

The NSW Asthma Survey

Identifying the needs of people
with asthma in NSW



Asthma
FOUNDATION
NEW SOUTH WALES

NSW Asthma Survey

What was the survey?

- A quantitative survey of around 700 people with asthma
- Designed to identify the attitudes, behaviours and needs of people with asthma in NSW
- The survey was conducted in late 2007 by researchers from
 - Woolcock Institute of Medical Research
 - Faculty of Pharmacy, University of Sydney
 - Australian Centre for Asthma Monitoring

NSW Asthma Survey

How was the survey conducted?

- Self-completed questionnaire for people with asthma
- Adults, teenagers, and parents/carers of children 5-13
 - Diagnosis of asthma
 - English-speaking
- Participants were recruited from
 - Community pharmacies (322)
 - Volunteers at Woolcock Institute of Medical Research (299)
 - Asthma Foundation NSW databases (107)

NSW Asthma Survey

Snapshot of survey participants

- Demographics
 - 608 adolescents and adults with asthma (61% female)
 - 81 parents/carers of children with asthma (47% female)
 - Median age 51 years (range 2-87 years)
- 81% born in Australia
 - 2% Aboriginal or Torres Strait Islander
 - 8% spoke language other than English at home
- Area of residence
 - 73% major cities, 20% inner regional, 7% outer regional
 - All socio-economic levels well-represented (but more participants were from less disadvantaged areas)
- Employment: 1/3 full-time employed; 1/3 retired

General health of participants

Self-reported general health status

- Excellent 8%, very good 28%, good 39%, fair 20%, poor 4%

Health status is generally lower for people with asthma than for general population

Smoking

- 9% participants smoked at least once a week

NSW average for current smoking is 17.7%

- Factors associated with higher prevalence of smoking
 - Younger age (16% of those aged 15-34, 4% of those over 65 years)
 - Living in lower socio-economic areas (10% SEIFA 1, cf. 4% SEIFA 5)

Obesity

- 23% males and 28% females were obese (BMI >30)

This rate is much higher than the Australian average (18% male, 17% female, NHS 2004-5). Obesity is associated with increased asthma symptoms.

“Preventer” medications

Adults

- 87% adults had used an ICS/LABA or ICS* inhaler in the last month

These rates are higher than would be seen in a randomly-selected population of people with asthma, reflecting some recruitment through pharmacies.

- Most adults using ICS were taking combination ICS/LABA (80%)

This rate is higher than would be expected from asthma guidelines. Most asthma is mild and can be managed with low-dose ICS alone.

Children

- 70% children had used ICS/LABA or ICS inhaler in the last month, and of these, two thirds were using ICS/LABA

Pediatric guidelines recommend ICS/LABA for only a small minority of children.

- 22% children were using leukotriene receptor antagonist

* ICS=inhaled corticosteroid; LABA=long-acting b2-agonist

Use of inhalers

Adherence with preventer medication

- 76% reported using their preventer medication 7 days/week

Actual adherence is usually much lower than self-reported adherence.

- 27% reported forgetting their preventer medication in last 4 weeks

Where do patients keep their asthma inhalers?

- Reliever inhalers (median 3 inhalers, range 0-18)
 - Kept in readily accessible locations such as handbag, bedroom, kitchen, office, grandparents' house etc.
 - 15% participants kept a reliever inhaler in the car
- Preventer inhalers (median 2 inhalers, range 0-9)
 - Kept in bedroom, bathroom, kitchen, bag etc.

With multiple inhalers, patients may find it hard to keep track of remaining doses, and expiry dates. Patients should be warned about risks of keeping inhalers in car.

Routine care for asthma

Non-urgent doctor visits about asthma

- 55% adults and 74% children had a non-urgent visit to their doctor for asthma in the last 12 months

This is lower than recommended by Australian guidelines, which state that people with asthma should have a 6-monthly review.

