



Drugs – Real World Outcomes

Impact of pediatric acute otitis media on child and parental quality of life and associated productivity loss in Malaysia: a prospective observational study

Bruce Crawford, Siti Sabzah Mohd Hashim, Narayanan Prepageran, Goh Bee See, Genevieve Meier, Keiko Wada, Cheryl Coon, Emmanuelle Delgleize, Michael DeRosa

Bruce Crawford
IMS Health, Tokyo, Japan
bcrawford@jp.imshealth.com

AOM QUALITY OF LIFE QUESTIONNAIRE IN ASIA

Questionnaire for a parent/caregiver of a child with an ear infection, to assess the impact of the child's illness on family life

[Part 1.] How has your child's ear infection affected you?

	Please tick the box that best describes your situation				
	Not at all	A little bit	Somewhat	Quite a bit	Very much
1. have you been worried?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. have you been more stressed than usual?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. have you, in general, become impatient more easily?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. have you felt frustrated or annoyed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. has your mood been negatively affected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. has the quality of your sleep been affected by any of the following: worry, stress, impatience, frustration and mood?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. have you had less time for other members of the family?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. have you had to reduce or alter your leisure activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. have you had to make changes to your daily schedule?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. has the quality of your outdoor or household activities been affected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. have you had any difficulty with planning your time schedule?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. have you had any additional expenses (excluding income losses)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. have you felt helpless or powerless?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Never	Rarely	Sometimes	Often	Frequently
14. have you been woken up during the night because of his/her ear infection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unchanged	A little bit worse	Somewhat worse	Quite a bit worse	Considerably worse
15. due to your child's ear infection, you would say your quality of life has been	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

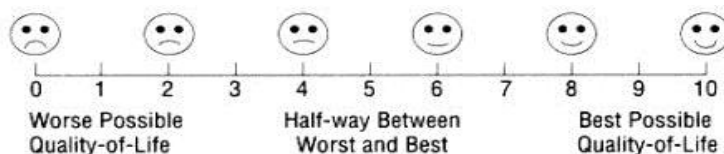


[Part 2.] How has your child's ear infection affected him/her?

Please tick the box that best describes your situation. Check one box for each question below.						
<p>1. <u>Physical Suffering:</u> Ear pain, ear discomfort, ear discharge, ruptured ear drum, high fever, or poor balance. How much of a problem for your child during the past 2-3 weeks?</p>						
Not present / no problem	Hardly a problem at all	Somewhat of a problem	Moderate problem	Quite a bit of a problem	Very much a problem	Extreme problem
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
<p>2. <u>Hearing loss:</u> Difficulty hearing, questions must be repeated, frequently says "what", or television is excessively loud. How much of a problem for your child during the past 2-3weeks?</p>						
Not present / no problem	Hardly a problem at all	Somewhat of a problem	Moderate problem	Quite a bit of a problem	Very much a problem	Extreme problem
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
<p>3. <u>Speech Impairment:</u> Delayed speech, poor pronunciation, difficult to understand, or unable to repeat words clearly. How much of a problem for your child during the past 2-3 weeks?</p>						
Not present / no problem or not applicable	Hardly a problem at all	Somewhat of a problem	Moderate problem	Quite a bit of a problem	Very much a problem	Extreme problem
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
<p>4. <u>Emotional Distress:</u> Irritable, frustrated, sad, restless, or poor appetite. How much of a problem for your child during the past 2-3 weeks as a result of ear infections?</p>						
Not present / no problem	Hardly a problem at all	Somewhat of a problem	Moderate problem	Quite a bit of a problem	Very much a problem	Extreme problem
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
<p>5. <u>Activity Limitations:</u> Playing, sleeping, doing things with friends/family, attending school or day care. How limited have your child's activities been during the past 2-3 weeks because of ear infections?</p>						
Not limited at all	Hardly limited at all	Very slightly limited	Slightly limited	Moderately limited	Very limited	Severely limited
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
<p>6. <u>Caregiver Concerns:</u> How often have you, as a caregiver, been worried, concerned, or inconvenienced because of your child's ear infections over the past 2-3 weeks?</p>						
None of the time	Hardly any time at all	A small part of the time	Some of the time	A good part of the time	Most of the time	All of the time
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

7. Overall, how would you rate your child's quality of life as a result of ear infections? (Check one box)

0 1 2 3 4 5 6 7 8 9 10





[Part 3.] Health questionnaire

By putting a tick (☑) in one box in each group below, please indicate which statements best describe your own health state today.

