

The prevalence of limited health literacy and its associations among adult asthma patients in primary care settings: A RESPIRE Collaboration Project

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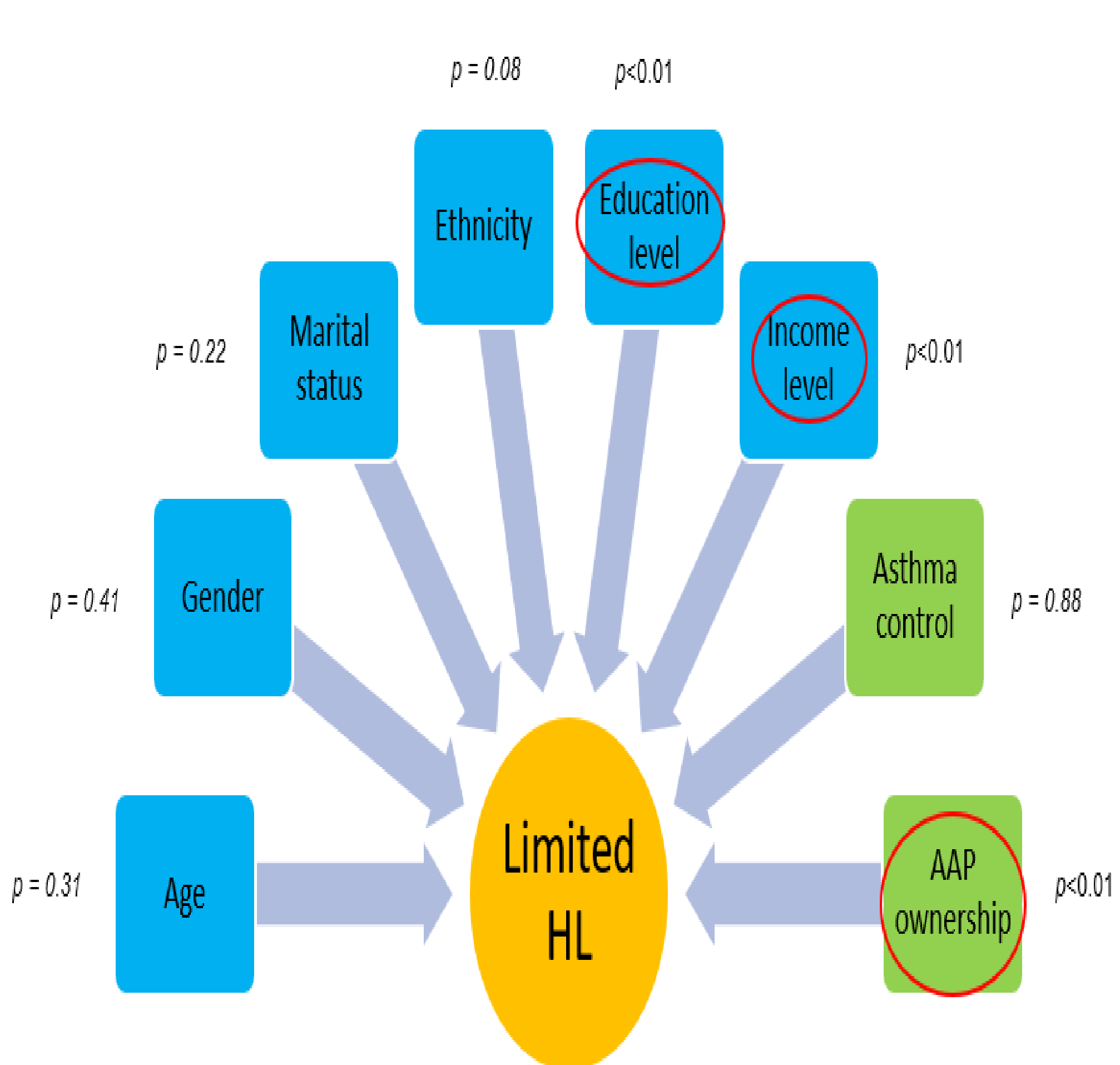
Background & aim

- More than 90 % of general Malaysian population falls under marginal to limited health literacy (HL) level.¹
- Among patients with asthma, low literacy is associated with poor adherence to self-management activities thus poor clinical outcomes.²
- The aim of this study is to determine the level of limited health level and its associations.