Written asthma action plan

- 40% adults and 63% parents/carers said they had a written asthma action plan

Asthma guidelines recommend that every person with asthma should have a written action plan. Action plan ownership in this survey was much higher than in recent Australian surveys (23% in 2004-5).

“Good asthma control”

In asthma guidelines, “good asthma control” means

- Minimal asthma symptoms and reliever use (\leq twice/week)
 - No night waking due to asthma
 - No exercise limitation due to asthma
 - Minimal or no risk of future adverse events e.g. exacerbations
- A patient’s level of current asthma control can be assessed from standardised questionnaires
- e.g. Juniper Asthma Control Questionnaire (ACQ)*
 - ACQ score of ≤ 0.75 represents well-controlled asthma
 - ACQ score of ≥ 1.5 represents poorly-controlled asthma
- Patients may interpret the expression “asthma control” differently (e.g. self-control, or quality of medical care)

The medical meaning of “asthma control” should be explained to patients, to avoid misunderstandings and to describe the goals of treatment.

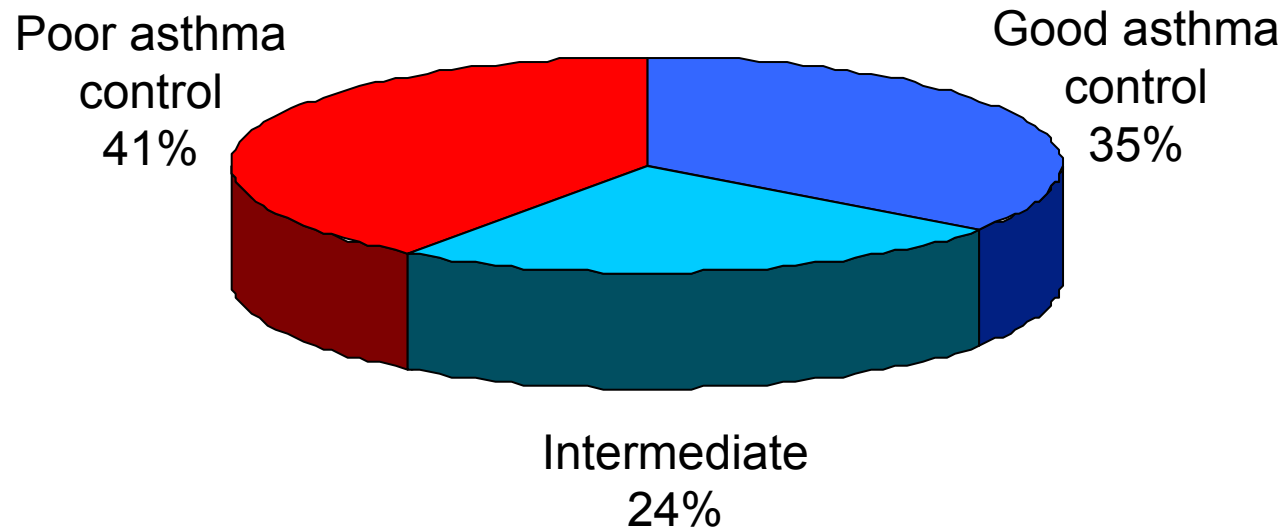
*For more detail about ACQ see www.qoltech.co.uk

Poor asthma control

What is the impact of poor asthma control?

- Disturbed sleep
 - In the last week, 46% of adults and 47% of children had disturbed sleep due to asthma
- Interference with daily activities
 - In the last 4 weeks, asthma interfered with daily activities of 57% adults, and 79% children
- Days away from work or school
 - In the last 12 months, 18% adults and 62% children lost time from work or school due to asthma
- Concerns about the future
 - 20% felt that asthma was preventing them achieving what they wanted from life, and were worried about asthma shortening their life

41% of respondents had poor asthma control



- Poor asthma control represents a significant burden to the patient and the community
- Only one third of people with asthma had good asthma control, despite most reporting use of “preventer” medication in last 4 weeks

Poor asthma control

What factors contributed to poor asthma control?

