

Key Research Findings 2012/13

Joint Annual Review
(27-29 January 2014)

Nepal Health Research Council
27 January 2014



Reproductive Health (1)

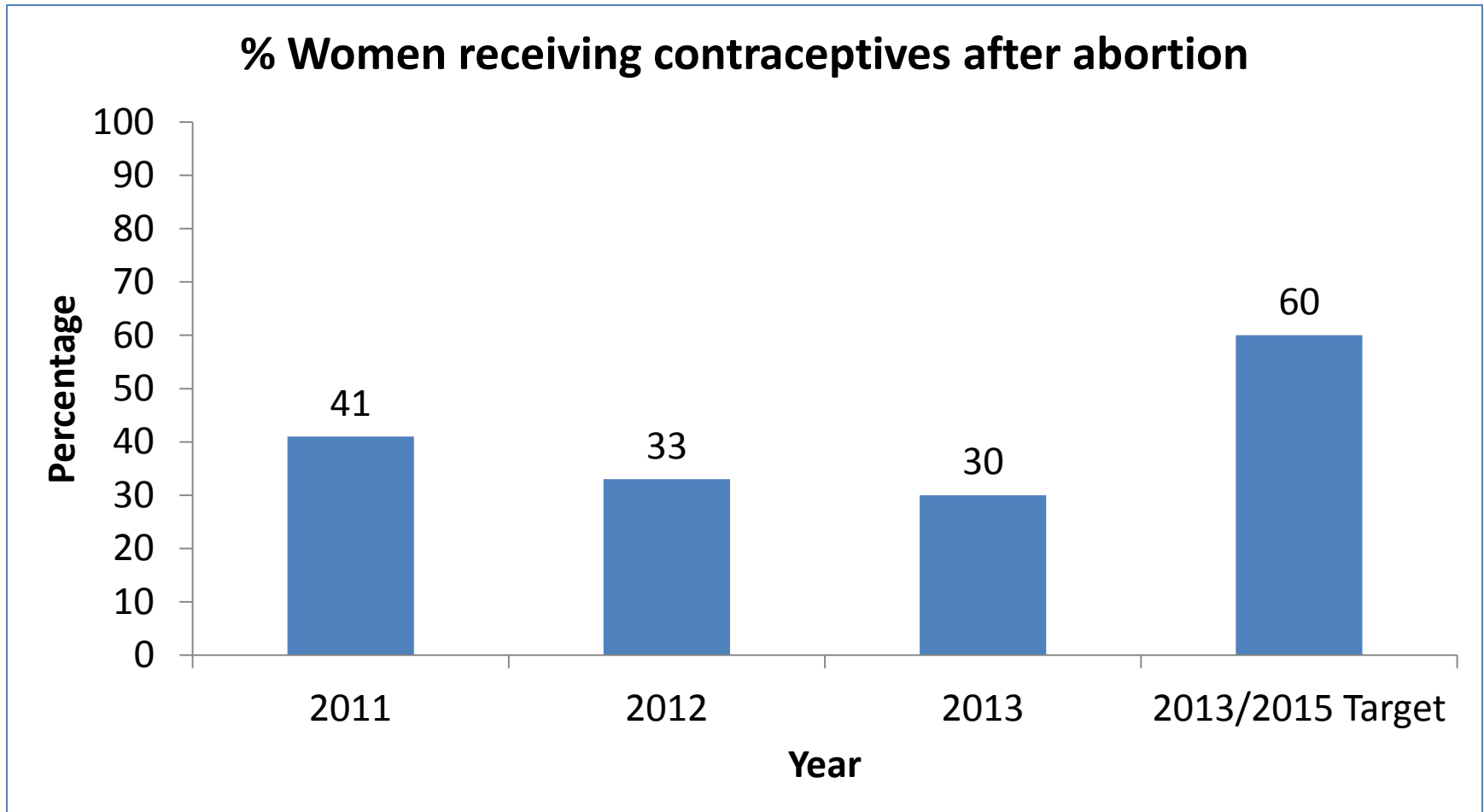
Family Planning

- Many women (27%) have an unmet need for family planning (Targets 20% 2013, 18% 2015)
 - Large difference in subgroups:
 - Currently married women living together with Husband – 16%
 - Adolescent : 42%
 - Muslims: 39%
 - First two years postpartum women: 52%

(NDHS 2011)

Reproductive Health (1)

Family Planning....