Results

- Total number of participants: 550 and response rate: 87%
- Prevalence of limited HL among adult asthma patients is **60.7%**.
- Mean duration of asthma diagnosis is 247 (\pm 191) months and mean PEFR (L/min) is 289 (\pm 102)

Diagram 1: Socio-demographic & clinical factors independently associated with HL score



Significant p value <0.05

Discussion & conclusion

- The prevalence of limited of health literacy among patients with asthma is lower than of the general population level in Malaysia.
- Asthma control is still suboptimal and ownership of AAP is still low, as compared to standard recommendation.⁴
- In this study, health literacy level is significantly associated with education level, income level and ownership of AAP.
- Although relationship of health literacy and asthma is multifaceted, interventions that addressed literacy issues within the patients' context may improve asthma outcomes.
- Based on these findings, an intervention that address poor health literacy will be developed for this population, to improve asthma self-management using information and communication technology (ICT).

References.

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Methods

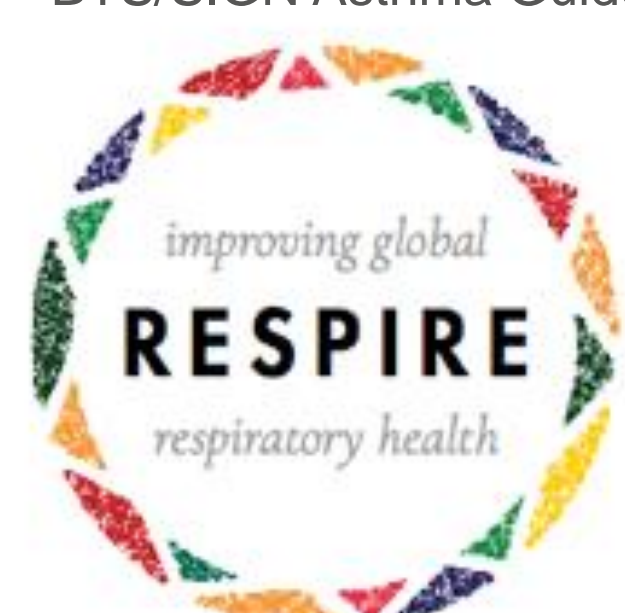
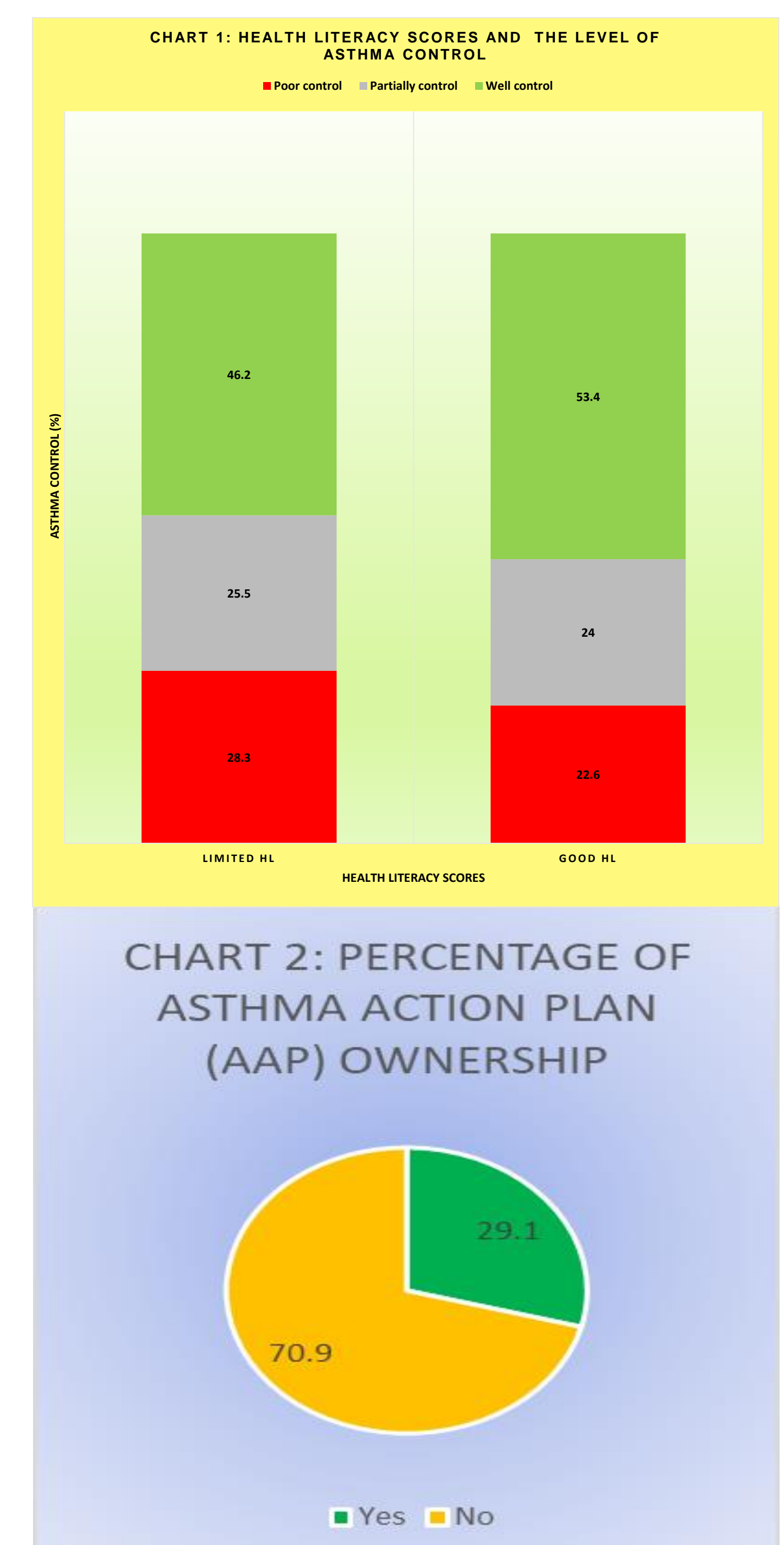
Methodology	Details
Study design	Cross-sectional
Setting	Public primary health centres, Klang
Sample population	Adults (>18 year-old) diagnosed with asthma
