

# Do Malaysian asthma patients use asthma action plans? A cross sectional study in Malaysian primary care

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## Introduction

- Supported self-management, including provision of an asthma action plan (AAP) improves asthma control and overall health outcomes.<sup>1-3</sup>
- However, the concept of self-management and use of asthma action plan among Asian population is relatively new.
- The aim of this study is to determine the prevalence of AAP ownership among asthma patients and their characteristics in Malaysia primary care.

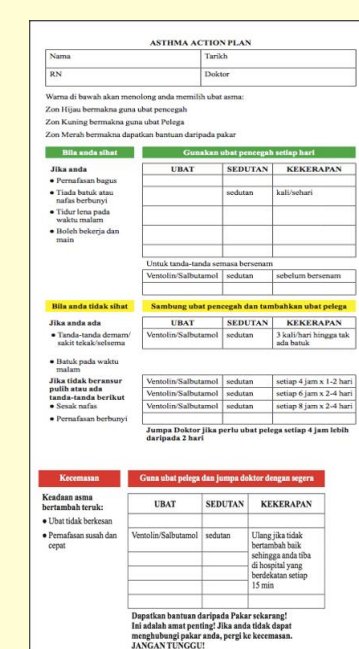
## Methods



Methodology	Details
Study design	Cross-sectional
Setting	Public primary health centres, Klang (5 clinics)
Sample population	Adults (>18-year-old) diagnosed with asthma
Data collection period	1 October 2017 – 31 January 2018
Sampling method	Sampling (every 2 <sup>nd</sup> patient with asthma attending the clinic)
Sample size	The sample size is calculated using a formula (based on Daniel, 1999) <sup>4</sup> and 30% attrition rate = 540
Questionnaire	Assisted completion of questionnaires: 1. Demographic and clinical profiles 2. Reported ownership of action plans 3. Asthma control questionnaire (ACQ)
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.

## Results

- Total number of participants: 550; Response rate: 87% (550/632)
- Only 160 (29.1%) own AAP, which are written in Malay language
- Of those who owned an AAP, 106 (66.2%) were confident to use it



AAP in Malay language

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## Analysis

Figure 1 shows the percentages of owning AAP from socio-demographic and clinical categories.

