Non communicable diseases in nepal health and social care essay

Health & Medicine, Disease

The magnitude of NCDs is still unknown in Nepal. The ministry ofHealthand Population, Government of Nepal has non yet formulated policy sing NCDs in the absence of grounds based determination. The survey aims to happen out the magnitude of the job of NCDs in Nepal, therefore directing the concerned governments and at policy degree.

Methods

A cross sectional survey was performed to happen out infirmary based prevalence of NCDs, wherein 400 indoor patients of financial twelvemonth 2009 were indiscriminately selected from each of the 31 selected wellness establishments. It included all third degree wellness establishments of the regional and sub regional infirmaries, zonary infirmaries, specialised infirmaries of malignant neoplastic disease and bosom diseases and medical colleges. In instance of Kathmandu Valley one cardinal infirmary, one medical college and one private infirmary were indiscriminately selected. Indoor patients, 35 old ages or older were included in the survey. Univariate analysis was carried out utilizing frequences and per centums.

Consequences

The survey revealed that there were 36. 5 % of the instances diagnosed with any of the four NCDs (bosom diseases, COPD, diabetesand malignant neoplastic disease) . Breast, neck and ovarian malignant neoplastic disease are the chief malignant neoplastic diseases at national degree accounting for 44 % of distribution. Majority of the instances were of HTN (47 %) followed by CVA, CCF, IHD, RHD and MI. Females and advantaged Janajatis (cultural

group) were found to be holding higher proportion of NCDs in their several groups.

Decision

The survey was able to uncover that Nepal is besides confronting the billowing load of non catching diseases similar to other developing states of south East Asia. Unless comprehensive and sector broad intercession schemes are planned and implemented efficaciously, this job is traveling to upsurge more.

Sector wise recommendation was provided in the survey.

Keywords: Non-communicable diseases, Nepal, Cross-sectional survey

Background

Non-communicable diseases (NCDs) refer to diseases or conditions that occur in, or are known to impact, persons over an extended period of clip and for which there are no known causative agents thatare transmitted from one affected single to another. [1] The hazard factors for many of the NCDs are associated with lifestyle related choicesenvironmental and familial factors. Tobacco usage, harmful usage of intoxicant, unhealthy diets (high in salt, sugar and fat and low in fruits and veggies) and physical inaction are some of the established behavioural hazard factors of NCDs.

NCDs have emerged as the major causes of morbidity andmortality worldwide. Harmonizing to World Health Organization, in 2008, out of 57 million planetary deceases, 36 million or 63 % were due toNCDs, chiefly

cardiovascular diseases or CVDs (17 million deceases, or 48 % of NCD deceases) , malignant neoplastic diseases (7. 6 million, or 21 % of NCD deceases) , respiratory diseases, includingasthma and chronic clogging pneumonic disease (COPD) , (4. 2 million) and diabetes (1. 3 million deceases) . [2] These diseases have been the taking cause of decease in high-income countriesover the last 50 old ages, and they are emerging as a taking cause of decease in low and middleincome states. [3] About 80 % of NCD deceases occur in low-and middle-income states and NCDsare the most frequent causes of decease in most states, except in Africa. [2]

Chronic diseases are largerproblem in low-income scenes, as dual load of infective every bit good as chronic diseases are striving their wellness services. [4, 5] In South Asia, which has onequarter of the planetary population but where about halfthe population lives below the poorness line and haslimited entree to wellness attention, about half of the grownup load ofdisease is attributable to NCDs. [6] Harmonizing to national studies gathered by WHO 's South East Asia regional office, of the totaldeaths in South Asia, the proportion attributable to NCDs ranged from about 7 % in Nepal to 40 % inthe Maldives in 1998. [7] In Sri Lanka the 1999 nose count study records diabetes prevalence as 8 % inrural countries and 12 % in urban countries ; [8] tantamount current rates for Nepal have been reported as 3 % and15 % severally. [9]

In Nepal, prevalence of CHD in eastern part was 5. 7 % in 2005. Similarly prevalence ofhypertension was 22. 7 % in Dharan municipality. [10] Various surveies have shown that the prevalence ofhypertension in big population

was about 20 % in urban population [11] Harmonizing to the information of 'Sunsari Health Survey ' of the twelvemonth 1993, theprevalence of diabetes and high blood pressure in Sunsari District, from eastern Nepal, was about 6 % and 5. 1 % severally in grownups. [12] A more recent information from an urban country has shown the prevalenceof diabetes and impaired fasting glucose as 14. 2 % and 9. 1 % severally. [13]

At least 80 % of bosom disease, shot, and type 2 diabetes, and 40 % of malignant neoplastic disease could be avoided through healthy diet, regular physical activity, and turning away of baccy usage. [14] However, the turning planetary load ofNCDs in hapless states and hapless population has been neglected by policy shapers, majormultilateral and bilateral giver bureau and faculty members [15] . Cost effectual intercessions to cut down chronic disease hazards exist, and have worked in manycountries. [14]

Nepal is one of the poorest states in the universe - at 157thposition of Human Development Index. [16] The magnitude ofNCDs is still unknown. The ministry of Health and Population (MoHP) , Government of Nepal hasnot yet formulated policy sing NCDs in the absence of grounds based determination. Thus it isimportant to turn to the load of NCDs through research.

