



HEALTH BELIEFS AND PRACTICES OF QUIBAL, PEÑABLANCA, CAGAYAN ON NON-COMMUNICABLE DISEASES: A BASIS FOR COMMUNITY ENGAGEMENT PROGRAM

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ABSTRACT

Everyone should prioritize their health and should have access to education and other associated services that will help them enhance their well-being. The study aimed to understand the health attitudes and behaviors of respondents in Quibal, Peñablanca, Cagayan around communicable diseases. This information will be used to develop and implement community outreach activities. In this study, the researchers utilized a descriptive correlational design together with a convenience sampling methodology. Except for the highest educational attainment and religion, there are no significant differences in the respondents' health practices based on their profile variables (age, sex, ethnicity, and socioeconomic status). However, there is a significant difference in the respondents' health practices in terms of prevention, control, and treatment, and ethnicity has a significant impact on the respondents' health. According to the survey, respondents from Quibal, Peñablanca, Cagayan feel that eating nutritious foods like fruits and vegetables and maintaining a balanced diet might help avoid and treat noncommunicable illnesses. More research is needed to understand better how and to what extent people's views, traditional beliefs, and actions might contribute to their health.

Key words: *non-communicable disease, Health beliefs, Health practices, Prevention, Control, Treatment, Management*

INTRODUCTION

Being a nursing student, one must be aware of the trends in healthcare delivery to promote optimum wellness and prevent diseases. Health should be one of the top priorities of everyone, people

should have access to education and other related services that will be very beneficial to improve their well-being. However, some beliefs and thoughts regarding the cause and treatment of health and diseases are often intervened by cultural beliefs that people in the society have outgrown according to June II A. Kiblasan (2021). Chronic diseases, sometimes referred to as non-communicable diseases (NCDs), are those that last for an extended period and can be brought on by a combination of genetic, physiological, environmental, and behavioral variables. As the Philippines implements substantial reforms under the Universal Health Care Act and moves toward an integrated and primary healthcare (PHC)-oriented system, it is vital to assess the country's ability to manage noncommunicable diseases, which are the country's main disease burden. The World Health Organization (WHO) reports that non-communicable diseases affect people of all ages, from all geographical areas, and in all nations. Although these diseases are typically associated with older age groups, some research indicates that 17 million deaths from non-communicable diseases happen before the age of 70. According to estimates, 86% of these premature fatalities take place in low- and middle-income countries. Children, adults, and the elderly are all susceptible to the risk factors for non-communicable illnesses, including inactivity, a sedentary lifestyle, poor diets, exposure to tobacco smoke, and excessive alcohol use. (World Health Organization, 2023). The Medical Colleges of Northern Philippines-College of Nursing Researchers will conduct its college-based extension program at Quibal, Peñablanca, Cagayan to find out and further understand the health beliefs and practices of the people in Quibal, Peñablanca, Cagayan, when it comes to non-communicable-diseases.

METHODOLOGY

Research Design

The researchers employed descriptive-correlational and inferential design approaches. The researchers utilized descriptive-correlational methods to seek an accurate and methodical description of a certain circumstance, population, or phenomenon that correlates to "how" questions on the adopted questionnaire. On the other hand, the researchers employed an inferential statistics design to compare the data collected from the treatment groups and derive inferences about the subject population. This technique was used to evaluate the health attitudes and behaviors of respondents in Quibal, Peñablanca regarding non-communicable illnesses.

Respondents of the Study and Sample Size

In this study, the researchers utilized the convenience sampling methodology. This technique assesses people' health attitudes and behaviors around non-communicable illnesses in Quibal, Peñablanca, providing researchers with a more comprehensive understanding of the community under study. The research participants were residents of Quibal Peñablanca, Cagayan. Each of the seven zones of Quibal, Peñablanca Cagayan will receive 40 surveys, except zones 6 and 7, which have 25 and 16 respondents, respectively, for a total of 241 respondents.