Reproductive Health (2)

MNH

Newborn Health

- National targets of Exclusive BF met – 65% (HHS 2012)
- **9% of 6-11 months infant exclusively breastfed**, which might be an underlying factor for stunting (Mehata et al. 2014).

Persisting belief that facility delivery not necessary/desirable

- Most common reason given for not delivering in a facility - belief that **it is not necessary** (62%) (NDHS, 2011)
- Birth is still widely seen as a **natural event** which doesn't require medical expertise. Women **perceived as weak** if they cannot give birth naturally (PEER Study, 2012).

Child Health Immunization

- Coverage of all basic vaccines – 87%
- Whereas in Muslim (**57%**)

(NDHS, 2011)

Epidemiology and Disease Control

Malaria & Mosquito Borne Diseases

- Many children do not sleep under a long lasting insecticide treated bed net (LLIBN)
 - In 2011 68% of children under 5 in high risk areas did not sleep under a LLIBN (Targets 80% 2013/2015)

(NHSP-2 Log frame monitoring review, 2012)

TB

- Low TB case detection rate /100,000 population (**73%** in 2011 & 2012, **78%** in 2013, (Targets **80%** 2013, **85%** 2015)

(HMIS)

Leprosy

- Prevalence of leprosy (per 10,000 population) is increasing (**0.79** in 2011 to **0.84** in 2013) (Targets 2013, 2015 – Halt & reverse)

(HMIS)

Health Infrastructure (1)

- Only 47% of hospitals had round-the-clock power supply. Situation was even worse in PHCCs (23%), HPs (18%) and SHPs (9%)
- The proportion of facilities having sinks with running water substantially decreased with level of facility; indicating poor infrastructure at peripheral level.
- Considerably lower proportion of maternity (58%) and outpatient departments (OPD)clients in hospitals (60%) reported having availability of drinking water at the facility

(STS 2013)

Health Infrastructure (2)

- Poor medical waste management (35% HCWM guidelines 2008/09, 45% self-developed protocol, and 15% none)

(MoHP 2013b)

- Only 7% of facilities had comprehensive biomedical waste management in place

(STS 2013)

Procurement (1)

Stock outs of essential drugs

- Proportion of HFs that **experienced no stock outs**
 - Hospitals – 63%
 - HPs – 34%
 - SHPs – 31%
 - PHCCs – 31%