- In multiple regression analysis, the following factors were independently associated with poor asthma control
 - Younger age
 - Smoking
 - Living in more socio-economically disadvantaged areas
 - Employment status (being retired vs. working full-time)
 - Completed only primary education
 - Holding a concession card

Preventer medication and possession of a written action plan can protect from poor asthma control, but this effect is not seen in cross-sectional surveys since patients with more severe asthma are more likely to be given preventer medications and written action plans.

Poor asthma control

What other factors contribute to poor asthma control?

- People often over-estimate their use of preventer medication
 - Encourage open communication about adherence problems
- Poor inhaler technique is common
 - A problem for both “puffers” and dry powder inhalers
 - Patients are unaware that their technique is incorrect
 - Poor inhaler technique has important consequences
 - Greater need for urgent health care due to asthma
 - More local side-effects (dysphonia, oral thrush)
- Inhaler technique should be checked regularly

Asthma Foundation NSW has produced a range of brief videos to help people with asthma and health care professionals to assess and improve inhaler technique

Urgent health care for asthma

How often did people with asthma need urgent care?

- In the last 12 months, 28% of adults and 62% of children had at least one episode for asthma requiring urgent care
 - 25% adults and 52% children had an urgent doctor visit for asthma
 - 9% adults and 23% children had an ED visit for asthma
 - 8% adults and 12% children were hospitalised for asthma
- Factors associated with urgent health care utilisation
 - Younger age
 - Full-time employment
 - Non-English speaking background
 - Completed only primary education
- Urgent health care is costly for patients and the community
Urgent health care represents a balance between need & access

Problems with asthma care

Patients identified the following problems interfering with their asthma management in the last 12 months

- Difficulty getting an appointment with a GP about their asthma
 - Adults 13%; parents/carers 31%
 - Not related to remoteness
- Cost of asthma medications
 - Adults 24%, parents/carers 23%
 - Particularly reported by younger adults
- Cost of seeing GP or specialist about their asthma
 - Adults 14%, parents/carers 16%

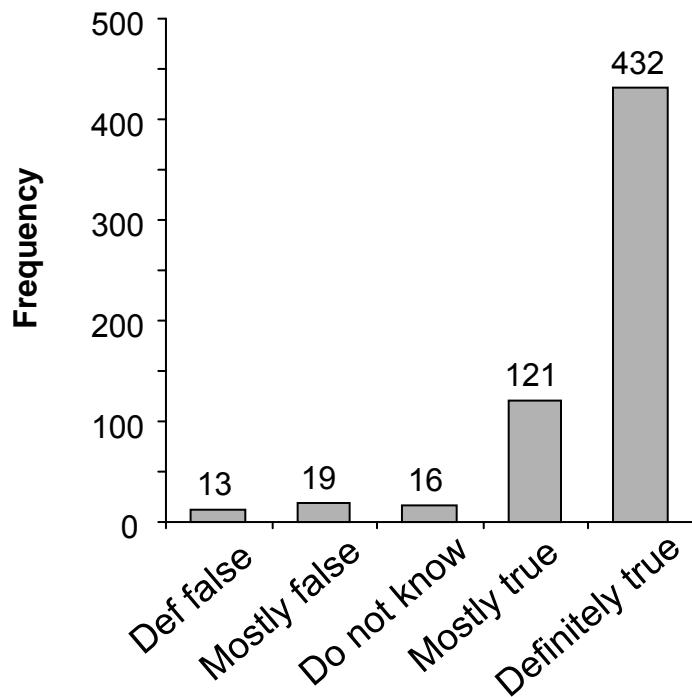
Attitudes and beliefs

- Most people felt that they had sufficient understanding of their asthma, and were happy with the way it was being managed
- 42% adults reported feeling dependent on their inhalers
- There was very wide variation in attitudes and beliefs about
 - Concern about side effects
 - Dislike of using inhalers in public
 - Financial difficulties limiting access to asthma care
 - Making changes in management according to symptoms
- Some people felt strongly that it was helpful to know the experiences of other people with asthma
 - Especially parents/carers, and those living outside major cities

