good knowledge on overall non communicable disease so further studied should focus on identifying practices whether they are implementing their knowledge on day-to-day life or not.

Keywords: *knowledge; non-communicable disease; visitors*.

INTRODUCTION

Non-communicable diseases (NCDs) contribute to the global burden of morbidity and mortality, with a significant share of premature deaths among low- and middle-income countries (LMICs). NCDs have a far-ranging impact on health, which translates into the higher healthcare cost associated with it.[1] NCD represent the principal cause of death worldwide killing 41 million people each year which accounts for 71 % of mortality globally.[2]Nepal is currently in a transition from infectious diseases to non-communicable diseases and its major public health concern. Recent data suggests NCDs account 60% of all deaths and 80% outpatient care in Nepal.[3] NCDs are posing a great threat to mankind. Timely identification, prevention, and control of common risk factors help to reduce the burden of death from NCDs as all the risk factors and preventing measures are closely related to lifestyle changes and behavior modifications. The rising prevalence of non-communicable diseases and associated mortality in low- and middle-income countries where the setting of limited health and economic resources, effective, scalable information and awareness strategies for addressing NCDs are urgently needed.[4] This study aimed to find out knowledge on Non communicable disease among patient visitors attending tertiary level hospital.

METHOD

A descriptive cross-sectional research design was used to find out knowledge on non-communicable disease among patient visitors attending medicine OPD of tertiary level hospital Chitwan, Nepal. Total of 122 adult visitors attending medicine OPD who were in age group (25-60 years) and who do not have History of NCDs were purposively selected and enrolled in the study. Semi structured face to face interview schedule questionnaire was developed by researcher herself and used to collect data. Developed instrument was validated by consulting

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subject expert. The reliability of the instrument was measured by pretesting among 10% of total sample. Necessary modifications were done after pre-testing as needed. Ethical norms were maintained throughout the study period. Ethical clearance was taken from Institutional Review Committee (IRC) Bharatpur hospital (Ref no:079/080-058). The collected data were checked, review and organize for completeness. Then all the data will be entering in excel, analyse in SPSS version 20.

RESULTS

This research was conducted among 122 respondents. This research showed that more than half (59.8%) were from 25-44 years and about 2/3rd (80.9%) were female. The data revealed that 26.2% were overweight and few (9.0%) were underweighted and obese as well. All most all (92.6%) of respondents were married and more than half (56.6%) were Brahmin where majority (85.7%) were following Hindu religion (Table 1).

Table 1. Socio-demographic information of respondents. (n=122)	
Variables	**Frequency (%)**
Age (Years)	
25-44	73(59.8)
45-60	49(40.2)
Sex	
Male	48939.3)
Female	74(60.7)
BMI (Kg/m^2)	
Under weight	11(9.0)
Healthy weight	68(55.7)
Over Weight	32(26.2)
Obesity	11(9.0)
Marital Status	
Married	113(92.6)
Unmarried	9(7.4)
Ethnicity	
Brahmin/chtri	69(56.6)
Aadibasi/Janati	45(36.9)
Madhesi	1(0.8)
Dalit	7(5.7)
Religion	
Hindu	113(92.6)
Buddhist	7(5.7)
Christian	1(0.8)

Regarding other sociodemographic information of the respondents, 96.7% of respondents were literate, (71.3%) of the respondents were from nuclear family. All most all (94.3%) have access to health care center within 30-minute distance from home. All most all (99.2%) of respondents responded that they heard about NCD while 59.8%) of respondent had family history of NCDs (Table 2).

Table 2. Socio-demographic information of respondents. (n=122)	
Variables	**Frequency (%)**
Education Status	
Literate	118(96.7)
Illiterate	4(3.3)
Occupation	
Job holder	29(23.8)
Business	19(15.6)
Agriculture	28(23.0)
Housewife	41(33.6)
Heard about NCD	121(99.2)
Family history of NCDs	73(59.8)

Table 3. Respondent s knowledge on modifiable risk factors of NCDs.	
Risk Factors	**Frequency (%)**
Smoking is a risk factor	117(95.9)
Chewing Tobacco is risk factors	117(95.9)
Excessive salt intake is risk factors	105(86.1)
Recommended salt intake is one tea spoon per day	67(54.9)
Obesity is risk factors	107(87.7)
Maximum intake of alcohol is risk factors	114(93.4)
Lack of physical exercise is risk factor	112(91.8)
Recommended moderate exercise is 150 minutes per week	25(20.5)
Hypertension is risk factor	111(91.0)
Increase cholesterol level is risk factor	104(85.2)
Stress is a risk factor	111(91.0)
Intake of high fat diet	111(91.0)
Sleep Disturbance	111(91.0)
Sedentary Life style	111(91.0)
High intake of sugar	117(95.9)
High blood glucose	112(91.8)
Random use of Drug without prescription	118(96.7)

Regarding Modifiable risk factors of NCD 95.9% of respondents were answered smoking, chewing tobacco and sedentary life style, 86.1% of

respondents answered excessive salt intake, 87.7% answered obesity, 93.4% of respondents were answered maximum intake of alcohol, 91.8% of respondents answered lack of physical exercise, 91% of respondents were answered hypertension, stress & intake of high fatty diet and sleep disturbance, 85.2% of respondents answered increased cholesterol level, 87.7% of respondents answered high intake of sugar, 91.8% of respondents were answered high blood glucose level, 96.7% of respondents answered random use of medicine without prescription as modifiable risk factors of NCDs (Table 3).