Data Gathering Tool

The questionnaire comprises a set of questions to be given to the respondents to determine their health beliefs and practices when it comes to non-communicable diseases. There are three parts of the questionnaire: the first part consists of the Profile of the Respondents, including their Age, Sex, Religion, Ethnicity, Highest Educational Attainment, and Socio-Economic Status. In second part, which is divided into four subcategories- Health Prevention, Health Control, Health treatment and Health Management-are factors associated with their Health Beliefs on Non-Communicable Disease. The evaluation of the respondent's Health Prevention, Health Control, Health Treatment, and Health management is compromised with five (5) behavioral statements in each subcategory with a total of twenty (20) behavioral statements in all categories which can be answered by using a Likert scale with a selection of Strongly Agree, Agree and Strongly Disagree. The final part has the same context as the second part, nonetheless it pertains to Health Practices. It has also four subcategories. Each category is comprised of five behavioral statement each subcategory with a total of twenty behavioral statements in all.

Data Gathering Process

Before conducting the study and distributing the questionnaires to the respondents, the researchers obtained all necessary consents, letters, and formal permissions from the school, the Medical Colleges of Northern Philippines, the Rural Health Unit of Peñablanca, Cagayan, and the Barangay Health Center of Quibal Peñablanca, Cagayan. The participants gave their consent when the researchers further explained the significance of the study. The selected respondents were given questionnaire by the researchers in person, and they kept an eye on them as they answered to ensure correctness and dependability.

Data Analysis

The profile variable was statistically presented by the researchers using frequency count and percentage distribution. Second, the researchers employed weighted techniques to characterize the respondents' responses about their health views regarding non-communicable diseases in terms of management, treatment, and prevention. The respondents' responses to questions about non-communicable illness prevention and control were described using the same statistics. In addition, one-way analysis of variance (ANOVA) was used to analyze the difference between the health beliefs and practices on non-communicable diseases of the respondents when grouped according to profile variables. Furthermore, the researchers used Pearson's to assess the relationship between the health beliefs and practices on non-communicable diseases. Then, the researchers used Regression Analysis to analyze how the profile of the respondents affects their health beliefs about practices regarding non-communicable diseases.

RESULTS AND FINDINGS

**TABLE 2.1. ASSESSMENT OF THE RESPONDENTS IN THE HEALTH BELIEFS ON NON-COMMUNICABLE DISEASE AMONG THE RESIDENTS OF QUIBAL, PEÑABLANCA, CAGAYAN IN TERMS OF PREVENTION AND CONTROL**

STATEMENTS	MEAN	DESCRIPTION
1. Only those ages 50 above are at risk for non-communicable disease.	2.91	AGREE
2. I can avoid non-communicable disease if I am eating healthy diet.	3.76	STRONGLY AGREE
3. I can avoid non-communicable disease if I will quit alcohol drinking.	3.74	STRONGLY AGREE
4. I can avoid non-communicable disease if I will quit smoking.	3.76	STRONGLY AGREE
5. I am too young to have a non-communicable disease.	3.17	STRONGLY AGREE
6. Doing exercise regularly will maintain my body weight.	3.64	STRONGLY AGREE
7. I will limit my alcohol intake.	3.65	STRONGLY AGREE
8. I will be going to quit smoking.	3.69	STRONGLY AGREE
9. I will be going to eat healthy foods such as fruits and vegetables.	3.82	STRONGLY AGREE
10. I will be going to reduce stress.	3.54	STRONGLY AGREE
CATEGORICAL MEAN	3.57	STRONGLY AGREE

According to the statistics, the respondents strongly agree with the category mean of 3.57 when it comes to the residents of Quibal, Peñablanca, Cagayan's health attitudes regarding non-communicable diseases and prevention and control. On the other hand, the respondents strongly agree with the lowest mean of 2.91 in terms of the statement, "Only those ages 50 and above are at risk for non-communicable disease." This suggests that while respondents are aware of the benefits of eating fruits and vegetables, they also think that non-communicable illnesses are related to their age. The respondents strongly agree with the highest mean of 3.82 in terms of the statement, "I will be going to eat healthy foods such as fruits and vegetables."

