Awareness and Usage of Inhalers Among Patients with Asthma: Findings from the REALISE Asia Study

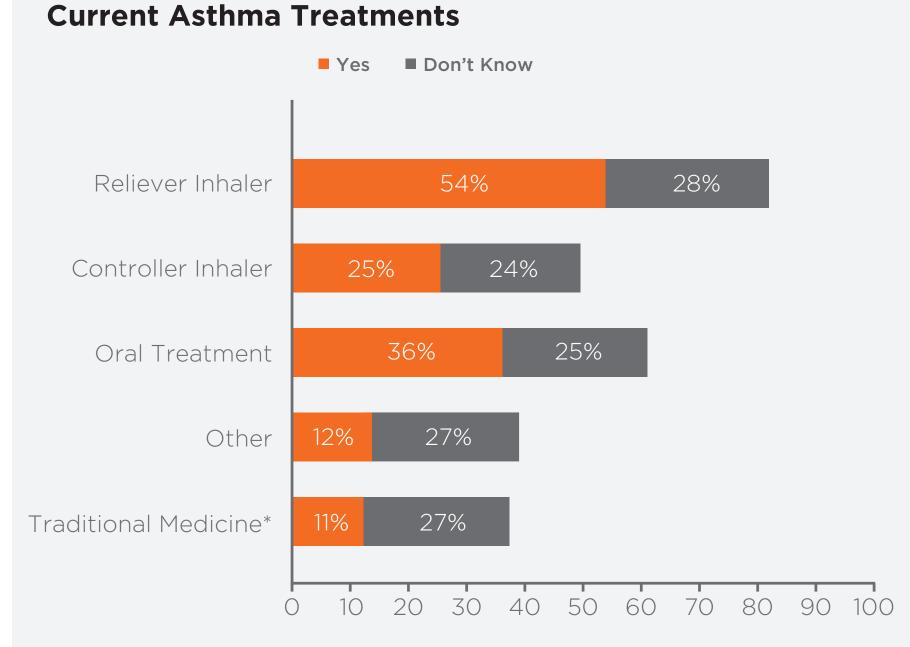
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• A recent patient survey REcognise Asthma and LInk to Symptoms and Experience (REALISE) noted that despite the availability of effective treatments, asthma control



Usage Frequency of Controller Inhaler

I take it every day	I take it some days, but others I do not
I take it only when I have symptoms	I used to take it, but now I do not
I never take it	

remains low in Europe.¹

- Poor treatment adherence is one of the contributing factors. In fact, poor adherence has been identified as one of the factors that increases the risk of exacerbations even for patients whose symptoms are well controlled.²
- We present here data from a similar survey conducted in eight countries in Asia, looking at the impact of awareness and usage of inhalers on adherence and asthma control.

Methodology

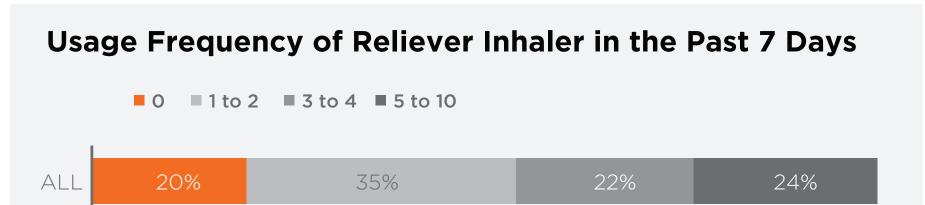
- This online questionnaire-based survey was conducted in 8 Asian countries (China, Hong Kong SAR, Indonesia, Malaysia, Philippines, Singapore, South Korea, and Taiwan).
- Questionnaires were translated and back-translated by professional translators and reviewed by the REALISE Asia Working Group for conceptual and cultural correspondence of source and translated text.
- Patients were recruited via a validated consumer panel. Patients had to be between the ages of 18 and 50 years, have ≥ 2 prescriptions for asthma in the past two years, and use social media. Online panels were used to address the population with access to medical care and social media and to allow the survey nationwide coverage.
- REALISE Asia collected these data: demographics, asthma control data (based on GINA criteria), perceptions and attitudes about asthma and its management, disease burden, and information sources. Responses were validated using rigorous quality checks (predefined screening criteria, duplicate-prevention algorithms, digital footprints, checks to rule out illogical answers or careless respondents). • This non-interventional survey was double-blinded to reduce bias and protect the privacy of the respondents in adherence to European Society for Opinion and Market Research (ESOMAR) code of conduct.

