

HEALTH SURVEY REPORT

VULNERABILITY ANALYSIS AGAINST COVID-19

Community Development Department Nepal Red Cross Society, National Headquarters May 2021





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Executive Background

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. The first case of COVID-19 was reported from Wuhan, the capital of Hubei Province of China on 31 December 2019. In Nepal, it was reported on 23rd March 2020. The World Health Organization (WHO) on March 11, 2020, has declared the novel coronavirus (COVID-19) outbreak a global pandemic1 and WHO rated Nepal at substantial risk for COVID-19 spread based on the risk profile and capacity of the country to respond to a potential outbreak. Now, the coronavirus is not only a global public health crisis but also a humanitarian crisis.

Initially, the Government of Nepal decided to restrict public movement by imposing a nationwide lockdown that means halting all travel through land and air from 24th March 2020 and gradually lifting movement restrictions depending upon the places nationally. This lockdown receded the national economy and it might take a few years for the economies and health sectors to bounce back to the pre-COVID state. Despite taking public safety measures into account this disease is beyond the control and had spread at the community level.

The Government of Nepal and multiple sectors are focusing on the preparedness and response of the COVID-19. Nepal Red Cross Society (NRCS), being auxiliary to the government, developed an approach paper to pave the way to support the government in this demanding situation. Subsequently, NRCS has been working on COVID- 19 preparedness and response operation in 77 districts by mobilizing thousands of volunteers in coordination with the Government of Nepal, International Federation of Red Cross and Red Crescent Societies National (IFRC), Participating Societies (PNS), International Committee of the Red Cross (ICRC) and nonmovement partners as well as other stakeholders.

Community Development Department (CDD), a pioneer department for implementing community development programs (CDPs) at NRCS, aims to build resilient communities through diverse community-based programs and projects. This health survey has been conducted on CDD district staff, HQs staff and volunteers to understand knowledge, attitude and practice on COVID-19 and health condition by virtual methods. 39 questions were asked to 64 participants including 23 females of the 18 to 60 age group.



- Findings
- Methodology
- Data quality and limitations
- Data analysis, interpretation and analysis
- Health criticality
- Conclusion and recommendations

A. Findings

- Total 64 (41 M 23 F) respondents took part in the survey (19 headquarters and 45 districts), within the age range of 18 69.
- 20 respondents are under medication which means a pre-existing medical condition with single to multipara medication and eight (8) respondents have a past surgical history.
- Seven (7) respondents are habitual to tobacco, where 14 respondents take alcoholics beverages occasionally.
- 18 respondents have done COVID-19 lab test and two (2) respondents tested positive.
- Seven (7) respondents are under multiple certain medical conditions that increase the risk of COVID-19.
- 35 respondents were found in a healthy weight, 23 are overweight and 6 are in underweight categories. In the overweight category (23), it shows that two respondents are obese status whose Body Mass Index (BMI) is above 30. Centers for Disease Control (CDC) states that people who have obesity are at increased risk for many diseases and health conditions.
- 58 respondents attend official events and gatherings in different frequencies.
- 46 respondents are still doing exercise or yoga.
- During the survey, 13 respondents were found to be in stress, fear or disappointment conditions due to the covid-19 pandemic.
- 8 are found at risk level, 5 are seen at moderate risk level, 3 are at high-risk level and 4 are found at the extreme high-risk level of their health in the situation of COVID-19.

B. Methodology

In the context of Covid-19, Nepal Red Cross Society, Community Development Department (CDD) has decided to conduct a health survey among staff and program volunteers, with the objectives of analyzing their overall health status and impact of Covid-19 to them.

A survey questionnaire was used to collect data from all the staff and volunteers working under the community development department (CDD) in different projects in both NRCS HQs as well as district-based (Parsa, Sindhuli, Kathmandu, Palpa, Myagdi, Salyan, Rolpa, Dailekh). In total 64 samples were collected throughout the survey which is 100% of the staff and volunteers under CDD. The data collection was conducted between 10-20th December 2020. The survey was conducted through mobile data collection using the KOBO application. All the staff under CDD were orientated on the health survey questionnaires before rolling out the survey. The orientation was conducted to have a common understanding of the questionnaire itself as well as to take feedback on the questionnaire if the set of questions missed any information to be collected which might be vital during the assessment. The survey was conducted adopting the following approaches for its successful completion.