The research conducted by Kibr, G. Based on multiple studies on adult cognitive predictors of vegetable consumption, (2022) found that the strongest predictor of vegetable intake to reduce the prevalence of non-communicable disease was an individual's perception of their ability to perform a particular action, or their self-efficacy. Furthermore, as per the research conducted by Pem, D., and Jeewon, R. (2015), given the sharp rise in nutritionally related health problems that have occurred globally, it becomes imperative that formal nutrition education, which aims to enhance understanding and intake of fruits



and vegetables, be given priority in health education programs and health promotion. This study clarifies the importance of fruits and vegetables in addition to the advantages and advancements of nutrition education in terms of enhancing consumption.

TABLE 2.2. ASSESSMENT OF THE RESPONDENTS IN THE HEALTH BELIEFS ON NON-COMMUNICABLE DISEASE AMONG THE RESIDENTS OF QUIBAL, PEÑABLANCA, CAGAYAN IN TERMS OF TREATMENT AND MANAGEMENT

STATEMENTS	MEAN	DESCRIPTION
1. I am drinking the prescribed medicine that the physician gave me.	3.70	STRONGLY AGREE
2. I am maintaining a healthy and balanced diet.	3.81	STRONGLY AGREE
3. I always follow medical orders to benefit my health.	3.81	STRONGLY AGREE
4. I am drinking the prescribed medicine that the physician gave me.	3.77	STRONGLY AGREE
5. I am doing an exercise for 30 minutes most days of the weeks.	3.34	STRONGLY AGREE
6. I am maintaining a healthy weight.	3.77	STRONGLY AGREE
7. I am maintaining a healthy and balanced diet.	3.82	STRONGLY AGREE
8. I am doing a regular health check-up.	3.12	AGREE
CATEGORICAL MEAN	3.64	STRONGLY AGREE

Based on the result, the respondents strongly agree with the category mean of 3.64 when it comes to the residents of Quibal, Peñablanca, Cagayan's health beliefs regarding non-communicable diseases and how to treat and manage them. Regarding the words, "I am maintaining a healthy and balanced diet," the respondents strongly agree with the greatest mean of 3.82. In contrast, they strongly agree with the lowest mean of 3.12 regarding the statements, "I am doing regular health check-ups." This suggests that the respondents are aware of the significance of visiting medical facilities for checkups and the necessity of maintaining a healthy, balanced diet as part of the treatment and management of noncommunicable diseases.

The respondents in Budreviciute's (2020) survey felt that aspects of a health plan, awareness management, lifestyle management, and good policy decisions were the best ways to prevent non-communicable diseases.

TABLE 3.1. ASSESSMENT OF THE RESPONDENTS IN THE HEALTH PRACTICES ON NON-COMMUNICABLE DISEASE AMONG THE RESIDENTS OF QUIBAL, PEÑABLANCA, CAGAYAN IN TERMS OF PREVENTION AND CONTROL



STATEMENTS		MEAN	DESCRIPTION
1. I am doing physical exercise to prevent non-communicable disease.	non-	3.45	STRONGLY AGREE
2. I am eating healthy diet to prevent non-communicable disease.		3.76	STRONGLY AGREE
3. I will quit alcohol drinking to prevent non-communicable disease.	communicable	3.67	STRONGLY AGREE
4. I will quit smoking to prevent non-communicable disease.		3.71	STRONGLY AGREE
5. I am maintaining suitable body weight to prevent non-communicable disease.		3.80	STRONGLY AGREE
6. I am reducing my alcohol intake.		3.67	STRONGLY AGREE
7. I intend to stop smoking.		3.71	STRONGLY AGREE
8. I am doing an exercise for 30 minutes most days of the weeks.		3.38	STRONGLY AGREE
9. I am eating a healthy balanced diet.		3.82	STRONGLY AGREE
10. I am drinking the prescribed medicine that the physician gave me.		3.80	STRONGLY AGREE
CATEGORICAL MEAN		3.68	STRONGLY AGREE

According to the statistics, the respondents strongly agree with the categorical mean of 3.68 when it comes to the treatment and management of non-communicable diseases among the people living in Quibal, Peñablanca, Cagayan. On the other hand, the respondents strongly agree with the lowest mean of 3.38 in terms of the statements, "I am doing an exercise most days pf the week." The respondents strongly agree with the highest mean of 3.82 in terms of the statements, "I am maintaining a healthy and balanced diet."