Data collection period	1 November 2017 – 31 January 2018
Sampling method	Systematic random sampling (every 2 nd patient)
Sample size	540
Tools	Assisted completion of tools: 1. Demographic and clinical profiles 2. Asthma control test (ACT) 3. Health Literacy Scale-Asia Q47 (HLS-Asia Q47)
Data analysis	Chi square tests were used to associate categorical variables with the primary outcome. Multivariate logistic regressions were used to adjust for confounders. Associations were considered significant at 95% confidence interval if p<0.05.

Table 1: Health literacy level according to sociodemographic

Factors (n=550)	Limited HL	Good HL
	Frequency, n (%)	
Age		
<39	82 (24.9)	87 (39.4)
≥ 40	247 (75.1)	134 (60.6)
Gender		
Male	120 (36.5)	78 (35.3)
Female	209 (63.5)	143 (64.7)
Ethnic group		
Malay	158 (48)	123 (55.7)
Chinese	44 (13.4)	24 (10.9)
Indian	127 (38.6)	74 (33.5)
Marital status		
Not Married	65 (19.8)	59 (26.7)
Married	264 (80.2)	162 (73.3)
Education level		
No formal/primary education	149 (45.3)	34 (15.4)
Secondary education	140 (42.6)	112 (50.7)
Tertiary education	40 (12.2)	75 (33.9)
Household income*		
Low income	291 (88.4)	167 (75.6)
Middle income	35 (10.6)	41 (18.6)
High income	3 (0.9)	13 (5.9)

HL Level: 0-33: Limited HL (poor and marginal) 34-50 Good HL (sufficient and excellent HL)
 * Based on National Income Level³

Clinical factors: Chart 1 & 2



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