For this intent ab initio hospital based prevalencedata generated from the regional, sub-regional, zonary and specialised centres across the state wastargeted. This survey was expected to supply a baseline information on magnitude of the NCDs in Nepal. It aims to happen out the magnitude of the

job of NCDs in Nepal, therefore directing theconcerned governments and at policy degree.

Methods

It was a cross sectional survey to place thehospital based prevalence of 4 NCDs (malignant neoplastic disease, bosom diseases, diabetes mellitusand COPD) . Thirty one wellness establishments (cardinal, regional, sub-regional, zonary infirmaries, medical colleges andspecialized centres) were selected from the five developmental parts. In Nepal, most of the instances of NCDs are treated in the third degree wellness establishments like cardinal, regional, sub-regional, zonary, specialised infirmaries and medical colleges. District degree infirmaries have fewfacilities for the diagnosing and intervention of NCD instances so they refer these instances to third levelhealth establishments. Taking these issues into history, we selected all the third degree wellness establishments to calculatethe infirmary based prevalence of NCDs. All specialised centres (Bhaktapur Cancer Hospital, Bharatpur Cancer Hospital and Sahid Gangalal National Heart Center) were besides selected to place the prevalence of different types of malignant neoplastic disease and bosom diseases inNepal. In instance of Kathmandu vale, three wellness institutions- one cardinal infirmary, onemedical college and one private infirmary were indiscriminately selected for this survey utilizing lottery method.

This survey was conducted over the period of eight months from December 2009 to July 2010. Indoor patients, 35 old ages or older were included in the survey. This survey included merely the indoor patientsof the selected

infirmaries because infirmaries maintain elaborate instance records of indoor patients merely and theywere easy accessible for the survey.

Sample size was calculated on the footing of prevalence (40 %) of NCD with12 % allowable mistake (95 % CI) . The sample size calculated was 384. This figure was rounded so that 400 instances were indiscriminately selected from each selected wellness establishment. During this procedure, the infirmary records were reviewed to obtain the information sing the entire figure of indoor instances registered in the twelvemonth 2009. Then instances were selected utilizing computing machine generated random Numberss (Ms-Excel 2007) until the needed sample size of 400 was reached. If the selected instance did non carry through the inclusion standards, so immediate following figure was taken as a instance. Detailss like IPD figure, age, sex, ethnicity, reference and diagnosing were so obtained. Checklist and informations digest signifiers were used for this intent.

The survey was approved by the ethical reappraisal board of Nepal Health Research Council. Formalpermission was obtained from the concerned governments of the selected wellness establishments. Confidentiality was maintained.

Datas obtained were coded and entered inMs-Excel 2007. The information base was so exported to SPSS (ver. 11. 5) for analysis. Univariate analysis was carried out utilizing frequences and per centums.

Consequences

This survey was conducted in 31 wellness establishments (Regional, Sub Regional, Zonal, medical colleges, specialised centres and cardinal infirmary) of Nepal for the intent of placing the infirmary based prevalence of non catching diseases.

The entire figure of patient admitted to these infirmaries in financial twelvemonth 2009 was 3, 47, 261, out of which 11, 907 instances were indiscriminately selected. The figure of instances selected from the wellness establishments ranged from 350 - 400.

Proportion of NCDs at the National degree

Wholly 11, 907 instances were selected from the 31 wellness establishments including specialised Centres. Among them 36. 5 % (4, 343) werecases of NCDs. (Figure 1)

Proportion of assorted NCDs at the National degree

The proportion of bosom diseases was higher than other NCDs. Out of the sum (4343) NCD instances, bosom diseases constituted 38 % . COPD was the 2nd prima disease (33 %) where as diabetes and malignant neoplastic disease was10 % and 19 % severally. (Figure 2)

Distribution of NCDs by age groups

Majority of the patients were from 35-50 old ages followed by 51-65 old ages. Proportion of NCD instances was found to be higher in the age group & A ; gt ; 80 old ages and followed by 66-80 old ages. (Table 1)

Distribution of assorted NCDs among age groups

Proportion of CVD and malignant neoplastic disease was found to be higher in the age group 35-50 old ages. Similarly, COPD and DM were found to be higher in age group above 80 old ages and 51-65 old ages severally. (Table 2)