Mobility

- I have no problems in walking around
- I have some problems in walking around
- I am confined to bed

Self-Care

- I have no problems with self-care
- I have some problems taking a bath/shower, or dressing myself
- I am unable to take a bath/shower, or dress myself

Usual Activities (*e.g. work, study, housework, family or leisure activities*)

- I have no problems with performing my usual activities
- I have some problems with performing my usual activities
- I am unable to perform my usual activities

Pain/Discomfort

- I have no pain or discomfort
- I have moderate pain or discomfort
- I have extreme pain or discomfort

Anxiety/Depression

- I am not anxious or depressed
- I am moderately anxious or depressed
- I am extremely anxious or depressed



To help people say how good or bad a health state is, we have drawn a scale (rather like a thermometer) on which the best state you can imagine is marked 100 and the worst state you can imagine is marked 0.

We would like you to indicate on this scale how good or bad your own health is today, in your opinion. Please do this by drawing a line from the box below (where 'Your own health state today' is written) to whichever point on the scale indicates how good or bad your health state is today.

Best
imaginable
health state

100

90

80

70

60

50

40

30

20

10

0

Worst
imaginable
health state



[Part 3.] Evaluation of the economic impact on the family due to ear infection

[1] Are there still any symptoms of ear infections present?

₁ No → Date of last symptoms : |__|_|_| / |__|_|_| / |__|_|_|
Day Month Year

₂ Yes

[2] What type of medical insurance coverage do you have ? (Check all that apply)

₁ Public Insurance (Universal Healthcare)
₂ Private Insurance
₃ Do not have insurance
₄ Other: _____

[4] Which type of doctor did you visit to diagnosis your child’s ear infection? (Check one)

₁ General practitioner
₂ Pediatrician
₃ Eye, Nose, Throat specialist (ENT)
₄ Emergency room department
₅ Audiologist
₆ Other: _____

[5] Were there any procedures performed during the visit to diagnosis this ear infection?

₁ No

₂ Yes → Please describe below what was done, how many times and whether it happened in outpatient setting or during hospitalization:

Procedure or diagnostic exam (*)	If other, please specify:	How many times performed in outpatient setting (no overnight stay)	How many times performed in inpatient setting (overnight stay)	Total cost
_ _	-----	_ _	_ _	_____ MYR
_ _	-----	_ _	_ _	_____ MYR
_ _	-----	_ _	_ _	_____ MYR

- | | | |
|--------------------------|-------------------------------|-----------------------|
| * 1: X-Ray | 2: Tympanocentesis | 3: Blood sample taken |
| 4: Sample from ear taken | 5: Surgery | 6: Adenectomy |
| 7: Audiometry | 8: Ventilation tube insertion | 9: Other |



[6] Were there any medications taken for this ear infection?

₁ No

₂ Yes → Specify all medications bought over the counter and/or prescribed that were taken after the visit to this medical doctor.

Brand name/dosing	Medication Type (Check one)	Number of packages bought	Total cost
	<input type="checkbox"/> ₁ Antibiotic <input type="checkbox"/> ₂ Pain killer <input type="checkbox"/> ₃ Fever reducer		_____ MYR
	<input type="checkbox"/> ₁ Antibiotic <input type="checkbox"/> ₂ Pain killer <input type="checkbox"/> ₃ Fever reducer		_____ MYR
	<input type="checkbox"/> ₁ Antibiotic <input type="checkbox"/> ₂ Pain killer <input type="checkbox"/> ₃ Fever reducer		_____ MYR
	<input type="checkbox"/> ₁ Antibiotic <input type="checkbox"/> ₂ Pain killer <input type="checkbox"/> ₃ Fever reducer		_____ MYR

[7] Has your child been hospitalized in relation to this ear infection?