This suggests that the respondents are aware of the importance of exercising and maintaining a healthy, balanced diet in the treatment and management of noncommunicable diseases. In line with Ayenigbara's research, I. (2019) Eating a healthy, balanced diet is crucial for maintaining good health and preventing non-communicable diseases (NCDs). Healthy eating is defined as consuming a variety of nourishing foods, eating a balanced diet, and following conventional dietary and nutritional requirements.

TABLE 5. RELATIONSHIP BETWEEN THE HEALTH BELIEFS AND PRACTICES ON NON-COMMUNICABLE DISEASES

VARIABLES	HEALTH BELIEFS
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		PREVENTION CONTROL		AND	TREATMENT AND MANAGEMENT
HEALTH PRACTICES	PREVENTION CONTROL	AND	r- value	.495	.600
			p- value	.000*	.000*

The data shows that there is a significant relationship between the health beliefs and practices towards non-communicable diseases in terms of prevention and control, and treatment and management. The result of the r-value shows that there is moderate correlation between the respondents' health practices in terms of prevention and control, and health beliefs (prevention and control). Moreover, there is a moderate high correlation between the respondents' health practices in terms of prevention and control and health beliefs (treatment and management).

This implies that there is interdependence on the beliefs and practices among the residents of Quibal. Based on the study of HK Kim et al. (2022), Health beliefs were significantly positively correlated with health practices behaviors in terms of prevention and control, treatment, and management.

CONCLUSION

The researchers found that respondents in Quibal, Peñablanca, Cagayan believe that eating fruits and vegetables and maintaining a healthy, balanced diet can help prevent and manage non-communicable diseases. In contrast, the respondent employs a nutritious, well-balanced diet to treat and control noncommunicable diseases.

RECOMMENDATION

The following recommendations are made in light of the study's findings and conclusion: more research to clarify the extent to which people's perceptions, as well as customary beliefs and practices, can influence their health. Regarding non-communicable illness prevention and control, as well as treatment and management, Quibal Peñablanca residents adhere to excellent practices. Nonetheless, our experts advise Quibal Peñablanca locals to take part in health education on non-communicable diseases, learn how to treat ailments that have been diagnosed, and adhere to recommended treatment regimens. Engage in the school's community engagement program with the Quibal, Peñablanca community and take use of the community extension services offered by the Medical Colleges of Northern Philippines.

REFERENCES

- Abalos, J. B., Saito, Y., Ramos Jr, M. A., & Cruz, G. T. (2023). Prevalence, awareness, treatment, and control of hypertension among older adults in the Philippines. *The Journals of Gerontology: Series A*, glad155. DOI: 10.1093/gerona/glad155.
- Afsahi, F., & Kachooei, M. (2020). Relationship between hypertension with irrational health beliefs and health locus of control. *Journal of education and health promotion*, 9. DOI: 10.4103/jehp.jehp_650_19



Alcabedos, M., & Fontanilla, R. (2024). THE IMPACT OF THE MATERNAL AND CHILD HEALTH CARE PROGRAM IMPLEMENTATION OF MEDICAL COLLEGES OF NORTHERN PHILIPPINES – COLLEGE OF NURSING IN SAN ISIDRO, IGUIG, CAGAYAN: A PROGRAM EVALUATION: Reproductive Health, Maternal and Child Health Care, Nutrition, Prenatal Care, Postnatal Care. <https://journal.mcnp.edu.ph/index.php/bsnm/article/view/15>

Arboh, Francisca & Yeboah, Elizabeth & Drokow, Emmanuel & Quainoo, Eric & Asantewaa, Adwoa & Acquah, Tyse & Amaglo, Akpene & Ama, Nana & Darko, Anokyewaa. (2020) Religious Beliefs and its Influence on the Treatment of NonCommunicable Diseases (NCDs) in Ayawaso District, Ghana. International Journal of Healthcare. 8. 107-119 DOI:10.4314/ahs.v16i2.6

Ayenigbara, I. (2018). The role of healthy nutrition and diet in the prevention of non-communicable diseases among the aged. (Società Italiana di Geriatria Ospedale e Territorio) and it is published by PAGEPress DOI.org/10.4081/gc.2019.7961