Distribution of NCDs by cultural groups

Ethnicity of instances was classified in seven groups harmonizing to the authorities categorization of ethnicity. Most of the patients were from upper caste groups followed by disadvantage Janajati population while really few were from spiritual minorities. The proportion of comparatively advantagedJanajati enduring from NCDs was higher than other cultural groups. (Table 3)

Distribution of assorted NCDs among cultural groups

The proportion of comparatively advantaged Janajati was found to be enduring more from bosom diseases, diabetes and malignant neoplastic disease (22. 33 % , 5. 16 % and 14. 73 % severally) while dalit suffered more from COPD which was reported 16. 97 % . (Table 4)

Distribution of NCDs by sex

Among the entire sample population female population was higher than male population. Similarly proportion of female was found to be enduring more from NCDs in comparing to male. (Table 5)

It was found that among different NCDs, there were more males enduring from bosom diseases and COPD than female and females suffered more from DM and malignant neoplastic disease than male. (Table 6)

Distribution of NCDs by developmental parts

Most of the survey population was from Central Development Region followed by western Development Region whereas relatively few from Far Western Development Region. Similarly proportion of NCDs was found to be higher in CDR and WDR. (Table 7)

Distribution of assorted NCDs among developmental parts

The survey revealed that people from WDR were found to endure more from bosom diseases and DM which account for 44. 93 % and 11. 25 % severally. Similarly people from FWDR and MWDR were found to be enduring more from COPD (55. 5 % and 50. 5 %) and EDR from malignant neoplastic disease (31. 46 %) . (Table 8)

Discussion

Our survey revealed that, out of the 3, 294 NCD instances, bulk of the instances (43 %) had COPD and 40 % had bosom diseases followed by DM (12 %) and Cancer (4 %) . The ground behind such a high proportion of COPD instances could be due to the usage of traditional cookery ranges and burning of solid biomass fuels (carnal droppings, harvest residue, and wood) which are the chief beginnings of indoorair pollution. The ingestion of non filtered coffin nails could be another ground for the high prevalence of COPD. Harmonizing to the WHO report on Non Communicable Diseases in

South East Asia Region, harmonizing to the infirmary based survey COPD is taking NCD followed by CVD, malignant neoplastic disease and diabetes in Nepal [17] .

Most of the patients enduring from non catching diseases in this survey belonged to the age group 35-65 years. It is obvious from most of the studies that this age group suffered more from NCDs and therefore the inclusion standard was affecting persons & A ; gt ; 35 old ages. The study released by Mauritius on Non Communicable Diseases indicated the most normally affected age group as 25-74 old ages [18] . It seems the productive age group are largely affected and have indirect impact on productiveness and economic growing of the state as a whole. The cultural distribution of the disease showed higher proportion of advantaged Janajati (52. 34 % out of the entire advantaged Janajati instances) to be enduring from NCDs. Female population (52. 47 %) was found to be higher in proportion of NCDs [19] . Among the developmental parts of Nepal, Central Development part (CDR) has about half of the entire instances of NCDs. This might hold been influenced by the fact that most sophisticated infirmaries are in Kathmandu (which lies in CDR) and which compels most of the people to seek wellness attention from the infirmaries of Kathmandu.

The survey revealed that chest, neck and ovarian malignant neoplastic disease are the chief malignant neoplastic diseases at national degree accounting for 44 % of distribution which suggests that the female is more vulnerable to these malignant neoplastic diseases. A infirmary based retrospective survey conducted in two infirmaries viz. Bhaktapur Cancer

Care Center and Om Hospital and Research Center had besides reported similar tendencies. It was observed that female (56. 4 %) had more figure of instances of malignant neoplastic disease than male and accounted for about 43. 5 % of the entire instances of malignance. Top five malignances included: chest (17. 31 %) , lung (17. 03 %) , NHL (Non-Hodzkin 's Lymphoma) (8. 38 %) , tummy (7. 54 %) and ovarian (7. 54 %) malignant neoplastic diseases severally. It was found that tummy and lung malignant neoplastic disease is the most common malignant neoplastic disease that occurs in digestive and respiratory system severally, NHL in the lymphatic system and chest malignant neoplastic disease in female generative system [20] . Higher prevalence of high blood pressure (47 %) followed by CVA, CCF, IHD, RHD and MI is similar as that of WHO report in Non Communicable Diseases in South East Asia Region which has showed the highest figure of instances of arthritic bosom disease followed by shot and IHD in Nepal [21] .

A figure of surveies conducted in India have shown a important association with a low consumption of fruits and veggies and the hazard of non catching diseases. It has been estimated that 2. 7 million lives could be potentially saved if the ingestion of fruits and veggies were sufficiently increased [22] .

