

Socioeconomic Disparities in Hypertension Medication Adherence in Quezon City, Philippines: A Cross-Sectional Study

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Introduction

Background

- High prevalence of hypertension in Asia contrasts with low awareness, treatment, and control
- Strict adherence to prescribed treatments is crucial for effective

		Adherence Base Low Adherence & Probable Low Adherence	ed on BMQ Adherent & Possibly Adherent	Odds Ratio	95% CI	p-Value
Income Class	Low Income & Below	40	37	1 200	0.645 3.036	0.396
	Lower Middle Income & Above	17 2	22	1.399		
Total	Count	57	59			

hypertension control

- Barriers to adherence include treatment challenges, forgetfulness, comorbidities, socioeconomic status
- The COVID-19 pandemic affected financial capabilities, impacting treatment adherence

Objectives

- This study, conducted from August to October 2023 in Quezon City, Philippines, aims to:
 - Assess adherence to prescribed hypertension treatment across different economic strata
 - Recognize the potential **impact of socioeconomic factors** on treatment adherence

Method

- A cross-sectional study
- Utilized online & in-person questionnaires

• Sampling & inclusion criteria



Majority of the population were ages 42-64 and taking only 1 medication. Based on the computed odds ratio, those who are low adherent and probable low adherent are 1.399 times more likely to belong to the "Low Income and Below."

Discussion

This study emphasizes the crucial role of adhering to anti hypertensive medications for blood pressure control. Despite available treatments, suboptimal adherence has been prevalent in the Philippines. In 2021, a national rate of 66% medication adherence was reported, whereas this study recorded a lower rate of 50%.

This study examines socioeconomic inequality in Quezon City in terms of medication adherence, highlighting its importance across economic classes. Majority of participants (44.8%) represent the low income hypertensive population, consistent with a higher HTN prevalence among those with low socioeconomic status. A **positive association between income and adherence** (OR = 1.399) was noted but statistically lacking (p-value=0.396). This is most likely due to skewed data distribution and a larger "Lower income and Below" group.

Results

A total of **116 hypertensive** Filipinos were surveyed using convenience sampling. After filtering data, the income was classified using multiples of the poverty line by the **Philippine Statistics Authority**.

		Frequency	Percentage
Age	18-41 years old	22	19.0
	42-64 years old	94	81.0
Income Class	Poor (Php <10,481)	52	44.8
	Low Income (Php 10,481 - 20.962)	25	21.6
	Lower Middle Income (Php 20,962 - 41, 924)	11	9.5
	Middle Income (Php 41, 924 - 73,367)	7	6.0
	Upper Middle Income (Php 73,367 - 125, 772)	9	7.8
	Upper Income (Php 125,772 - 209,620)	3	2.6
	Rich Income (Php >209,620)	9	7.8
Number of	3	10	8.6
Medication	2	41	35.3
	1	65	56.0
Shapiro-Wilk Test	P-value = 1.787		

Overall, the study underscores the **multifactorial** nature of medication adherence, especially in the context of socioeconomic disparities and evolving challenges posed by the COVID-19 pandemic.

Conclusion

The research reveals suboptimal adherence, with only 50.9% considered adherent. Low adherence is more prevalent in low-income classes, suggesting a potential link to socioeconomic factors, although this association is not statistically significant. The **COVID-19 pandemic has** exacerbated financial constraints, potentially complicating medication adherence. While no statistically significant association was found, the study emphasizes the importance of understanding the connection between income status and medication adherence. Tailored interventions are needed to support hypertensive patients, especially those in lower income groups.

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