Knowledge on the Disaster Risk Reduction (DRR) among the youth residing at Kathmandu Valley.

Sabin Khanal, 0073, MBA-RM

sabin.j19@iihmr.in

School of Development Studies (SDS), IIHMR University

Outline

Introduction

Theoretical Framework

Methodology

Results

Discussion

Suggestions and Recommendations

Conclusion

1. Introduction

1.1 Background: Nepal's Himalayan area is considered one of the world's most dangerous flood hazard zones. Landslides are common in the middle Hills, and floods and fires are common in the Terai. As a result, disasters such as floods, landslides, and fires are common in Nepal. These disasters strike almost every year in the country, claiming many lives and wreaking havoc on property. As country having high number of youth (16-40 years), awareness and knowledge about the disaster in this population group is important for disaster preparedness and disaster response.

1.2 Aim of the study: This study aims to understand the level of knowledge of DRR in youths of Kathmandu valley and how youths have prepared and planned for the next disaster.

1.3 Objectives: The objectives of the study are:

General:

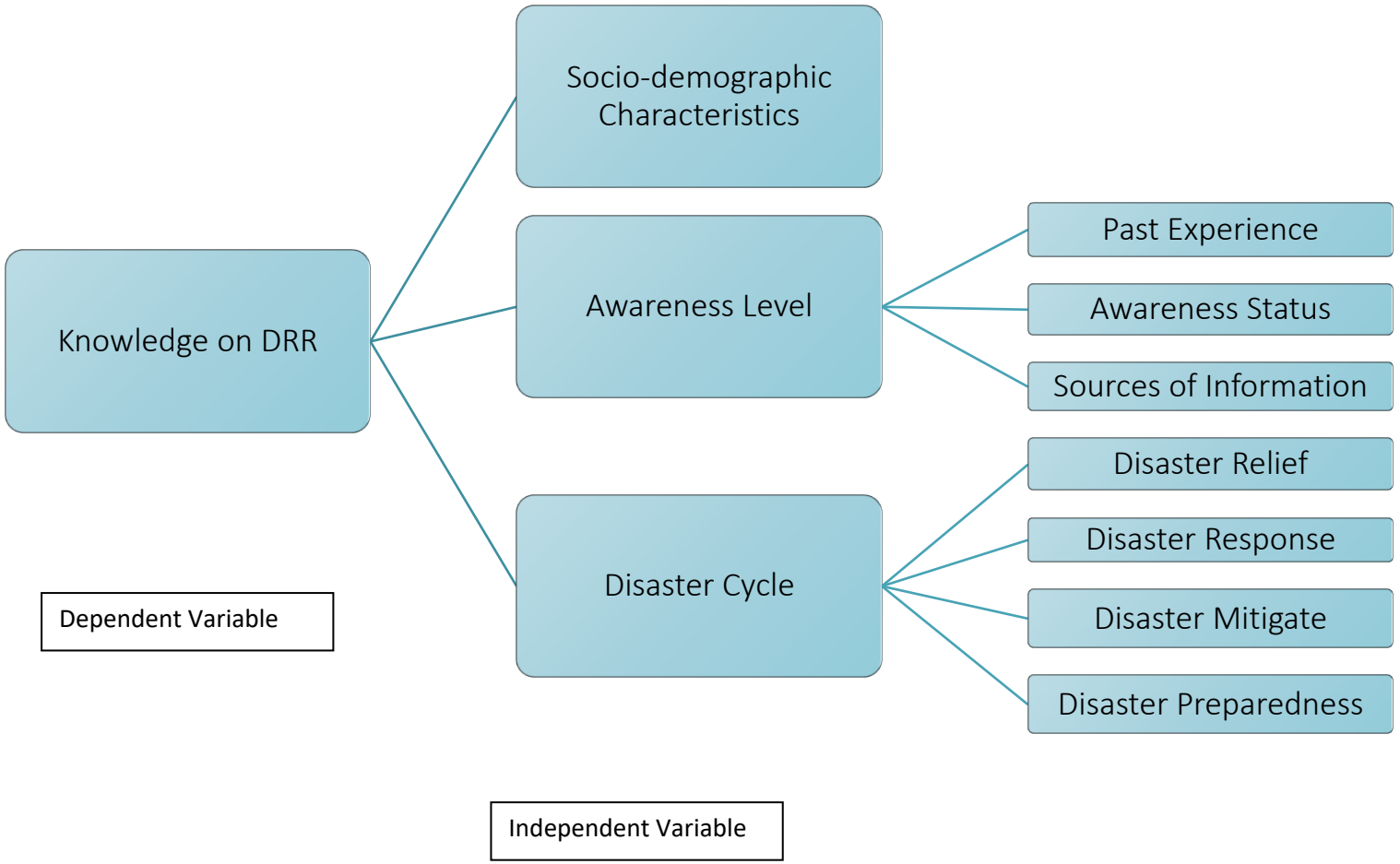
To access the level of knowledge on DRR among youths of Kathmandu Valley