The survey was conducted by the staff and volunteers under the CDD. Everyone played their role in data collection. However, specific teams were created throughout the process to track the entire task.

There were 4 tier teams with specific responsibilities: 1. Survey management team, having responsibilities of planning and developing tools and digitalizing data collection questionnaires in Kobo application. Likewise, 2. Monitoring team was responsible for pilot testing and online monitoring of data and addressing issues encountered in the survey. 3. Data collection team was

responsible for orientation on the questionnaire and worked as a troubleshooter, last but not least, 4. Report writing team was responsible for data cleanness, draft report, collection of feedbacks, and finalizing the report.

C. Data quality and limitation

The data quality was in line with the survey questionnaires. The HQs staff were oriented on the questionnaire verbally in the office premises whereas the district staff and volunteers were orientated virtually. Their queries were also entertained through telephonic conversation to ease the data collection process.



CDD had to depend on its district-based project staff to reach the staff and volunteers at the field level due to limited internet access. Thus, there was not a direct control on the survey questionnaire dissemination at the field level. HQs team was limited in virtual monitoring which led to minor gaps in data triangulation. This survey report depicts the scenario during the period of data collection; therefore, it only replicates the information received during the said timeframe.

Detail Findings

1. Data analysis, interpretation and presentation 1.1. Demographic analysis

World Health Organization (WHO) states "Health is the state of physical mental and social wellbeing not merely absence of any kind of disease or informality". But due to different causes and effects, a body can be abnormal with its impact in sense to another organ differently. There will have different health impacts on the human body somehow it will be genetic, behavioral and event means an accident. Due to this unrealistic disorder, there comes different smash in the human body and



causes human phenomenal disorder and uncertainty biologically. To be recovered and exit in normal condition there will have a limitation of safe food hygiene, movement, and medication as per the medical survey. As per the objectives of the health survey through the Nepal Red Cross Society Community Development Department online survey has been conducted within community development department members through the KOBO tool. It comes to overview those 64 personals were taken part in a survey where 19 central offices and remaining 45 were contributed from the districts program staffs with 41 males and 23 females from age 18 - 69. It concluded that out of 64 members of the CDD family 20 members are under medication means pre-existing medical condition with single to multipara medication and oversight of the survey concluded health details of the community development department members.

1.2. Certain medical conditions (Diseases)

The Centre for Disease Control (CDC)¹ has categorized some of the medical conditions that are at the increased risks for severe illness from the virus that causes Covid-19 and among those categorized medical conditions, 31% (20) respondents are suffering from those diseases. The recent health survey was conducted by the Nepal Red Cross Society- Community Development Department (NRCS-CDD) among their departmental staff and volunteers. The survey found that the highest prevalence rate (12.5%) of certain medical conditions is in the above 50 years, age group. It shows that the lowest prevalence rate (4.68%) is the underage group of 18-29 years.

Out of 20 respondents having certain medical conditions, the highest number (7) is in the age group of 40-59 and the same number (7) in the age group of 50-59 as well. Similarly, one (1) respondent

¹ <u>https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-</u>

conditions.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fneed-extra-precautions%2Fgroups-athigher-risk.html





falls under the age group of 60-69. The survey found that 16 males and four (4) females are suffering from certain types of medical conditions.

By the analysis of the survey, results-it was found that seven (7) respondents are under multiple certain medical conditions that increase the risk of the Covid-19 virus. Those seven respondents are suffering from two different types of diseases at the same time, either high blood pressure and diabetes or high blood pressure and Asthma/COPD or nervous system disease and diabetes.

Having multiple diseases respondents are seen all in the above 50 years, age group. **CDC reveals that the risk for severe illness with COVID-19 increases with age, with older adults at the highest risk**². It means that they are at higher risk than people in their 40s. Survey also found that 60% (12) of respondents are in increased risk condition who are working in districts under different projects run by the department. Rest 40% (8) of respondents are working in national headquarters.

