

Health Literacy and its Association with Knowledge of Chronic Diseases in Eastern Nepal

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BACKGROUND

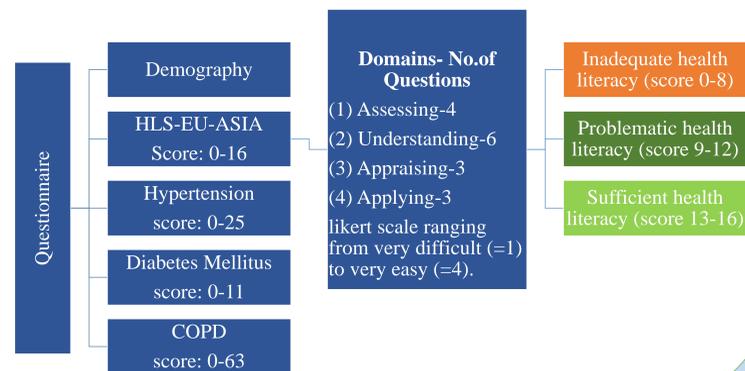
“Health literacy is linked to literacy and entails people’s knowledge, motivation and competences to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain or improve quality of life during the life course.”

The burden of non-communicable diseases (Cardiovascular diseases, Chronic Obstructive Pulmonary Diseases, Cancer and Diabetes Mellitus) is increasing in an alarming rate in low income countries including Nepal. One of the major hindrances in chronic disease management is low health literacy. Health literacy plays a pivotal role in adherence to treatment, self-care and better health care utilization.

The objective of the study was to find out the level of health literacy and its association with knowledge of the disease among the chronic disease patients in Nepal.

METHODS

- We recruited 426 patients (30-79 years) conveniently from the tertiary care and the primary care who had one of the chronic diseases (Hypertension, Diabetes Mellitus and COPD) from September 2014 to August 2015 and were interviewed face to face.
- In case of co-morbidity, the disease with the longer duration was selected and the question which was disease specific was asked accordingly.
- We excluded health care workers and the patients with severe cognitive impairment or complications.
- Along with demographic information, Health literacy was measured using translated, pretested, validated European Health Literacy Survey (HLS-EU-Asia-Q) questionnaire with total score of 16.



RESULTS

Out of total (426) participants, 38% had hypertension, 38% had diabetes and 24% had COPD..

More than half of the population (54.5%) were illiterate.

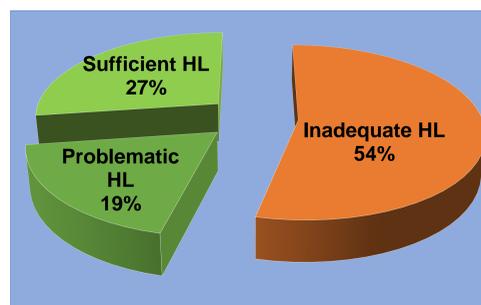


Figure 1. Distribution of levels of health literacy among the respondents (n=426)

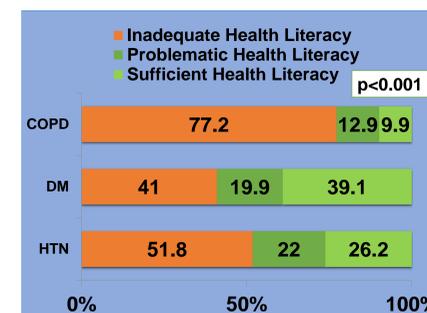


Figure 2. Distribution of levels of health literacy according to disease type (n=426)

Table 1. Levels of health literacy of respondents by knowledge of chronic disease (n=426)

Levels of Health Literacy	Disease knowledge scores (Mean±SD)		
	HTN* Total score: 25.0	DM* Total score: 11.0	COPD*† Total score: 63.0
Sufficient Health literacy	18.70 ± 4.296	7.90 ± 1.973	23.40 ± 7.734
Problematic Health literacy	15.921 ± 4.607	6.06 ± 2.462	16.54 ± 6.450
Inadequate Health literacy	12.38 ± 5.230	4.15 ± 2.348	12.65 ± 6.613

*: p<0.001, †: kruskal wallis test

Table 2 Results of multiple regression analysis to predict the aspect of knowledge of chronic diseases (n=426)

	Knowledge of HTN		Knowledge of DM		Knowledge of COPD	
	β	95% CI	β	95% CI	β	95% CI
Age	-0.09	-0.18–0.01	-0.00	-0.04–0.03	-	-
Information received regarding disease at clinic	1.42	-0.55–3.40	-0.25	-1.27–0.76	4.83	2.19–7.46
Health literacy	0.20	0.10–0.29	0.08	0.04–0.13	0.21	0.06–0.36

Adjusted for gender, higher education, being married, family history of disease, regular visit to the clinic, smoking habit, and alcohol intake.

CONCLUSION

The prevalence of limited health literacy was very high (73%) in our study and better health literacy was associated with better knowledge of chronic disease.

Therefore, a strategy to educate chronic disease patients is necessary.

A counseling with pictures in a clinic set-up may be helpful, especially for old and illiterate patients.

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