Specific:

To identify socio-demographic factors that may influence the knowledge of DRR.

To determine the knowledge regarding disaster response and preparedness.

2. Theoretical Framework



3. Methodology

3.1 Research Questions: The entire study will be based on the two questions:

What is the level of knowledge on DRR among the youths residing at Kathmandu valley?

What is the existing knowledge regarding disaster response, and preparedness among the youth residing at Kathmandu valley?

3.2 Study Variables :

Independent variable: Socio-demographic, Awareness Level, and Disaster Cycle

Dependent variable: Knowledge about disaster risk reduction

3.3 Study type:

Cross sectional study: To examine a large number of different variables at once, cross sectional study is been taken. This study allows looking at age, gender, income, and educational level in relation to youths' awareness and knowledge of DRR at once.

Cont..

3.4 Description of the study: This study design is a descriptive type of cross-sectional study which involves the study of a cross-section of population and uni-variate analysis of the data collected.

3.5 Study setting: Kathmandu Valley (Valley consist of three districts Kathmandu, Lalitpur and Bhaktapur). Valley lies on the Bagmati Province of Nepal.

3.6 Sampling Technique: In this study, convenience sampling techniques was used for data collection. Participants were selected as convenient because of the ongoing pandemic situation of COVID-19.

3.7 Sample size: 110 Individual (Total 113 respondents have participated for survey however three respondents disagree to conduct the study till last and voluntarily leaved. So only 110 respondent's questionnaire is taken consideration for the study)

3.8 Data collection tools and techniques:

Data collection method	Tools	Techniques
Web based (Enketo version of Kobotoolbox)	Semi-structured questionnaire	Self-administered questionnaire

3.9 Data Analysis:

Data was analyzed through SPSS software

The data was measured by descriptive statistics; for understanding the distribution of data

Cross-tabulation; to study the association between variables

The hypothesis were measured by using chi-square

3.9 Data Presentation: Findings of the data are presented on tabular form and other pictorial form such as pie chart and bar diagram.

3.10 Limitation:

This study doesn't focus about natural disasters, risks, impact, or climate change; rather, it is about what we understand and know about information that is "available" or not, and that can be handled (or not) differently than it is now.

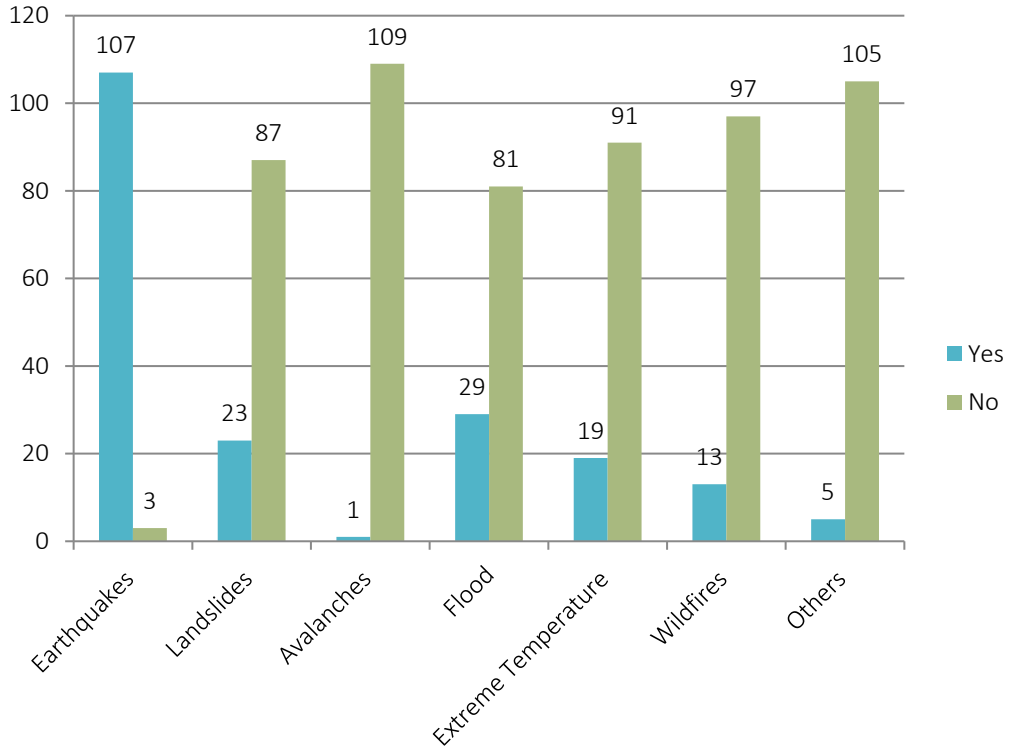
This study studies only the age group of 18-40 years and who are residing at Kathmandu valley.