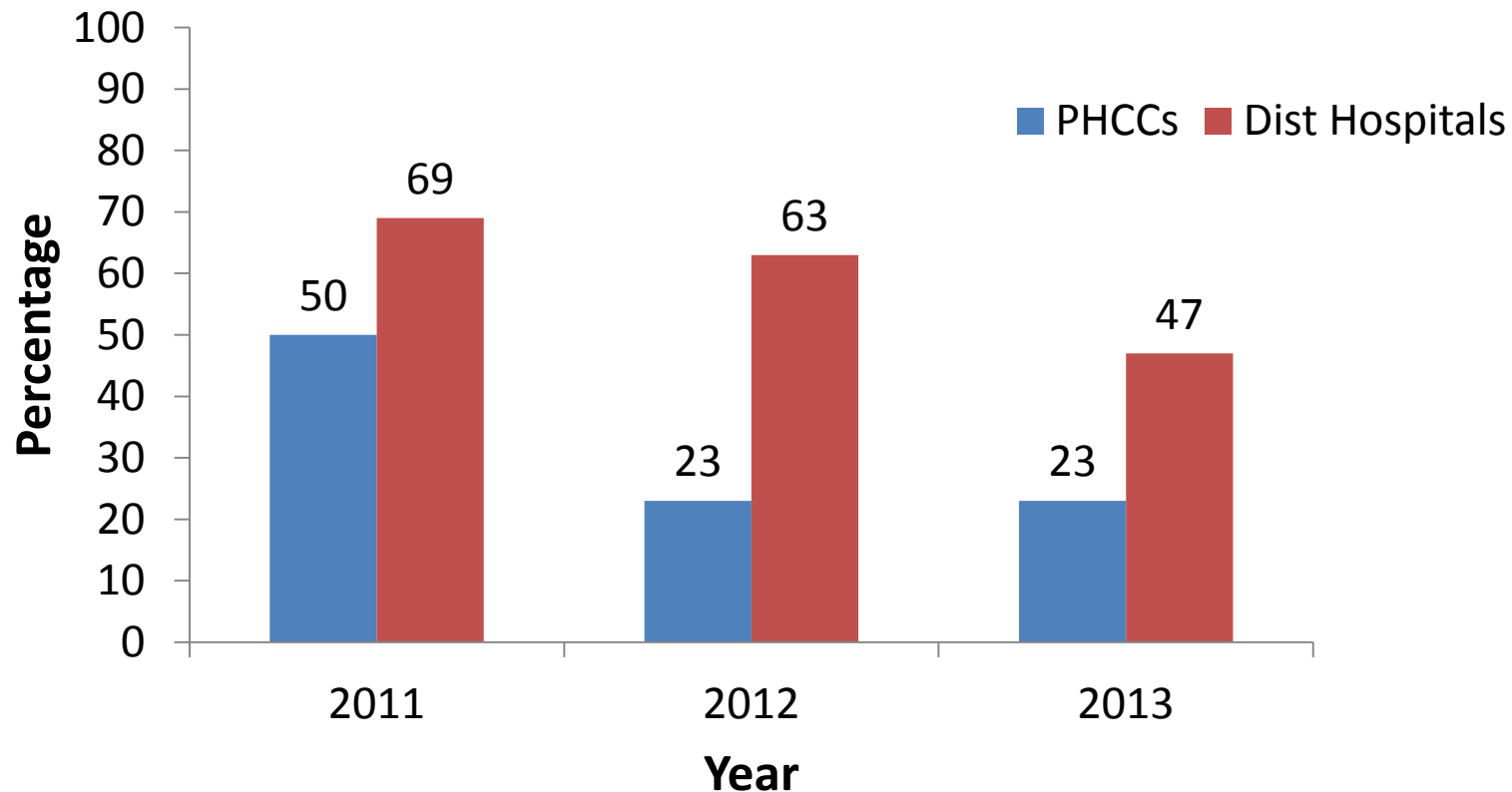
Inappropriate storage of drugs

- Proportion of HFs **without a functional refrigerator** to maintain the cold-chain:
 - SHPs - 96%
 - HPs – 59%
 - PHCCs – 23%
- All hospitals had **at least one functional refrigerator**

(STS 2013)

Human Resources

A small (and falling) proportion of sanctioned doctor posts filled across the health system (Target – 88% 2013, 90% 2015)



(STS2011, 2012 and 2013)

