

# Do electronic health literacy and online health information seeking mediate the effects of socio-demographic factors on COVID-19 and Non-Communicable Disease (NCD) related behaviors among Myanmar migrants in Southern Thailand?

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## 1. INTRODUCTION

Myanmar migrants in Thailand are vulnerable to COVID-19 and NCD risk behaviors, influenced by socio-demographic factors. In the digital age, migrants can seek extensive health information online, and their ability to understand and use electronic health information, which is known as electronic health literacy (e-Health literacy), becomes critical in making decisions about their health behaviors.

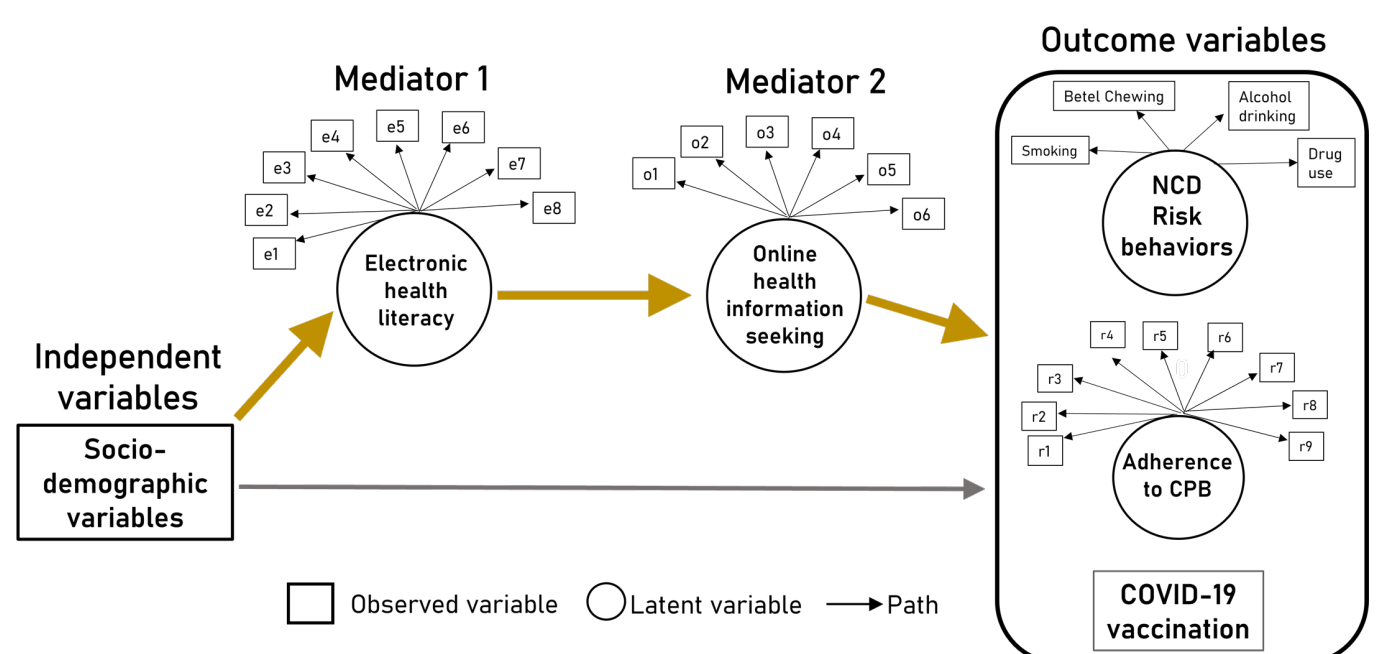
## 2. OBJECTIVE

to investigate serial mediation effects of e-Health literacy and online health information seeking on the associations between the socio-demographic factors and COVID-19 as well as NCD related behaviors

## 3. METHODOLOGY

A cross-sectional was conducted among **1,050** Myanmar migrants in Hat Yai city and Pattani city from September 2022 to January 2023. **Inclusion criteria** were those who were 18 years and older, either legal or illegal, who could communicate well in Burmese. **Exclusion criteria** were those who were arrested or with mental problems or vaccinated outside Thailand. Structural Equation Modeling (SEM) analysis was conducted using R software.

## 4. CONCEPTUAL FRAMEWORK



If indirect effects in the pathway from **socio-demographic factors** → **e-Health literacy** → **online health information seeking** → **COVID-19 & NCD outcome behaviors** were statistically significant, serial mediation was present.

## 5. RESULTS: SERIAL MEDIATION ANALYSIS

Socio-demographic variables	NCD risk behavior			Adherence to CPB			COVID vaccination		
	Direct Effect	Indirect Effect	Total Effect	Direct Effect	Indirect Effect	Total Effect	Direct Effect	Indirect Effect	Total Effect
1. Gender (Male <sup>†</sup> vs. Female)	<b>-0.606***</b>	-0.002	<b>-0.614***</b>	<b>0.300***</b>	0.002	<b>0.307***</b>	<b>0.172***</b>	-0.001	<b>0.170***</b>
2. Occupation (construction <sup>†</sup> vs. factory vs. seafarers)	<b>0.156**</b>	0.001	<b>0.160**</b>	<b>-0.190***</b>	-0.001	<b>-0.194***</b>	<b>0.204***</b>	0.001	<b>0.205***</b>
3. Religion (Buddhist <sup>†</sup> vs. Non-Buddhist)	NS	NS	NS	<b>-0.162**</b>	0.000	<b>-0.162**</b>	NS	NS	NS
4. Ethnicity (Burmese <sup>†</sup> , Non-Burmese)	NS	NS	NS	<b>-0.135**</b>	-0.005	<b>-0.154**</b>	<b>-0.316***</b>	0.003	<b>-0.312***</b>
5. Living status (alone <sup>†</sup> vs. with family, relatives vs. with friends)	NS	NS	NS	NS	NS	NS	<b>0.096*</b>	-0.003	<b>0.092*</b>

Model Fit indices: CFI = 0.956, TLI = 0.971, RMSEA = 0.029, SRMR = 0.043; <sup>†</sup>Referent group; NS: Not significant; \* P < 0.05, \*\* P < 0.01, \*\*\* P < 0.001

## 6. CONCLUSION AND POLICY RECOMMENDATION

In conclusion, COVID-19 and NCD outcome behaviors of migrants were directly influenced by socio-demographic factors, such as gender, occupation, ethnicity, religion, and living status. There were no serial mediation effects of e-Health literacy and online health information seeking on the associations between socio-demographic factors and COVID-19-related as well as NCD-related behaviors. These findings highlighted that e-Health strategies may not be a high priority for enhancing migrants' health behaviors. Diverse interventions beyond e-Health strategies for future pandemic mitigation and improving health behaviors among migrant population are needed.