4. Results

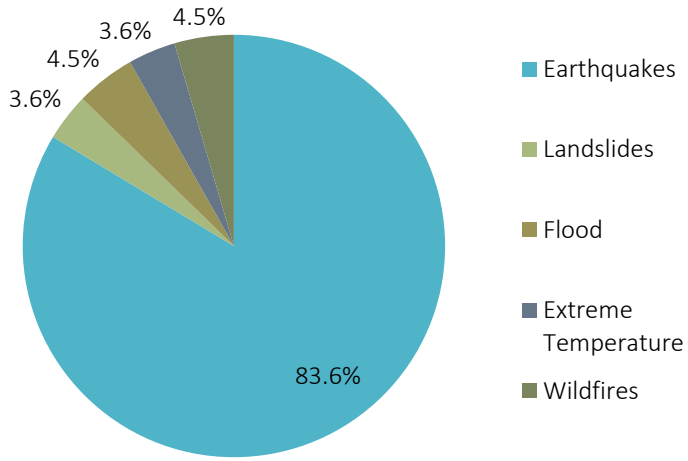
4.1 Socio-demographic Characteristics

Characteristics		Frequency	Percent	Cumulative Percent
Age	18-23	38	34.5	34.5
	24-29	51	46.4	80.9
	30-35	11	10.0	90.9
	36-40	10	9.1	100.0
	Total	110	100.0	
Gender	Male	55	50.0	50.0
	Female	55	50.0	100.0
	Total	110	100.0	
Ethnicity	Brahmin, Chhetri, Thakuri (BCT)	88	80.0	80.0
	Janjati	15	13.6	93.6
	Adhibasi	2	1.8	95.5
	Others	5	4.5	100.0
	Total	110	100.0	
Education Status	Literate	110	100.0	100.0
Education Level	Bachelor's Degree	66	60.0	60.0
	Master's Degree	40	36.4	96.4
	PhD, Post-doc	4	3.6	100.0
	Total	110	100.0	
Marital Status	Married	25	22.7	22.7
	Unmarried	85	77.3	100.0
	Total	110	100.0	
Professional involved	Business	10	9.1	9.1
	Service	47	42.7	51.8
	Intern/Volunteer	4	3.6	55.5
	Labor/manual work	2	1.8	57.3
	Student	47	42.7	100.0
	Total	110	100.0	