Belarga, C., Calustre, A. J., Castro, D. L., Mangaron, S., Sicat, S. B & Faller, E. (2022) Noncommunicable Disease (NCD) Treatment, Prevention Strategies, and Risk Factors: A Philippine Situation, International Journal of Research Publication and Reviews DOI: 10.1097/MD.00000000000025082

Budreviciute, A., Damiati, S., Sabir, D. K., Onder, K., Schuller- Goetzburg, P., Plakys, G., ... & Kodzius, R. (2020). Management and prevention strategies for non-communicable diseases (ncds) and their risk factors. Frontiers in public health, 8, 788. DOI: 10.3389/fpubh.2020.574111

Beni, M. H. (2019) Early Life Nutrition and Non-Communicable Disease. Advances in Experimental Medicine and Biology book series (AEMB, volume 1121) DOI: 10.1007/978-3-030-10616-4_4

Datta, B. K., Haider, M. R., Tiwari, A., & Jahan, M. (2023). The risk of hypertension among child brides and adolescent mothers at age 20 s, 30 s, and 40 s: Evidence from India. Journal of Human Hypertension, 37(7), 568-575. doi.org/10.1038/s41371-022-00730-9

Fontanilla, R. C., Catuiza, F. L., Nano, A. B., & Adaya, A. V. (2023). Nutritional Status to Academic Performance of The School-Aged Children: A Basis for Inter-Collaborative Extension Services Program. The Seybold Report ISSN, 1533-9211

Fontanilla, R., Mandac, R. G., Michael, U. J., Florentino, J., & Paracad, N. A. B. (2023). Department of Health Programs: The Perspective of a Geographically Isolated and Disadvantaged Area of Peñablanca, Cagayan. Herculean Journal, 1(1).

Fontanilla, R. (2023). Nourishing Minds: A literature review on the link of nutrition, academic engagement, and student success. herculeanjournal.com. <https://doi.org/10.17605/2zdprd70>

Groot, & Maassen van den Brink. (n.d.). What does Education do to our Health. www.oecd.org/education/innovation-education. P.355



Kahissay, M., Fenta, T. & Boon, H. Beliefs, and perception of illhealth causation: a socio-cultural qualitative study in rural North-Eastern Ethiopia. *BMC Public Health* 17, 124 (2017). DOI.org/10.1186/s12889-017-4052-y

Kibr, G. (2022). The Health Benefits of Vegetables; Preventive Implications for Chronic Non-Communicable Diseases. IntechOpen.
DOI: 10.5772/intechopen.101303

Odukoya, O.O., Jeet, G., Adebusoye, B. et al. Targeted faithbased and faith-placed interventions for noncommunicable disease prevention and control in low- and middle-income countries: a systematic review protocol. *Syst Rev* 11, 119 (2022).DOI.org/10.1186/s13643-022-01981-w

Oshio, T., & Kan, M. (2019). Educational level as a predictor of the incidences of non-communicable diseases among middleaged Japanese: a hazards-model analysis. *BMC public health*, 19, 1-11 852 (2019). DOI.org/10.1186/s12889-019-7182-6

Pem, D., Jeewon, R. (2015) Fruit and Vegetable Intake: Benefits and Progress of Nutrition Education Interventions- Narrative Review Article. *Iran J Public Health*. 2015 Oct;44(10):1309-21. PMID: 26576343; PMCID: PMC4644575. DOI: 10.1080/10408398.2019.1632258.

Rodgers, J. L., Jones, J., Bolleddu, S. I., Vanthenapalli, S., Rodgers, L. E., Shah, K., ... & Panguluri, S. K. (2019). Cardiovascular risks associated with gender and aging. *Journal of cardiovascular development and disease*, 6(2), 19. DOI: 10.3390/jcdd6020019

Wang, J., & Geng, L. (2019). Effects of Socioeconomic Status on Physical and Psychological Health: Lifestyle as a Mediator. *International journal of environmental research and public health* 2019 Jan 20;16(2):281. DOI: 10.3390/ijerph16020281

Yamaguchi, Y., Tuliao, M. T. R., & Matsuo, H. (2021). Factors associated with the progression and prevention of noncommunicable diseases in community-dwelling Filipino adults: A cross-sectional study. *Medicine*, 100(14). DOI: 10.1097/MD.00000000000025082