1.3. Medication

Out of a total of 64 participants, 20 respondents have certain medical conditions and among them, only 17 respondents are on medication and taking certain medicines. The highest number of medication respondents fall into the 50-59 age group. The lowest years 3 number of medications comes into the 18-29 age group (only 1 respondent) and 60-69 age group (only 1 respondent). However, under the 60-69 age group only one respondent is a universe of the survey. It can be also said that 100% of the 60-69 age group are on medication. So, it is difficult to generalize the trend of medication.



Out of the total respondents of certain medical conditions, 12 are male and five (5) are female.

² https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/older-adults.html

³ The age group range of IFRC FDRS system. NRCS has adopted here same FDRS system. Please see more detail: <u>https://data.ifrc.org/fdrs/faq</u>



1.4. Surgery history

1.5. Body Mass Index (BMI)



60-69 TOTAL

female. The data shows that there are not females under the 50-59 age group. The survey result shows that trend of respondents' BMI is- 54.58% (35) found in a healthy weight, 35.93% (23) are in overweight and 9.37% (6) are in underweight categories. In the overweight category (23), it shows that two respondents are in obese status whose BMIs are above 30. CDC⁵ tells that people who have obesity are at increased risk for many diseases and health conditions. The BMI data shows that the highest number of overweight (7), the highest number of underweight (4) and the highest number of healthy weight (11) categories fall into the same age group of 18-29. One vivid trend is clearly seen that age group and healthy weight have a reciprocal correlation.

The surgery history of eight (8) participants was found out of a total of 64 respondents. Most of the respondents had got the surgery of hand, appendicitis, legs, c- section, kidney, bone and gallstone organs. The lowest number of respondents having surgery are into 40-49 (one respondent) and 60-69 (one respondent) age groups. Seven (7) are male and a female among total respondents (8) having surgery history.

After analysis of the BMI⁴ of all 64 respondents, the average BMI is 24.04 which is a healthy range. Age group-wise, it shows that the highest average BMI is 25.49 comes in 60-69 age group which is an overweight category (above 25.00 BMI). The lowest average BMI (22.99) falls in the 18-29 age group. The survey results showed that the age group 30-39 is near to the overweight limit. The report also depicts that the overall average weight of respondents is 67.47 Kg and the average height is 1.67 meters. The average lowest weight, average shortest height and lowest average BMI fall under the 18-29 age group. Out of the total universe of the survey, 41 are male and 23 are



⁴ <u>https://www.cdc.gov/healthyweight/assessing/bmi/index.html</u>

⁵ https://www.cdc.gov/healthyweight/effects/index.html

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1.6. Alcohol Habit

The health survey also analysed the data related to alcohol intake. The result states that 14 respondents have a habit of alcohol intake frequently. The same data says that the average length of alcohol taking is 11.25 years. The maximum average alcohol takina period is seen under the 50-59 age group i.e., 30.25 years. The data also reveals that the alcohol-taking trend has increased by increasing age. Experts prescribe that alcohol-taking habit does not protect from Covid-19, but it weakens the body ability to fight infection and increases acute respiratory distress syndrome as well as pneumonia which are sometimes associated with COVID-19.

1.7. Attending event and gatherings

58 out of 64 staff and volunteers need to attend events and gatherings in different frequencies. The trend shows that there is a decrease in attending events and gathering with an increase in age groups.

The highest number of respondents (28) were found to attend events and gatherings on regular basis, 20 frequently and 10 are in 2-3 times monthly. The highest frequency of attending falls in the 18-29 age group.

Health experts recommend that people need to prepare before going, use social distancing and limit physical contact, wear masks and limit contact with commonly touched surfaces or shred items.





1.8. Workout



The survey reveals that 46 respondents are still doing exercise or yoga. 11 do it on daily basis, 35 on a sometimes basis and 18 respondents said that they have not yet done exercise or yoga. The data shows that the trend of doing exercise or Yoga is decreasing by increasing the age groups of respondents. The active age group of doing exercise or Yoga is seen 18-29 as per the survey.