NCD RISK FACTORS SURVEY 2013
NEPAL

Survey Aim & Methods

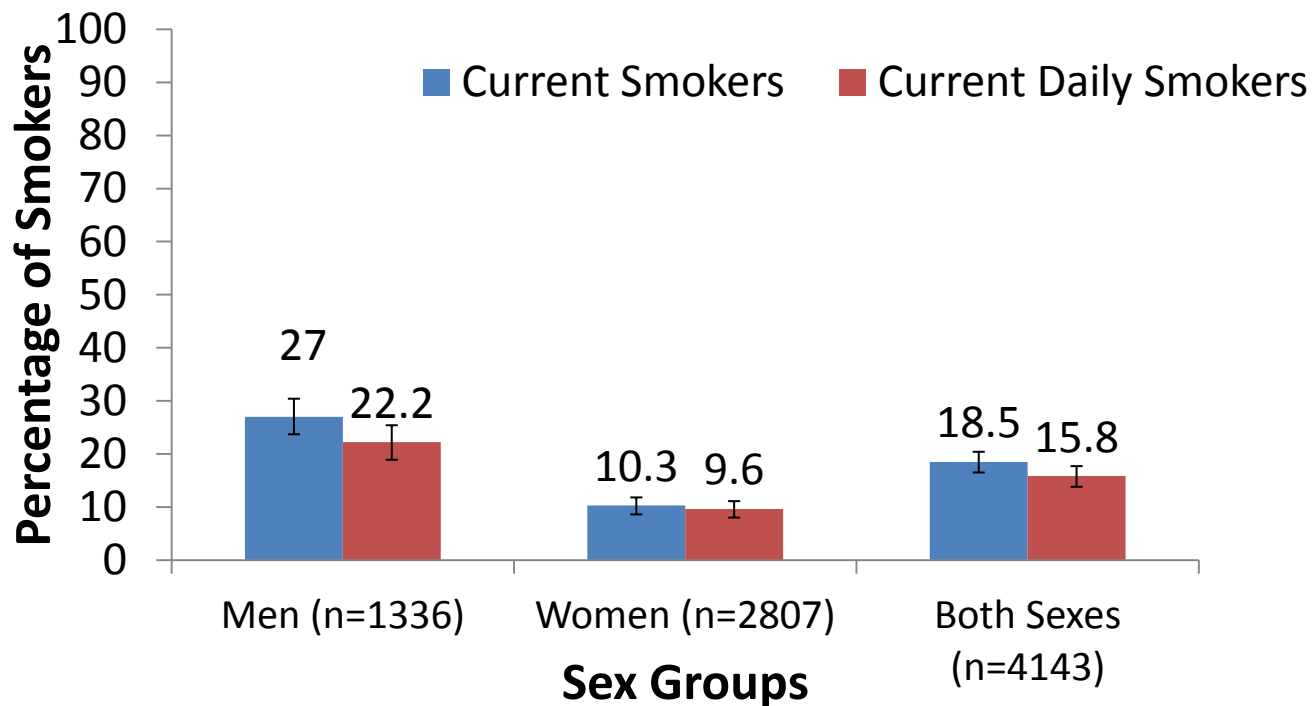
Assessment of the prevalence of NCD risk factors (both behavioral & biological) among 15-69 years population

Method – STEPS protocol, digital data collection using STEPS instruments, wet method for biological risk factors