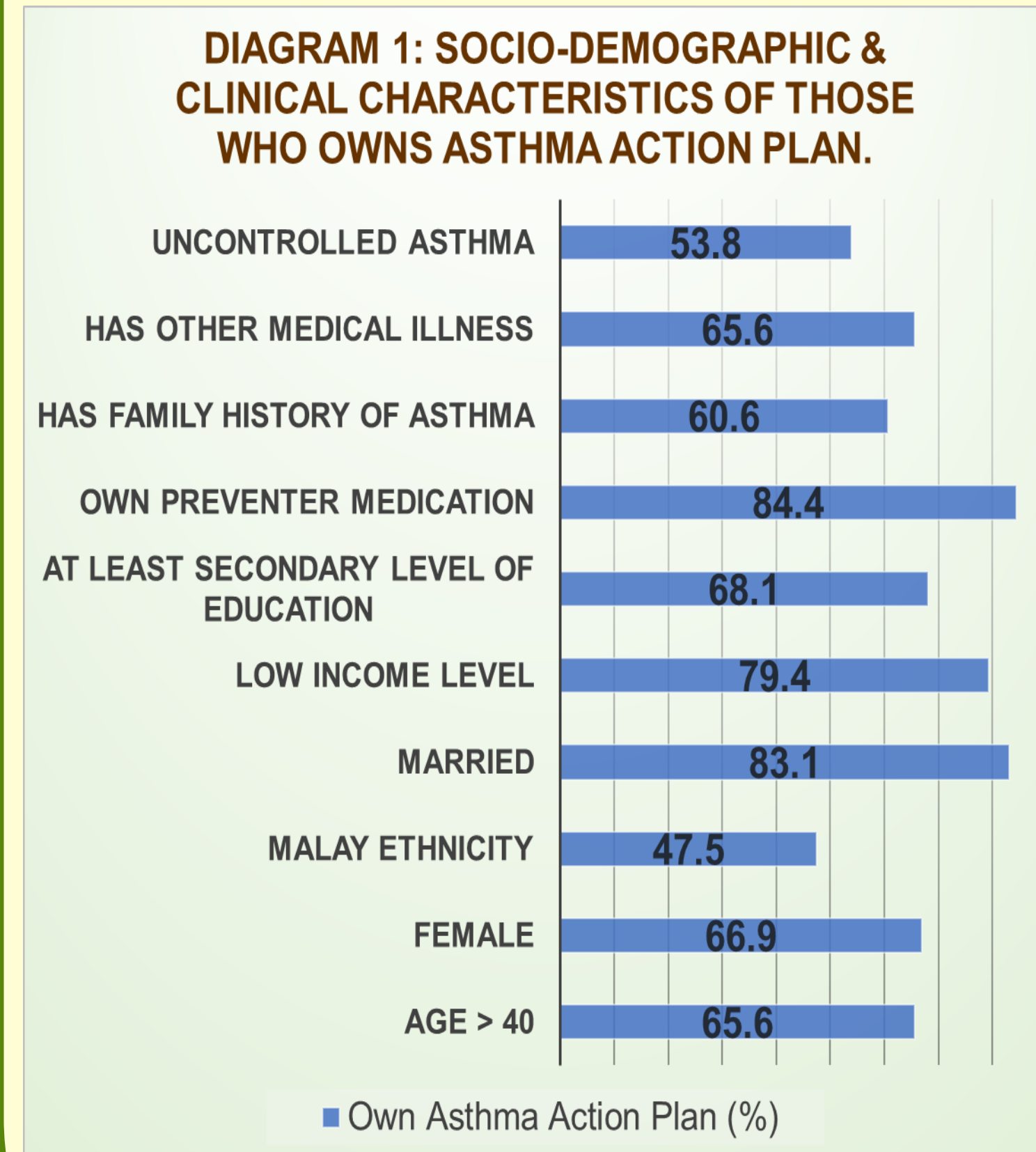
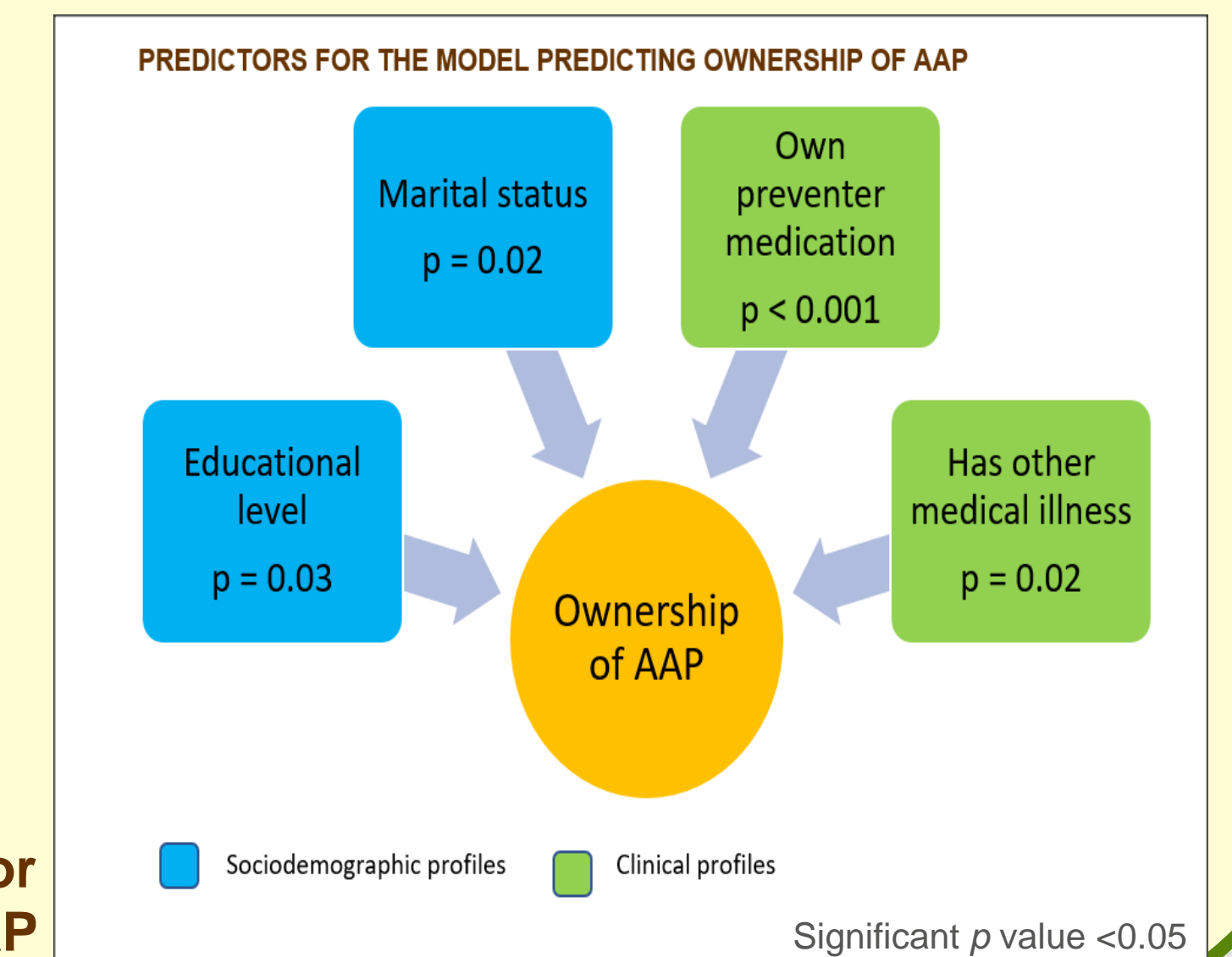
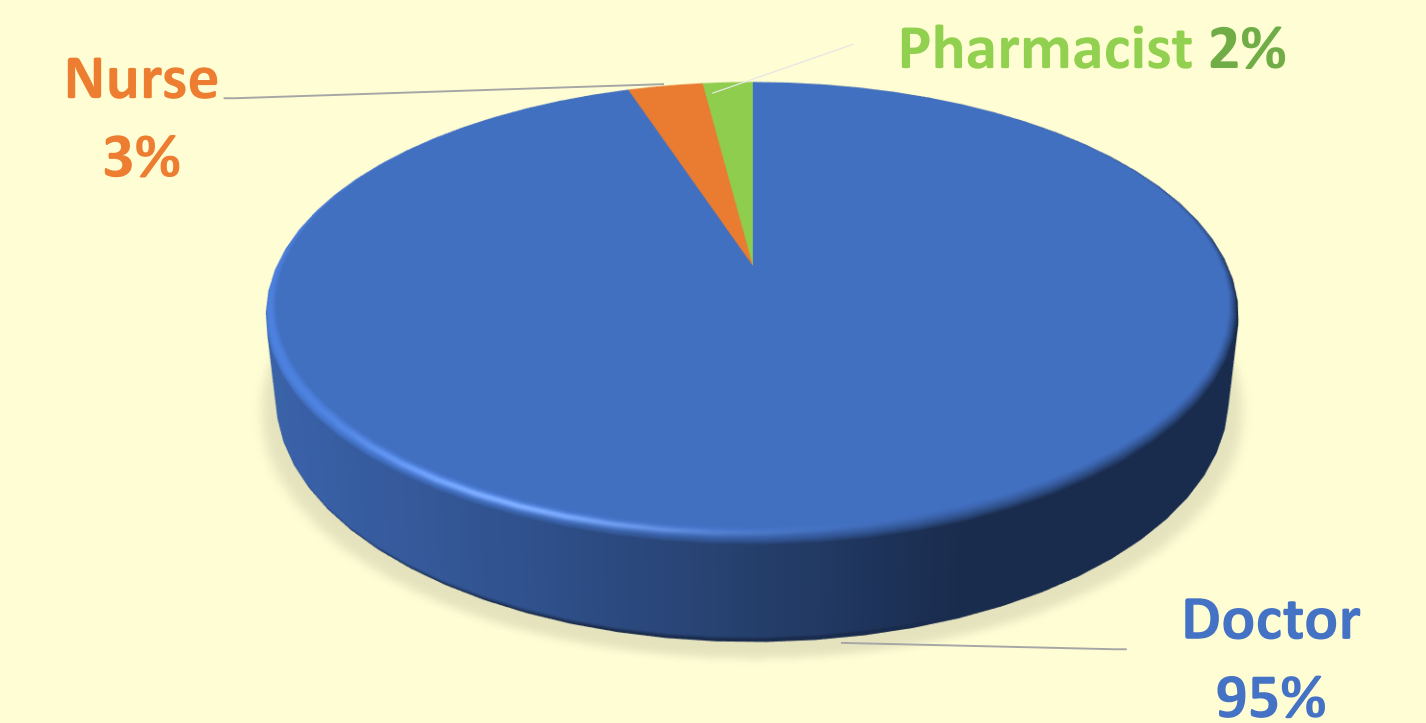


Figure 3 shows the predictors for owning an AAP

Figure 2 shows the healthcare professional who provided the AAP.



## Discussion and conclusion

- Ownership of AAP (29.1%) in this study is similar to the data in the developed nations across Europe and Australia.<sup>5-7</sup> However, two of the clinics involved in this study have dedicated programmes for asthma care. The findings may not be the same to other primary care setting which do not have facility for this.
- Most AAPs are written in the Malay language, thus, it is interesting to see that majority of patients who own AAP are from Malay ethnic group (47.5%).
- Education, usage and confidence in using an AAP for asthma self-management is sub-optimal among asthma patients in Malaysian primary care.
- Supported asthma self-management in this population must be strengthened.

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