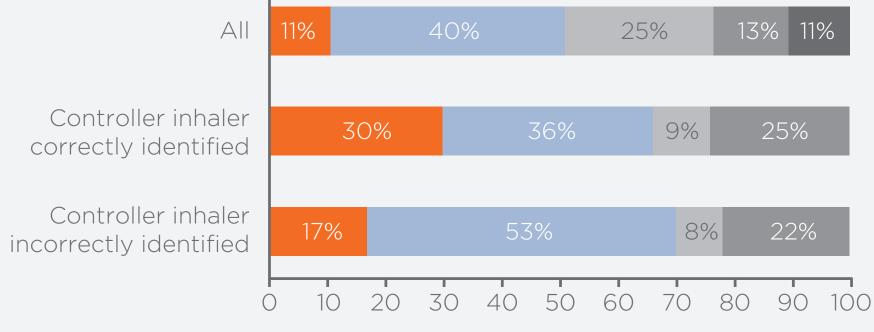
Respondents (%)

- Data are shown as percentage of respondents who are currently taking medications to manage their asthma n = 2,165.
- Q: Which of the following treatments do you take to help manage your asthma?
- *Traditional Chinese Medicine or Traditional Korean Medicine.

Usage of Reliever Inhaler

- Of those patients who own a reliever inhaler, 35% reported that they had to use their reliever inhaler > 3 times in the past 7 days.
- The average use of reliever inhaler was 2.8 times in the past week.





Respondents (%)

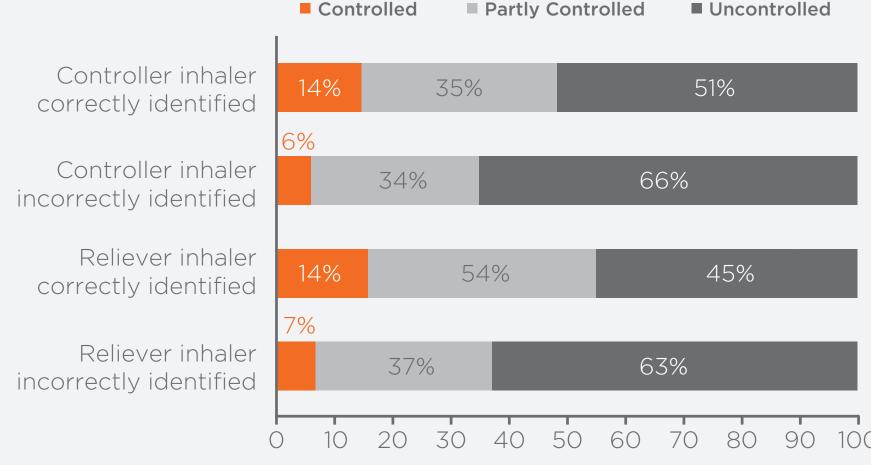
Data are shown as percentage of respondents who use controller inhaler daily n = 1,072; those who correctly name their inhaler, n = 212; and those who incorrectly name their inhaler, n = 337.

'Name controller inhaler correctly' means the respondent gave name(s) for controller inhaler correctly; otherwise it is considered 'name controller inhaler incorrectly.

Q: Which statement best describes how you take your regular asthma treatment? This is your controller inhaler, which is usually brown, orange, red, purple, or pink.

• Looking at GINA-defined level of control, a statistically significant larger proportion of respondents who named their controller inhaler correctly were well-controlled (14%), than those who answered incorrectly (14% versus 6%, p = 0.05). • The same pattern was seen for those who correctly classified their reliever inhaler versus those who were incorrect (14% versus 7%; p = 0.05).

Asthma Control Status by Knowledge of Inhalers



Results

Demographics Information

- A total of 2,467 patients with asthma completed the online survey. The geographical split is shown in the map below.
- There is a relatively equal proportion of men (54%) to women (46%); mean age of respondents is 34 years old.