4200 adult population

Complex sample weighted analysis

Tobacco Use: Current Smoking Status among Sex Groups

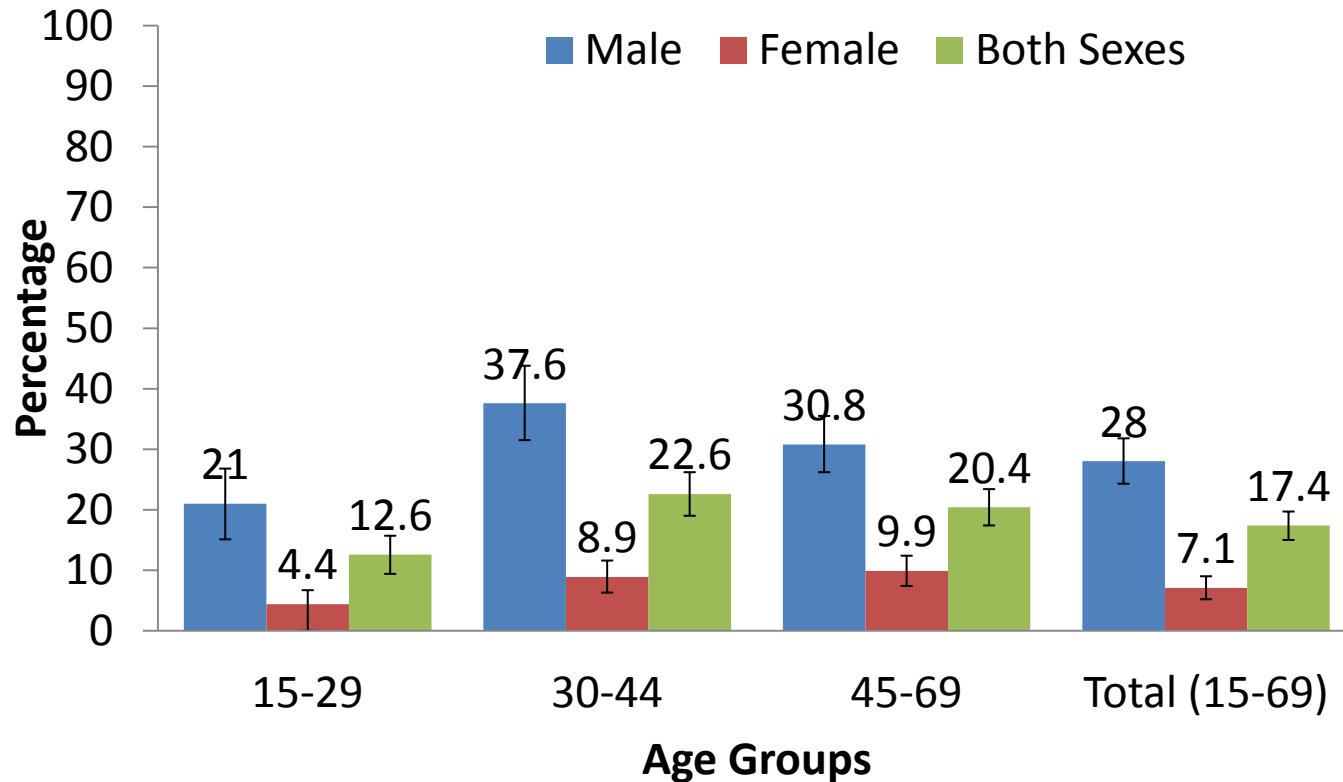


Current users of tobacco
30.8% (M
48.1%, W
14.1%) in
either of its
form smoke
or smoke
less

- Tobacco Use, increased by age and with statistical significant difference between sex groups
- Current Daily smokers highest among 45-69 years age group 26.4 % (M 31.0, W 21.9)

Alcohol Use: Current Drinker

Current Drinker (Last 30 Days)



More than one tenth (men 11.1%, women 13.2%) of current drinkers were heavy drinkers (drank ≥ 60 g of pure alcohol on average day for men & ≥ 40 g for women).

Unhealthy Diet

- Daily per capita consumption of fruits and vegetables - 1.8 servings (fruit 0.5 servings and vegetables 1.4 servings)
- Not consuming adequate fruits or vegetables on an average day - 98.9% .

Dietary Salt

- Around **10.9%** thought that they **consume far too much or too much salt.**
- More than three quarters of the respondents (**78.5%**) **thought consuming too much salt could cause serious health problems.**

Physical Activity

- Combining various types of physical activities 3.5 % low physical activity 11.6 % moderate physical activity category and 85% high physical activity category.
- Around 2.3% of the respondents found not meeting the WHO recommendation on physical activities for health (150 minutes of moderate-intensity physical activity per week, or equivalent).
- The proportion of the respondents not engaging in vigorous physical activity - 53.6 % (Men 43.5%, Women 63.3%).

Overweight & Obesity

- Prevalence of combined overweight and obesity (BMI >25) - **21.6% (W - 22.1%, M - 21.2%)**.
- Higher among 30-44 age groups - 29.7% (M - 29.1%, W - 30.3%).

Oral Health

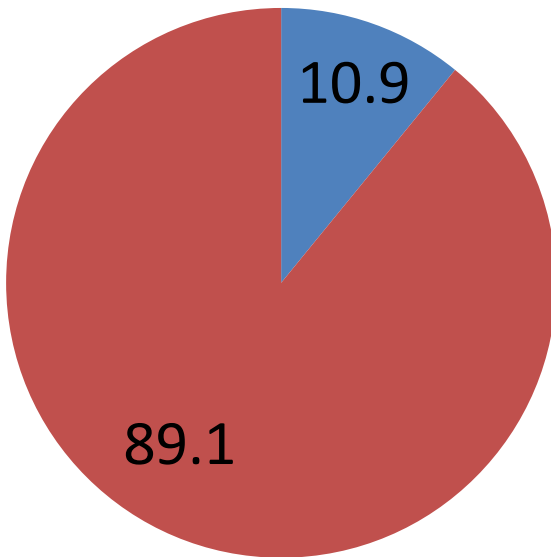
- **Pain or discomfort** caused by their **teeth or gums** **23.7%**
- Cleaned teeth at least once a day 94.9%.
 - 88.2% used tooth brush with or without toothpaste
 - 87.1% used with toothpaste
- Self reported prevalence of **dental caries** - **35.9%** (M-29.7%, 41.9%).