4.2 Experience natural hazards



Experience of the different form of natural hazards

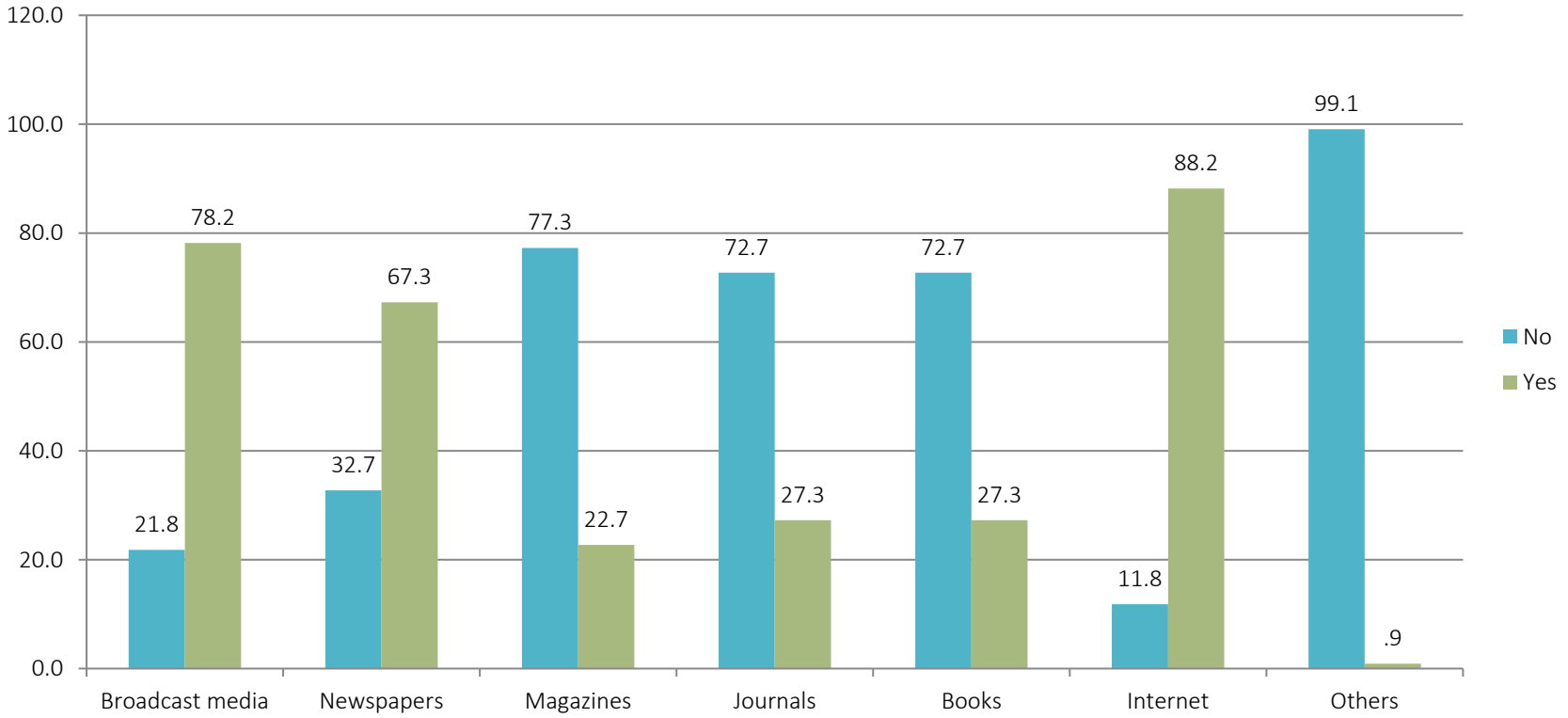


Last hazard Experienced

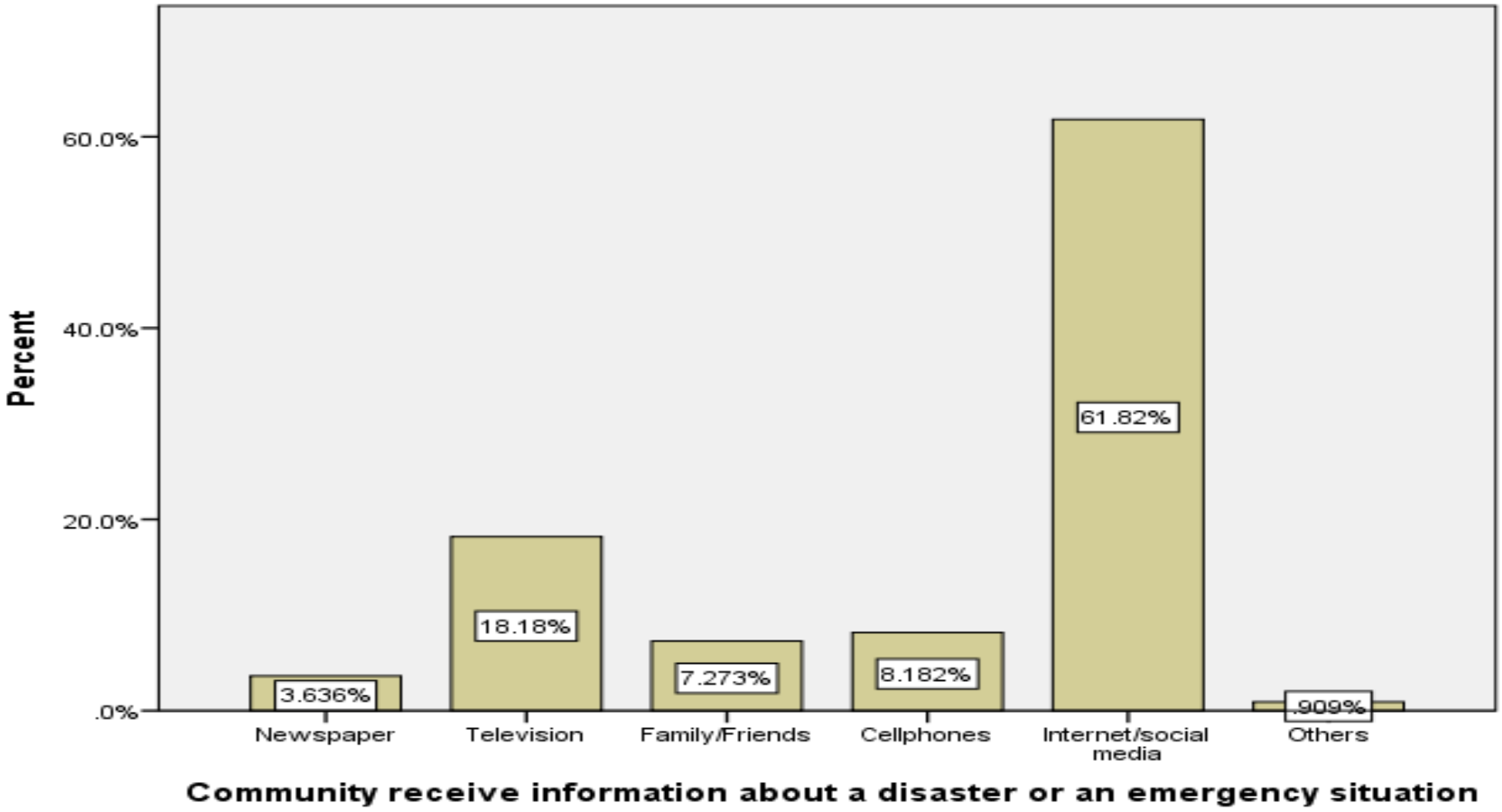
4.3 Awareness Status

Awareness status of Natural Hazard (in %)	Geophysical (Earthquakes, Landslides)	Hydrological (Flood, Avalanches)	Climatological (Extreme temperature, Drought, Wildfires)	Metrological (Cyclones, Waves)	Biological (Disease epidemics, insect/animal plagues)
Very much Aware	**44.5**	17.3	16.4	8.2	**33.6**
Much Aware	26.4	24.5	30.0	7.3	29.1
Aware	19.1	23.6	**32.7**	30.0	20.0
Slightly Aware	6.4	**28.2**	12.7	20.0	10.0
Not aware	3.6	6.4	8.2	**34.5**	7.3

4.4 Source of information



4.5 Means for communication during emergency time



4.6 Descriptive Statistics of Relief Plan

Relief (in %)	I have minimum of 72 hours of water/food supply	I have mode of communication which is not dependent on electricity	I have First aid kits and other emergency kit	I have necessary hygiene and sanitation products	I have disaster kits and necessary medication	I have supplies for children, elderly people and people with difficulties	I have an emergency operational plan	I have an knowledge about an evacuation Area
Strongly Disagree	13.6	11.8	10.0	6.4	10.0	9.1	7.3	9.1
Disagree	10.0	21.8	11.8	11.8	27.3	22.7	35.5	19.1
Agree	**40.9**	**37.3**	**52.7**	**44.5**	**41.8**	**40.0**	**36.4**	**38.2**
Strongly Agree	29.1	20.0	20.0	31.8	13.6	20.9	13.6	21.8
I do not know	6.4	9.1	5.5	5.5	7.3	7.3	7.3	11.8