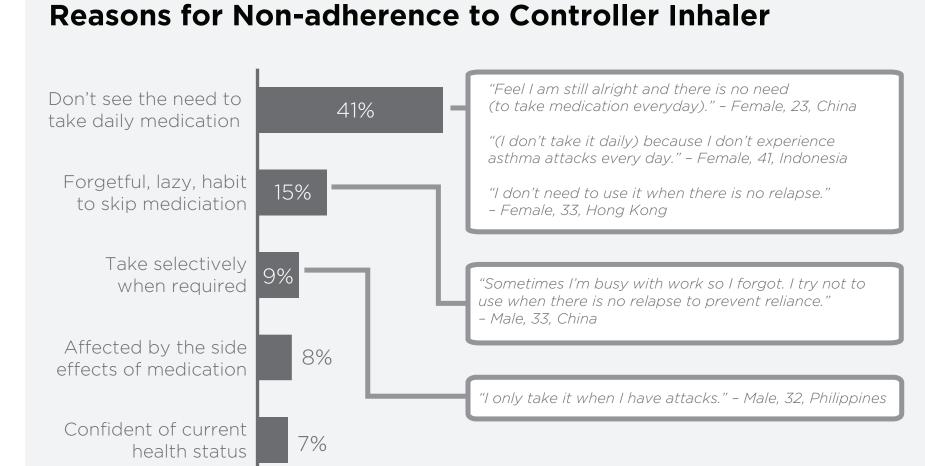


Respondents (%)

Data are shown as percentage of respondents who own a reliever inhaler n = 1,887 Q: Thinking about the last week, how many times have you used your reliever inhaler?

Usage of Controller Inhaler

- Among those who reported having a controller inhaler, only 14% used it daily, 43% said they used it on some days, and 7% never used it at all.
- Nearly half of the patients mentioned that inhaler is a real nuisance, and disagreed that they need to take their controller inhaler regularly to control their asthma
- Over 40% cited that they did not see the need to take daily medication for reasons that they feel well or they don't experience asthma attacks.



Respondents (%)

Data are shown as percentage of respondents who are correct and incorrect in naming the inhaler category: n = 213 and n = 336 respectively for controller inhaler; and n = 405 and n = 767 respectively for reliever inhaler.

Q: Which of the following treatments do you currently take to help manage your asthma?

Conclusions

- Over-reliance on reliever inhaler and poor adherence to controller medication remains a problem in Asia, reflective of the perceptions patients have regarding their disease and its treatment.
- Asthma patients in Asia generally have inadequate knowledge about their inhalers, and it is worrying that in almost half of the patients, the inhaler technique has not been checked by a healthcare professional in the previous year.
- These emphasize the need to take action, which can be as simple as regular check of inhaler technique. Baseline knowledge such as difference between controller and reliever medications must also be ensured, since such awareness is associated with better treatment adherence and level of asthma control.

References

Korea (20%) Hong Kong (8%) Mainland China (32%) Taiwan (12%) Philippines (6%) Malaysia (6%) Singapore (8%)



Medication Use

- Majority (88%) of respondents were taking some form of medication for their asthma.
- Of these, 54% are currently using a reliever inhaler, 25% are using a controller inhaler, and 36% are on oral treatment.
- Of those who are currently taking some form of medication for asthma, only 51% have had their inhaler technique checked by a healthcare professional (HCP) in the past year.

10 20 30 40 50 60 70 80 90 100 **Respondents (%)**

Data are shown as percentage of respondents who did not take asthma controller inhaler daily n = 923.

Q: Following the question on controller inhaler: Why do you not take your regular asthma treatment?

Inhaler awareness and corresponding level of adherence and asthma control

- Among those who cited they have inhalers, only 39% and 35% were able to correctly classify their inhalers as controller and reliever, respectively.
- Patients who correctly identified their controller inhaler were also significantly more likely to use it daily compared to those who were not able to do so (30% versus 17%; p = 0.05).

¹Price D, et al. NPJ Prim Care Respir Med 2014;24:14009; doi:10.1038/npjpcrm.2014.9

²GINA Report, Global Strategy for Asthma Management and Prevention, 2014. Available at: http://www.ginasthma.org/ (accessed 1 September 2014).

Declarations of Interest

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