Raised Blood Pressure (25.7%)

Men (n=1326)

% of HTN = 31.1

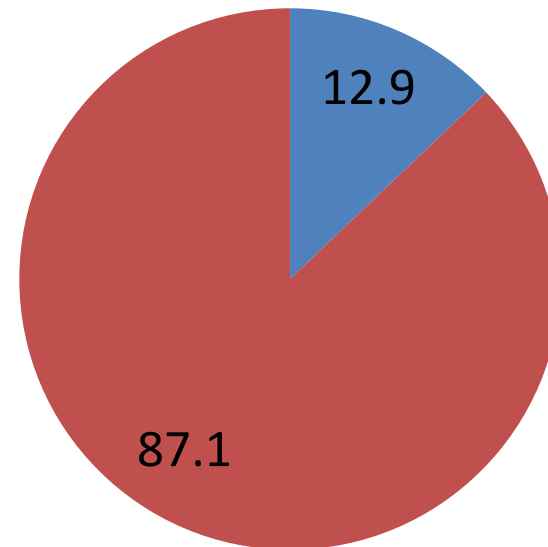
■ With Medication
■ Without Medication



Women (n=2798)

% of HTN = 20.6

■ With Medication
■ Without Medication



Increased with age highest among 45-69 years age group – 46.7% (M 49.9%, W 43.5%)

Raised Blood Sugar*

Age Range	Male			Female			Both Sexes		
	N	DM %	95% CI	N	DM %	95% CI	N	DM %	95% CI
15-29	253	1.3	0.0-2.7	602	0.6	0.0-1.2	855	0.9	0.2-1.7
30-44	372	3.3	1.2-5.3	1051	2.9	1.2-4.6	1423	3.1	1.8-4.4
45-69	573	11.3	8.3-14.3	921	6.2	4.4-8.1	1494	8.7	7.0-10.5
15-69	1198	4.6	3.4-5.7	2574	2.7	1.9-3.6	3772	3.6	2.9-4.4

* DM= FBS \geq 126 mg/dl or Current Medication

59% of Men & 56% of Women with DM are not under medication currently

Abnormal Lipids (1)

Total Cholesterol*

Age Range	Male			Female			Both Sexes		
	N	Raised %	95% CI	N	Raised %	95% CI	N	Raised %	95% CI
15-29	252	15.7	10.9-20.5	600	13.0	9.7-16.2	852	14.3	11.2-17.4
30-44	372	33.6	27.5-39.8	1045	20.0	17.0-23.0	1417	26.4	23.0-29.9
45-69	573	30.3	26.0-34.7	919	35.6	31.5-39.7	1492	33.0	29.7-36.3
15-69	1197	24.5	21.3-27.7	2564	21.0	18.7-23.3	3761	22.7	20.5-24.9

* Raised % \geq 190 mg/dl of Total Cholesterol

Abnormal Lipids (2)

- **Low HDL** – **women 79.3%** (<50 mg/dl) & **men 61.2%** (<40 mg/dl)
- Raised **triglycerides** (≥ 150 mg/dl) - **25.2%** (men 31.4%, women 19.4%)
- **Raised LDL** (≥ 130 mg/dl) - **15.8%** (men 16.4%, women 15.1%)

Combined Risk Factors & CVD Risk Prediction

- 15.1% had three to five risk factors (*current daily smoking, low fruits & vegetables intake, low level of physical activity, overweight and raised BP*), no risk factors – 0.4%
- The proportion of the respondents (among 40-69 years) with a 10-year CVD risk of $\geq 30\%$ - 3.2% (men 2.6%, women 3.7%) which is defined according to age, sex, blood pressure, smoking status, total cholesterol, and diabetes.

Conclusion

- Prevalence of NCD risk factors is **substantial in Nepal** which can be regarded as a huge public health problem.
- Preventing and controlling risk factors is **easier and less costly** than treating NCDs.
- However, there is negligible action done towards prevention and control of the NCDs and their risk factors so far and hence need to be given special focus.
- This survey will be repeated in 5 years if funds permit.

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THANK YOU