Table 4 showed that all most all (94.3) of respondents answered increasing age,82.8% answered sex, few (22.1%) of respondents were answered male as vulnerable sex. Likewise, majority (84,4%) of respondents were answered family history, 92.6% of respondents answered hereditary, few (9.2%) of respondents were answered ethnicity, all most all (95.1%) of respondents answered family history as non-modifiable risk factors of NCDs (Table 4).

Table 4. Respondents' knowledge on non-modifiable risk factors of NCDs. (n=122)

Risk Factors	Frequency (%)
Increasing age	115(94.3)
Sex	101(82.8)
Being male sex is more vulnerable than being female	27 (22.1)
Family history	103(84.4)
Hereditary	113(92.6)
Ethnicity	12(9.2)
Family history of NCDs	116(95.1)

Table 5 shows that concerning preventive measures of NCDs 99.2% of respondents answered balance diet, 98.4% of respondents were answered regular intake of food and fruits, 93.4% answered limit salt intake, 91.8% of respondents were answered about minimum intake of fatty diet & quitting smoking & tobacco, 98,4% answered regular physical exercise, 98.4%of respondents answered limiting use alcohol 97.5% of respondents were answered maintaining blood pressure and normal cholesterol level, 96.7%) of respondents were answered ideal body weight & minimize stress. Likewise, all most all (95.5%) mentioned regular sleeping habit. 97.5% respondents answered health awareness program as preventive measures of NCDs.

Table 5. Respondent's knowledge on preventive measures of NCDs. (n=122)

Preventive Measures	Frequency (%)
Balance diet	121(99.2)
Regular intake of fruits and vegetables	120(98.4)
Limited salt intake	114(93.4)
Minimum intake of fatty diet	112(91.8)
Quitting smoking and Tobacco	120(98.4)
Regular physical exercise	120(98.4)
Limiting use of alcohol	120(98.4)
Maintain normal blood pressure	119(97.5)
Maintain normal cholesterol level	119(97.5)
Maintain ideal body weight	118(96.7))
Maintain normal blood sugar level	116(95.1)
Regular health checkup	119(97.5)
Minimize stress	118(96.7)
Regular sleeping habits	117(95.5)
Health awareness program	119(97.5)

Table 6 shows that majority (87.7%) of the respondents had good knowledge on NCDs.

Table 6. Respondents' overall knowledge on NCDs. (n=122)

Level of Knowledge	Frequency (%)
Poor	4 (3.3)
Average	10(8.2)
Good	107(87.7)

DISCUSSION

Based on the findings of the similar studies done in different setting and populations discussions has made. Concerning sociodemographic characteristics of patient's visitor ranged from 25 to 60 yrs. of age group were involved and among them 59.8% respondents were from age group of 25-44years where more than half (60.7%) of the respondents represent female sex and 92.2% were married. These study findings were compared with the study conducted in Uganda where participants ranged from 28 to 66 (mean 43.6) years of age. Approximately two-thirds were female and received secondary school education.[3] Similarly findings were compared with the study findings done in Nepal which showed 58.2%participants were female. The participants ranged in age from 18-93 years.[4] Among respondents, 57.4% were female, 82.5% were married, and 46.2% completed primary school. The respondents'