Our survey revealed that bosom diseases is more likely to happen in those who have accustomed ingestion of saturated oils where as American Journal of Clinical Nutrition states that diets rich in veggies and usage of mustard oil could lend to the lower hazard of IHD among Indians [23] . Similarly, in a survey done in IHD showed that a maximal figure of the respondents (63. 8

%) used refined vegetable oil for cookery followed by mustard oil use by 21 % which contain important degree of poly unsaturated fatty acids shown to be protective against coronary arteria disease [24] .

Hence, the findings observed in the present survey point toward an pressing demand of developing strong community-based intercession plans to turn to the increasing load of these diseases.

Decision

This cross sectional survey was carried out to gauge the infirmary based prevalence of non catching diseases. It was able to uncover the grounds of job of NCD Nepal is confronting.

This infirmary based cross sectional survey revealed that there were 36. 5 % of the instances diagnosed with any of the four NCDs (bosom diseases, COPD, diabetes and malignant neoplastic disease) in the financial twelvemonth 2065/66. Breast, neck and ovarian malignant neoplastic disease are the chief malignant neoplastic diseases at national degree accounting for 44 % of distribution. Majority of the instances were of HTN (47 %) followed by CVA, CCF, IHD, RHD and MI. It reflects that Nepal is besides confronting the billowing load of non catching diseases similar to other developing states of south East Asia.

In decision, the magnitude of non catching disease is significant in Nepal and is regarded as a public wellness job. Although grounds for the pandemic of non catching chronic diseases is incontrovertible, as besides seen in this survey, there is a dearth of plan to observe, manage and prevent these

diseases in Nepal. The governmental, non-governmental and community based organisations are still contending to undertake the load of infective diseases. Unless pressing and specific focal point on preventing, handling and control of NCDs are targeted, the load of the NCDs will be intolerable to the hapless state like Nepal. This survey had provided a background informations on NCD and the concern organisations should concentrate and lend in the bar, control and decrease of NCDs load and its hazard factors.

Recommendations

Given the complex causality of NCDs, its bar requires an incorporate action across a scope of sectors at local, regional and national degrees. Each person sector can execute a specific function to lend from their degree. Health attention and public wellness must play a cardinal function in supplying attention and support for the patients but besides in using the alone public wellness theoretical accounts to forestall the associated hazard of NCDs.

Recording and Reporting System

Poor entering system was observed in most of the infirmaries. There was no unvarying format to enter the patient 's inside informations. Assorted features of the patients such as caste, reference and even diagnosings were non clearly written on record book in many infirmaries ' inmate registry due to which, it became hard to acquire the information refering patient and the diagnosing.

Some of the medical colleges and authorities infirmaries used computing machine based package to enter the patients ' informations, but the package and format differ from infirmary to infirmary. So there is an huge demand of unvarying recording and coverage format and if possible the information should be maintained in an electronic version. Data based system should be established to centralise the informations and to decently keep the informations at different degree of wellness system.

Ministry of Health and Population

Ministry of Health could develop precedence based substructures and faculties to forestall and command the NCDs at different phases. It should develop a national degree policy and program of action for good planning and implementing the collaborative action between the wellness sector and other giver bureaus tostresson clinical every bit good as preventative steps for the control of NCDs.

Capacity edifice plans to the medical forces like in service preparation should be provided to update the cognition and to advance the accomplishments.

Most of the wellness establishments particularly in rural portion of the state, lack efficient and new engineering along with the expert work force due to which the patients are forced to travel to the urban countries for quality wellness attention. Ministry should set up non catching disease centre at each development part so that people of rural country besides can bask the quality wellness services.

It should set up the surveillance system of NCDs as like other disease surveillance or demand to set up the integrated surveillance system. There is of import function of surveillance for NCDs inthe Region which can motivate the states to set up sustainable databases forNCDs and their hazard factors. This would greatly ease in policy development and planning for NCD bar and control.

Advocacy runs such as consciousness raising plans, street play, concerts should be conducted for the general people on how to forestall from the hazard of developing NCDs. The Engagement of the public figures at the local and national media in these events can hike the impact.

Population degree

Health is an single issue and induction from an single degree should be done to be free from NCDs. NCDs consequence from familial, behavioural and environmental factors and the interactions between them.

At the population degree, a high prevalence of hazard factors at community degree can be reduced by developing healthy life manner which includes healthy dietetic consumption (less consumption of fried, oily, debris nutrient) , regular physical activity, low consumption of salt, thermal balance, psychological emphasis etc. Alcoholic and smoke wont are the associated damaging factors that are responsible for different types NCDs so such wonts should be restrained. Children should be encouraged to amend the healthy life manners and behaviours to advance wellness in order to cut down the load of NCDs in the following coevals.