₁ No

₂ Yes → How many days in: Intensive care unit |__|__| days Cost of hospital stay _____ MYR
 Pediatric/ General ward |__|__| days Cost of hospital stay _____ MYR

[8-a] Were there any consultations/visits to other health care professionals for treatment of this ear infection?

₁ No

₂ Yes → Please describe all visits to other healthcare professionals related to the current ear infection after the visit for diagnosis

Healthcare professional	Type of consultation	How many times	Total cost
			_____ MYR
			_____ MYR
			_____ MYR
			_____ MYR

Healthcare professional code

- | | | |
|-------------------------|-------------------------|-------------------------|
| 1. General Practitioner | 2. Pediatrician | 3. ENT Specialist |
| 4. Audiologist | 5. Emergency department | 6. Traditional Medicine |
| | | 7. Other |

Consultation type code

- | | | |
|--|----------------------|------------------|
| 1. Phone consultation | 2. Visit at practice | 3. Visit at home |
| 4. Visit at hospital outpatient clinic | 5. Other | |



[9] Were there any *additional* procedures performed following the visit to diagnose this ear infection?

₁ No

₂ Yes → Please describe below what was done, how many times and whether it happened in outpatient setting or during hospitalization:

Procedure or diagnostic exam (*)	If other, please specify:	How many times performed in outpatient setting (no overnight stay)	How many times performed in inpatient setting (overnight stay)	Total cost
_ _	-----	_ _ _	_ _ _	_____ MYR
_ _	-----	_ _ _	_ _ _	_____ MYR

- | | | |
|--------------------------|-------------------------------|-----------------------|
| * 1: X-Ray | 2: Tympanocentesis | 3: Blood sample taken |
| 4: Sample from ear taken | 5: Surgery | 6: Adenectomy |
| 7: Audiometry | 8: Ventilation tube insertion | 9: Other |

[10] Does your child normally attend school, day nursery or other form of day care?

₁ No

₂ Yes, school

₃ Yes, day nursery

₄ Yes, family, e.g. grandparents

₅ Yes, other _____

[10-a] If yes, did your child have to miss school, day nursery or other form of day care because of their ear infection?

₁ No

₂ Yes → How many hours |_|_|

[11] Who took care of your child during the day when he/she was ill? (check all that apply)

₁ Mother

₂ Father

₃ Grand-parent

₄ Other: -----



[12-a] Did you or another caregiver have to miss work to take care of the child because of their ear infection?

₁ No → Please explain the reason:

The sickness episode and/or the medical visits occurred during days/time off

The caregiver could work from home

The caregiver could exchange work days with days off

The caregiver is retired

This is the caregiver's paid job. Cost was _____ MYR

Other _____

₂ Yes → Please complete if you have a paid job below:

Table a) For caregivers with a paid job	Caregiver	Did the caregiver have to stay home (Y/N)?	Total number of hours absent from a paid (*) job
	Mother	<input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₂ No → <input type="checkbox"/> ₃ I don't know	__ __ hours <input type="checkbox"/> I don't know
	Father	<input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₂ No → <input type="checkbox"/> ₃ I don't know	__ __ hours <input type="checkbox"/> I don't know
	Grand-parent	<input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₂ No → <input type="checkbox"/> ₃ I don't know	__ __ hours <input type="checkbox"/> I don't know
	Other caregiver: -----	<input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₂ No → <input type="checkbox"/> ₃ I don't know	__ __ hours <input type="checkbox"/> I don't know

* including self-employment

[12-b] Has a part of your absent hours been compensated? (paid sick time, sickness allowance, etc.)

Paid job:

₁ Yes, approximately _____ hours

₂ No

₃ Not applicable

₄ I don't know

[13] On the days that you went to work when your child was ill, did you feel less productive than normal, for example because you could not concentrate as well?

₁ No

₂ Yes → Please estimate the amount of extra hours that would have been needed to be as productive as when your child was not ill: |__|__| hours



[14] Did you or another caregiver have to take care of the child during the episode on your free weekdays or during weekends (when you did not have work)?