ages ranged from 18 to 77 years with a mean age of 41.1 (S.D ± 13.9). About (23.1%) respondents had a positive family history of NCDs.[5] Regarding risk factors of NCD this study showed 95.9% of respondents were answered smoking, chewing tobacco and sedentary life style, 86.1% of respondents answered excessive salt intake, 87.7% answered obesity, 93.4% of respondents were answered maximum intake of alcohol, 91.8% of respondents answered lack of physical exercise, 91% of respondents were answered hypertension, stress & intake of high fatty diet and sleep disturbance, 85.2% of respondents answered increased cholesterol level, 87.7% of respondents answered high intake of sugar, 91.8% of respondents were answered high blood glucose level, 96.7% of respondents answered random use of medicine without prescription as modifiable risk factors of NCDs, increasing age,82.8% answered sex, few (22.1%) of respondents were answered male as vulnerable sex. Likewise, majority (84,4%) of respondents were answered family history, 92.6% of respondents answered hereditary, few (9.2%) of respondents were answered ethnicity, all most all (95.1%) of respondents answered family history as non-modifiable risk factors of NCDs, these findings were compared to the findings of the study done in Rwanda where risk factors identified by respondents were smoking(65.7%), alcohol Drinking(61.1%),Passive smoker (11.4%), Obesity (37.7%), Consuming Junk food (34.1%), Stress (44.2%), Anxiety, Consuming excess salt (49.7%), Lack of Physical exercise (22.5%).[6] Additionally the study conducted in Rwanda reported risk factors as obesity (71.2%), followed by unbalanced diet (56.9%),alcohol consumption and physical inactivity (15.2% and 17.1%, respectively). [7] One more similar study done in Bangladesh reported risk factors as excess intake of fat and sedentary life-style (67.9%), smoking (68.2%), less intake of vegetables and fruits (57.4%), excess or additional salt intake (50.5%) and family history of NCD (44.1%).[9] Another study done in Kenya reported that most of the participants (62.1%) had low levels of knowledge about NCD risk factors.[8] About preventive measures of non-communicable disease this study findings reported that balance diet (98.4%), regular intake of food and fruits (98.4%), limit salt intake (93.4%), minimum intake of fatty diet (91.8%), quitting smoking & tobacco (98,4%), regular physical exercise, (98.4%), limiting use alcohol (97.5%), maintaining blood pressure and normal cholesterol level (97.5%), maintaining ideal body weight & minimize stress (96.7%). Likewise, all most all (95.5%) mentioned regular sleeping habit. 97.5% respondents answered health awareness program as preventive measures of NCDs these findings were compared with the study findings done in Bangladesh where respondents answered adopting healthy balanced dietary behavior (69.6%), avoiding too much fatty food (72.5%), followed by regular exercise (71.2%), avoiding or giving up smoking (70.8%) and taking extra salt (57.9%) as preventive measures of NCDs.[9] Concerning overall knowledge on non-communicable disease findings of this study reported that 87.7% had good knowledge, 8.2% had average knowledge, 3.2% had poor knowledge and findings compared with study findings done in India where 10(16.6%) subjects had inadequate knowledge, 47(78.3%) subjects had moderately adequate knowledge, and 3 (5%) subjects had adequate knowledge.[10]

CONCLUSION

This study concluded that majority of respondents have good knowledge on overall non communicable disease so further studied should focus on identifying practices whether they are implementing their knowledge on day-to-day life or not.

Conflict of interest: None

REFERENCE

1. Neupane G, Acharya S, Bhattarai M, Upadhyay A, Belbase B, Bhandari M, Pandeya D, Pokharel S, Ghimire S, Thapa G, Karmacharya B. Study, Design, and Rationale of Noncommunicable Diseases in Nepal (NCD Nepal) Study: A Community-Based Prospective Epidemiological and Implementation Study in Rural Nepal. Global Advances in Health and Medicine. 2020 Apr. [DOI]
2. Aryal KK, Mehata S, Neupane S, et al. The burden and determinants of non-communicable

diseases risk factors in Nepal: Findings from a nationwide STEPS survey. Kirchmair R, ed. PLoS ONE. 2015;10(8). [DOI]

3. Ojo TT, Hawley NL, Desai MM, Akiteng AR, Guwatudde D, Schwartz JI. Exploring knowledge and attitudes toward non-communicable diseases among village health teams in Eastern Uganda: a cross-sectional study. BMC Public Health. 2017 Dec; 17:1-1. [DOI] [PubMed]
4. Onagbiye SO, Tsolekile LP, Puoane T. Knowledge of non-communicable disease risk factors among community health workers in South Africa. [DOI]
5. Thadathil FB. Awareness About Non-Communicable Diseases among Rural Population in Remote Villages of Nepal. Indian Journal of Public Health Research & Development. 2020 Oct 7;11(10):229-35. [DOI]
6. Abdullah, F., Rahman, N. A. A., Kumaran, V., Fazam, N., & Wong, C. E. Knowledge, Attitude and Practices of Indigenous People Towards Non-Communicable Disease in Bera, Malaysia: A Community Based Study. A community-based study. The Medical journal of Malaysia, 2024:79(5), 531–537. PMID: 39352154. [PubMed]
7. Biraguma J, Mutimura E, Frantz JM. Knowledge about modifiable risk factors for non-communicable diseases adults living with HIV in Rwanda. African health sciences. 2019;19(4):3181-9. [DOI] [PubMed]
8. Kiplagat SJ, Steyl T, Wachira LJ, Phillips J. Knowledge of non-communicable diseases among adolescents in Uasin Gishu County, Kenya. African Health Sciences. 2023 Jul 13;23(2):589-96. [DOI] [PubMed]
9. Alam ME, Amin MN, Haque MJ, Hasan F, Haldar MK, Yasmin N, Abu SK, Ullah SS, Yasmin F, Arefin MM, Islam SI. Awareness of Rural People about Prevention of Non-Communicable Diseases. Ibrahim Cardiac Medical Journal. 2020;10(1-2):27-32. [Link]
10. Kalaiyamoorthy V, Abel L. Assessment of Knowledge on Noncommunicable Diseases among the Adult Patients who are Attending the Noncommunicable Diseases Outpatient Department in Government Head Quarters Hospital at Cuddalore. Pon J Nurs 2023;16(2):31–33. [DOI]

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