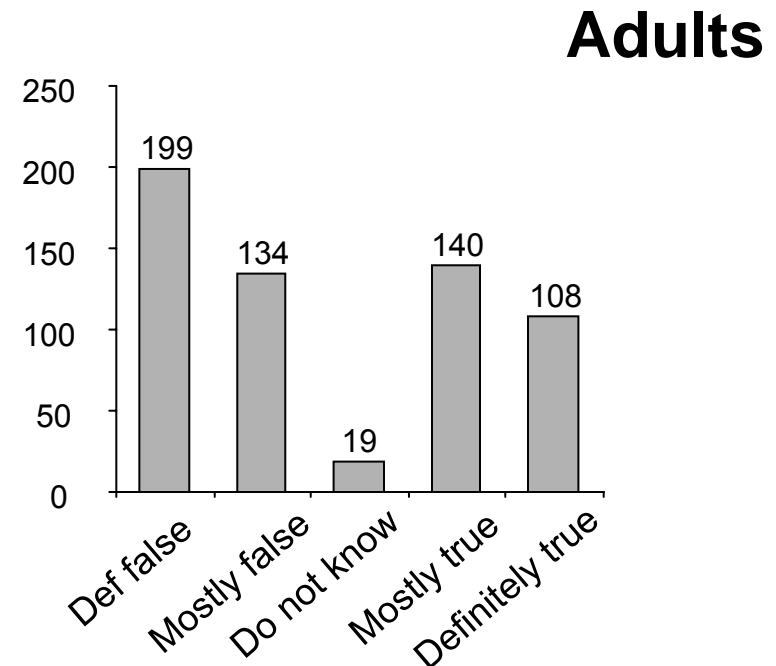
Because these issues are important in asthma management, and there is wide variation between individuals, it is important for health care professionals to ask each patient about his/her attitudes and beliefs about asthma.

Attitudes and beliefs

Is there still a stigma about having asthma?



