Effectiveness of the Awareness program on Non Communicable Disease among Future Female Nursing professionals of Nepal

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Background

➢Non-communicable diseases (NCDs) account for 71% of global deaths, with Nepal significantly impacted.^(1,2) In 2019, NCDs caused 71.1% of deaths.⁽³⁾

Addressing the NCD burden requires a multi-faceted approach, focusing on prevention, early detection, and effective management, demanding a well-trained healthcare workforce. (4,5)

➢Nurse play a pivotal role in addressing these challenges and their role is vital across various levels of care individual, community, national, and international. ⁽⁶⁾

➢Recent evidences showed the need for capacity building among nursing graduates in Nepal, who show strong enthusiasm for NCD-focused training programs. ^(7,8,9)



General Objective:

To assess the knowledge about non communicable disease among PCL nursing students before and after the NCD awareness program

Specific Objective:

- To evaluate the change in knowledge of PCL nursing students after attending the NCD awareness classes
- To evaluate the perceived effectiveness of the program by students, nursing teachers





An educational session was held for all final-year PCL nursing students at the institutions.

The content were finalized through a content finalization workshop with stakeholders from EDCD, NHIECC, Curative Service Division and Nursing and Social Security Division.

Students were provided with NCDrelated IEC materials from NHIECC covering causes, risks, and prevention.

After completing the pre-test, post-test, and a delayed post-test one month later, each institution received an educational banner. They were encouraged to display it to raise awareness among all students.

Intervention



















Activities Of "NCD Awareness Project Among Future Nursing Professionals" Funded By AstraZeneca

Study Design

Single-group quasiexperimental study with a sequential mixed-methods approach

Study setting

27 CTEVT-affiliated colleges in Kathmandu Valley offering PCL Nursing Program.

METHODOLOGY

Sample Size

540 students in pre-post test.70 nursing students from 7 colleges in FGD.

7 faculty members from 7 colleges in KII.

Sampling

Quantitative – Simple random sampling Qualitative – Purposive for college selection and Purposive judgmental for KII and FGD

Results





Domain wise change in knowledge on NCD in difference stages



Change in Overall Knowledge in different stages

Pair	M1	M2	Diff	t	р	Cohen's d
Post -Pretest	15.57	21.96	6.39	48.06	<0.05	2.02
Delayed Posttest-	19.05	15.57	3.93	23.36	<0.05	1.12
Pretest						
Delayed Posttest-	19.05	21.35	-2.45	-15.88	<0.05	-0.77
Posttest						

Qualitative findings

"Genetics, sedentary lifestyle, physical inactivity, obesity, consumption of unhealthy foods, pollution are the risk factors of NCDs." (a participant during FGD in Lalitpur District) "Adopting a healthy lifestyle, early screening, providing health education and awareness, and keeping a healthy environment can all help to prevent disease" (a participant during FGD at Bhaktapur District)





Perceived effectiveness of the program

The feedbacks from the students during group discussion reveals that the program was perceived as highly effective in terms of increasing knowledge, providing new information, improving practical skills, and using an engaging format that made learning enjoyable.

Many participants expressed that their understanding of noncommunicable diseases (NCDs) increased "profoundly" after attending the session. Prior to the session, their knowledge on the topic was limited, but they now feel more confident about recognizing signs, symptoms, types, and control measures.





Perceived effectiveness of the program

Participants emphasized that they were introduced to new data, especially regarding the burden of NCDs and PEN protocols, which they previously lacked.

"Data on the burden of disease of NCDs, PEN protocols was very new for us." (FGD in Lalitpur district)

For participants from the medical field, the program had practical benefits that went beyond theoretical knowledge.

"We are now able to provide our patients with more complete information, which improves the quality of services we delivered." (FGD in Kathmandu district)

Perceived effectiveness of the program

The program received highly positive feedback from teachers as well, who praised its thoroughness, dedicated effort in conducting interviews and assessments, and the effectiveness of its approach

Both teachers and participants commended the program for its effectiveness, uniqueness, and the valuable knowledge it provided, expressing gratitude for the learning opportunity.

"I got a chance to know about the government programs, strategies, policy on NCDs. I feel that it was best that you included a new information about the government's package. Also, as teachers, we also had have the opportunity to learn about the actions of the government to address NCDs. I want to thank each and every one of you." (KII from college at Bhaktapur District)

Conclusion

Participants showed varied understanding in the pre-test, with significant improvement in the post-test, particularly in NCD overview, risk factors, and prevention.



While the overall impact was positive, the delayed post-test suggested a slight decline in knowledge retention, indicating a need for reinforcement.



Both participants and teachers praised the program's effectiveness and practical applicability. Recommendations included targeted awareness, interactive formats, and teacher training.

Conclusion / take away

Final-year PCL nursing students are key players in addressing NCDs in the community, so to ensure **long-term impact**, integrating **government NCD programs** into the **PCL nursing curriculum** can equip future healthcare providers with **practical knowledge** and enhance their role in community health promotion.



It was also noted that teachers were unaware of government NCD programs, highlighting the need for training and workshops to enhance understanding, enabling both students and teachers to effectively address the rising NCD burden.

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THANK YOU !!!









A brief Bio

Sushmita Ghimire is a public health researcher and an Assistant Professor at Asian College for Advance Studies Affiliated with Purbanchal University. She also serves as a Research Associate at the Center for Health and Disease Studies Nepal. With over seven years of experience in health system and social research, she has worked extensively in areas such as health insurance, social determinants of health, neglected tropical diseases, non-communicable diseases, mental health, and disability and have publications. She has strong expertise in qualitative, quantitative, and mixed-method research approaches, bringing valuable insights into the field.