₁ No

₂ Yes → Please complete the table below:

Caregiver	Did the caregiver have to stay home (Y/N)?	Total loss of leisure hours
Mother	<input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₂ No -----> <input type="checkbox"/> ₃ I don't know	__ __ hours <input type="checkbox"/> I don't know
Father	<input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₂ No -----> <input type="checkbox"/> ₃ I don't know	__ __ hours <input type="checkbox"/> I don't know
Grand-parent	<input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₂ No -----> <input type="checkbox"/> ₃ I don't know	__ __ hours <input type="checkbox"/> I don't know
Other caregiver: _____	<input type="checkbox"/> ₁ Yes <input type="checkbox"/> ₂ No -----> <input type="checkbox"/> ₃ I don't know	__ __ hours <input type="checkbox"/> I don't know

[15] What means of transportation did you use to take your child to this visit?

To the pharmacy	<input type="checkbox"/> ₁ Walking <input type="checkbox"/> ₂ Cycling <input type="checkbox"/> ₃ Car: approximate distance : _____ km <input type="checkbox"/> ₄ Public transportation (bus, metro): approximate cost? _____ MYR <input type="checkbox"/> ₅ Taxi/motorbike: approximate cost for the taxi/motorbike ride(s)? _____ MYR <input type="checkbox"/> ₆ Other: _____
To the other visit	<input type="checkbox"/> ₁ Walking <input type="checkbox"/> ₂ Cycling <input type="checkbox"/> ₃ Car: approximate distance : _____ km <input type="checkbox"/> ₄ Public transportation (bus, metro): approximate cost? _____ MYR <input type="checkbox"/> ₅ Taxi/motorbike: approximate cost for the taxi/motorbike ride(s)? _____ MYR <input type="checkbox"/> ₆ Other: _____
To the hospital	<input type="checkbox"/> ₁ Walking <input type="checkbox"/> ₂ Cycling <input type="checkbox"/> ₃ Car: approximate distance : _____ km <input type="checkbox"/> ₄ Public transportation (bus, metro): approximate cost? _____ MYR <input type="checkbox"/> ₅ Taxi/motorbike: approximate cost for the taxi/motorbike ride(s)? _____ MYR <input type="checkbox"/> ₆ Other: _____

[16] Gender of your child	<input type="checkbox"/> ₁ Male <input type="checkbox"/> ₂ Female
----------------------------------	---

[17] Child's DOB	__ _ / __ _ / __ _ Day Month Year
-------------------------	---



[18] Has your child had an ear infection before?	<input type="checkbox"/> ₁ No <input type="checkbox"/> ₂ Yes, 1 month ago <input type="checkbox"/> ₃ Yes, 2 months ago <input type="checkbox"/> ₄ Yes, 3 months ago <input type="checkbox"/> ₅ Yes, 4 months ago <input type="checkbox"/> ₆ Yes, 5 months ago <input type="checkbox"/> ₇ Yes, 6+ months ago
---	--

[19] Who is answering this questionnaire? (Check one)
<input type="checkbox"/> ₁ Mother <input type="checkbox"/> ₂ Father <input type="checkbox"/> ₃ Grand-parent <input type="checkbox"/> ₄ Other: _____

[20] What is the highest level of education you have attained? (Check one)
<input type="checkbox"/> ₁ High school diploma <input type="checkbox"/> ₂ Some college <input type="checkbox"/> ₃ Associate degree <input type="checkbox"/> ₄ Bachelor degree <input type="checkbox"/> ₅ Graduate degree <input type="checkbox"/> ₆ Other: _____

[22] Household Income (Check one)
<input type="checkbox"/> ₁ Under 5,000 MYR <input type="checkbox"/> ₂ 5,001 – 20,000 MYR <input type="checkbox"/> ₃ 20,001 – 35,000 MYR <input type="checkbox"/> ₄ 35,001 – 50,000 MYR <input type="checkbox"/> ₅ 50,001 – 70,000 MYR <input type="checkbox"/> ₆ Over 70,000 MYR