I dislike being wheezy, short of breath or coughing in public

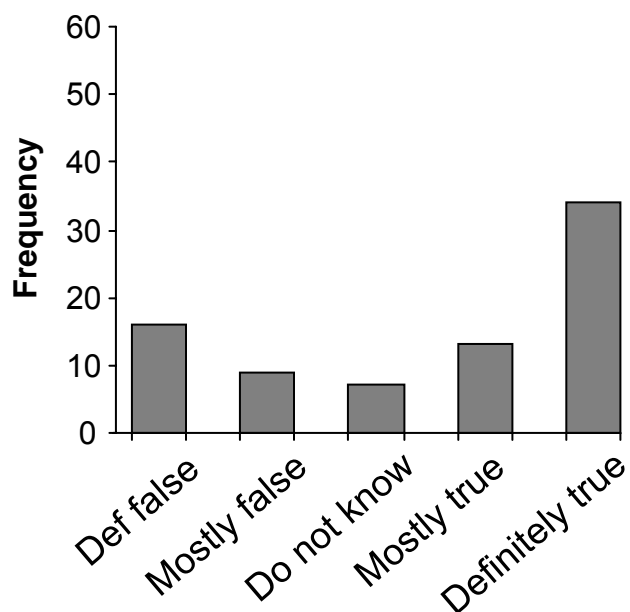


I dislike using inhalers in public

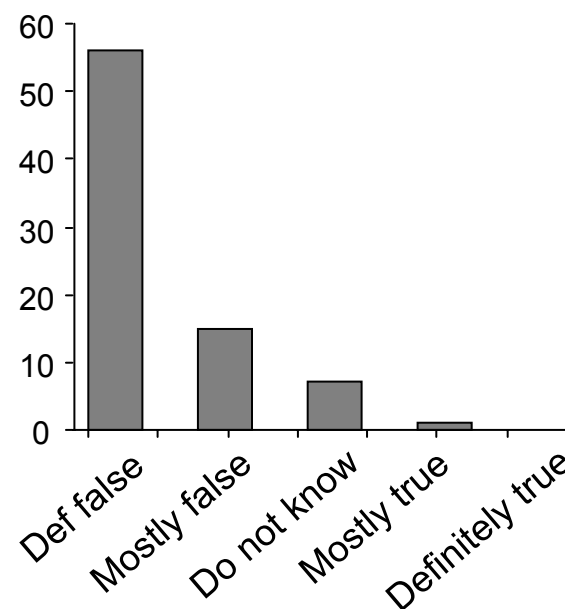
Attitudes and beliefs

Is there still a stigma about having asthma?

Parents/carers



I dislike my child being wheezy, short of breath or coughing in public



I dislike my child using inhalers in public

Information about asthma

Where did patients obtain information about asthma?

Adults

- Doctor 77%
- Pharmacist 38%
- Media 21%
- Hospital 21%
- Relative/friend 14%
- AF staff 11%
- Internet 13%

Parents/carers

- Doctor 96%
- Pharmacist 68%
- Media 36%
- Hospital 39%
- Relative/friend 36%
- AF staff 18%
- Internet 29%

- Pharmacists provide a valuable source of information about asthma, especially in more disadvantaged areas
- Information about asthma also comes from many other sources, not necessarily reliable

Survey asked about sources of information about asthma in last 12 months

Information about asthma

Use of the internet for health information

- 66% adults and 74% parents/carers had accessed the internet in the last 4 weeks
 - As expected, older people and those in more disadvantaged areas were less likely to have access to the internet
- Only half of those accessing the internet had used it to obtain health information
- Other studies have identified concerns by consumers about the reliability of internet-sourced health information

Health care professionals can assist people with asthma to find reliable asthma information by providing consumer leaflets or by writing “information prescriptions”, e.g. to the consumer website and electronic newsletters provided by Asthma Foundation NSW

Summary

Asthma is often poorly-controlled despite the availability of effective preventer medications

- Poor asthma control is a particular problem in younger patients
- The cost of medications, inhaler technique and smoking may be important factors

Many people with asthma are using urgent health care

- Especially children and younger adults
- This places a significant burden on patients and on scarce health resources
- Strategies are required to reduce need for urgent care

Some urgent health care attendances are appropriate, for management of severe exacerbations, but many could be prevented by appropriate medication use, written action plans, and regular review visits.

Summary

Consumers need to receive reliable and consistent health messages about asthma

- Most patients receive asthma information from their GP
- Pharmacists already provide a valuable additional resource for information about asthma, especially in disadvantaged areas
- Patients also obtain advice about asthma from many other sources, including media, internet, relatives and friends
 - Information from different sources may be conflicting
- Internet is currently under-utilised for information about asthma
 - The credibility of many internet sources is questionable, and people with asthma are often aware of this
 - People with asthma should be directed towards reliable sites such as those provided by professional or consumer bodies

Asthma Foundation NSW provides reliable, user-friendly information about asthma

You can write an “information prescription” for people with asthma

1. Visit the Asthma Foundation NSW Website (www.asthmansw.org.au)

- Subscribe to "onAIR" - free email newsletter with latest asthma updates
- Register for a free Asthma Control Pack including a first aid magnet and asthma emergency card
- Check the Asthma Medications Reference Chart
- Look through the A-Z of asthma triggers
- Download a wide range of asthma brochures and fact sheets
- Book an emergency asthma management training course
- Find out about Asthma Friendly Schools

2. Call the Asthma Information Line on 1800 645 130

- Manned by health professionals who are experienced in asthma management

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