Other Studies reveal that meditation, as well as **yoga**, can increase vagal tone. In

0 20 40 60 80 100 120 140 addition to targeting the central vagal tone response, circulating levels of pro-inflammatory cytokines are influenced by several types of complementary practice. Some of the cytokine-related effects of seated meditation, breathing practices, and yoga asana practices are related to the reduction in sympathetic nervous system activation⁶.

1.9. Stress, fear or disappointment

The survey report depicts that 13 respondents are in some sort of stress, fear or disappointment conditions due to the COVID-19 pandemic. Among 13, a high number of respondents (4) who are in some sort of stress, fear or disappointment falls under the 18-29 age group. Health experts state that it is natural to feel stress, anxiety, grief, and worry during the COVID-19 pandemic. However, it can cause feelings of



fear, anger, sadness, worry, numbness, or frustration, changes in appetite, energy, desires, and interests, difficulty concentrating and making decisions, difficulty sleeping or nightmares, physical reactions, such as headaches, body pains, stomach problems, and skin rashes, worsening of chronic health problems, worsening of mental health conditions, Increased use of tobacco, alcohol, and other substances. CDC report⁷ says, "Learning to cope with stress healthily will make you, the people you care about, and those around you become more resilient".

⁶ <u>https://www.pacificneuroscienceinstitute.org/blog/infectious-disease/meditation-and-yoga-practices-as-adjunctive-therapies-for-covid-19/</u>

⁷ Mental Health and Coping During COVID-19 | CDC

D. Health criticality

The heated table shows the health criticality respondents. Altogether amona 20 respondents are found to be in different health conditions. 8 are found at risk⁸ level, 5 are seen at moderate risk level, 3 are at high-risk level and 4 are found at the extreme high-risk level of their health in the situation of COVID-19. Among them, the highest number of different risk categories lay in the 50-59 age group and lowest in the 60-69 age group. The highest number of the extreme high-risk respondent (2) falls into the 50-59 age group. The analysis also states that the average BMI of those 20 respondents is 25.20 which is in the overweight category.

Extreme HR Hi		Risk (HR) M	oderate Risk	Risk
18-29 Yrs	30-39 Yrs	40-49 Yrs	50-59 Yrs	60-69 Yrs
		4	1	1
1		3	2	
1	1	1	2	
1			2	

E. Conclusions and recommendations

Health is often understood as the absence of disease or sickness. While this definition is valid, it lacks the comprehensiveness of a broader approach. So one needs to start assessing their holistic health and wellness on a wider spectrum. This means wellness depends on more factors than simply avoiding the flu each year. Holistic health and wellness are sustained by eight pillars: physical, nutritional, emotional, social, spiritual, intellectual, financial, and environmental⁹.

During the COVID crisis, most of the year was spent at home due to lockdown operating the office work from home using virtual means. While on lockdown, NRCS (CDD) decided to conduct the health survey to understand the current health status of the staff and volunteers under it. The survey was on a trial and learning basis but the analysis and example in this report have demonstrated a wider array of factors that influences staff health.

Humanitarian organization as its responsibility and duty to provide humanitarian assistance during emergency and pandemic, staff and volunteers who have to work during the crisis and emergency environment require healthy living. Health status truly matters for the better performance and output of the intended task.

The study clearly depicts that the health status survey is important at a certain interval of time, which helps us to understand the vulnerability of staff and volunteers and take some mitigation measures and strategy to mobilize the staff based on the situation and time of criticality.

- Continuity (yearly basis) of the health survey of staff and program volunteers.
- Collective sharing of the result/analysis of the report and conduct the health awareness and wellbeing sessions.

⁸ Each risk level, numbers of health criticality are associated and categorised accordingly such as-at extreme high-risk level 9-10 health criticalities are comprised likewise at high-risk 7-8, at moderate risk 5-6 and at risk 3-4.

⁹ <u>https://askthescientists.com/pillars-of-wellness</u>

- Awareness of the importance of health for everyone, thus, the significance of the healthy living while performing on humanitarian organization, which often work an emergency and pandemic.
- Continuous monitoring and practices on safety behaviors among the staff and program volunteers.
- Promotion of understanding and practices of spiritual health.
- Increased understanding and importance of holistic health.
- Promotion of other health and wellbeing-related subsidies while health insurances being basic security.

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