4.7 Descriptive Statistics of Response Plan

Response (in %)	I have knowledge about which government office needs to be contacted after the disaster	I have knowledge about evacuation process during disaster occurrence	I have knowledge about civil defense phone and officials numbers of disaster management in the community	I have knowledge about Cardiopulmonary resuscitation (CPR) and first aids during disaster management in the faculty	I have knowledge about how the injured individuals transferred to the health facility	I have knowledge about safety precautions	I have knowledge about safe waste disposal system	I have knowledge on the community laws or policies for disaster management ?
Strongly Disagree	14	5.5	12.7	8.2	7.3	5.5	7.3	7.3
Disagree	12	18.2	19.1	20.9	15.5	9.1	8.2	24.5
Agree	**52**	**49.1**	**40.0**	**36.4**	**46.4**	**48.2**	**50.9**	**38.2**
Strongly Agree	19	14.5	17.3	18.2	22.7	30.9	28.2	19.1
I do not know	13	12.7	10.9	16.4	8.2	6.4	5.5	10.9

4.8 Descriptive Statistics of Mitigation Plan

Mitigation(in %)	I have planned for insurance	I have knowledge about preventive health care	I have participated in disaster risk education training or workshop	I am confident for reconstruction activities from government after disaster	I know the importance of talking about disasters with neighbors, friends and colleagues	I give priority to disaster awareness in local, regional and national level	I used to listen experts or DRR leaders who work or do activities for disaster management	I have knowledge about disaster prone area
Strongly Disagree	9.1	7.3	10.0	14.5	7.3	6.4	7.3	8.2
Disagree	24.5	8.2	**38.2**	25.5	10.9	7.3	11.8	18.2
Agree	**42.7**	**53.6**	32.7	**40.9**	**49.1**	**53.6**	**54.5**	**48.2**
Strongly Agree	10.0	24.5	12.7	10.0	29.1	25.5	19.1	14.5
I do not know	13.6	6.4	6.4	9.1	3.6	7.3	7.3	10.9

4.9 Descriptive Statistics of Preparedness Plan

Preparedness (in %)	I have collected the information	I have spoken to disaster management representatives in my area	I have prepared a family emergency plan	I have prepared a neighborhood emergency plan	I have prepared disaster survival kits	I have taken special training	I have trained other members in the community	I have signed up with entities that provide emergency news or alert systems
Strongly Disagree	6.4	15.5	11.8	12.7	11.8	18.2	20.9	12.7
Disagree	28.2	**39.1**	24.5	**35.5**	33.6	**38.2**	**41.8**	**40.0**
Agree	**47.3**	22.7	**43.6**	30.0	**39.1**	28.2	20.0	29.1
Strongly Agree	8.2	10.9	13.6	12.7	8.2	7.3	9.1	8.2
I do not know	10.0	11.8	6.4	9.1	7.3	8.2	8.2	10.0

4.10 Hypothesis Testing

Education status and Awareness of disaster

Types of disaster	Chi-square test	P- value	Result	Description
Geophysical	1.565	0.992	0.992>0.05	No association
Hydrological	6.619	0.578	0.578>0.05	No association
Climatological	5.911	0.657	0.657>0.05	No association
Metrological	37.514	0.001	0.001<0.05	Association
Biological	1.565	0.992	0.992>0.05	No association

Level of Awareness and Source of Information (Internet) : The chi-square value (p-value) is found to be 0.038 at 0.05 significance level (alpha value). There is relationship between Source of information (Internet) and Awareness Level (Geophysical).

5. Discussion

This study findings has critically state that the relationship between education and DRR awareness is not associated in most form of hazards however to some calamities like Metrological, the education plays role on creating awareness.

Past experience to disaster also plays role on creating the awareness related to the disaster.

Internet (more than 88% of the total respondents prefer) as major source of information and followed by Broadcast Media (like 78.2% of the total respondents) i.e. Television (as given in the figure 7).

Community members and local or national authorities are crucial stakeholders for raising the awareness.

6. Suggestions and recommendations

This study suggests that stakeholders like voluntary groups, National Government and Non-governmental Organization have role on preparing a disaster management plan therefore these stakeholders should involve intensively on creating the **participatory disaster management plan** so that the local will be aware about every phase of disaster cycle.

It is necessary to look into the channel for making information authentic and there is an opportunity for brining **the formal structure for information flow** by use of Internet.

7. Conclusion

DRR research and decision-making isn't just about "managing changes caused on by disasters," but also about "creating systemic changes" that make people less vulnerable to calamities.

And it is necessary to transformed the knowledge into action.

THANK YOU

For your time and consideration

IIHMR UNIVERSITY