

# ***KNOWLEDGE AND COPING AMONG CARERS OF CHILDREN WITH ASTHMA***



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# KNOWLEDGE AND COPING AMONG CARERS OF CHILDREN WITH ASTHMA

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# BACKGROUND

- Asthma is a chronic respiratory diseases in the world
- It is estimated that 235 million people worldwide are suffering from asthma (WHO,2014).
- In Malaysia , the prevalence of asthma among children age up to 14 years old is 4.2% (Norzila,M.K,2013).

# PROBLEM STATEMENT

- Children usually has frequent visits to emergency services and sometimes hospitalization (Silva C.M & Barros L, 2013 )
- Asthma is one of the most common cases seen in emergency unit with 600 cases seen last year (Hospital Bentong,2014)

# LITERATURE REVIEW

- Asthma control is largely affected by family knowledge on asthma (Hazir et al.,2002)
- Lack of knowledge about asthma and lack of information from health cares providers were reason in poor control of asthma (Berg et al., 2007)

# LITERATURE REVIEW

- **Coping with asthma**
  - People use problem focused coping for controllable problem and emotion focused coping for less controllable (Mehin et al., 2010).
  - Mother of children with chronic illness use more emotion focused coping than mothers of children with acute illness.(Barrera et al.,2004)

# LITERATURE REVIEW

- **Demographic and Coping**
  - Parents with low socioeconomic had lower compliance with prophylactic drug (Abd Elmoneim, 2013).
- **Relationship of knowledge and coping**
  - Parents who lack knowledge will also lack the confidence to appropriately address disease related problem (Aziz et al., 2006).

# PURPOSE OF STUDY

- To determine the knowledge level of carers with asthma children
- To determine the coping level of carers with asthma children
- To determine the association between knowledge level and demographic
- To determine the association between coping level and demographic
- To examine the relationship between carers knowledge of asthma and their coping



# METHODOLOGY

- **Study design**

- Cross sectional survey
- quantitative study
- questionnaire

- **Study Setting**

- Pediatric specialist clinic and Emergency unit from two district hospital in Pahang

- **Study Duration**

- 3 months from 10 Feb till 20 Mei 2015

# METHODOLOGY

- **Study Population :**

- Carers of children with asthma (N=500)

- **Sampling**

- Raosoft formula used to calculate sample size.

- Convenience sampling (n=220 )

Out of 220, only 204 answer all the questions and 16 not completed.

Finally, only 204 participants taken for study.

# METHODOLOGY

- **Pilot Study**
  - 22 participants involved and excluded in real study.
- **Validity**
  - Content validity was approved by two experienced professional experts from paediatric.
- **Reliability**
  - Using Kuder - Richardson Formula 20 calculator for knowledge of asthma . Result was 0.802.
  - Cronbach's alpha to measure internal consistency for coping. Result was 0.9

# METHODOLOGY

- The questionnaire consist of 3 parts:
  - (i) **demographic**: gender, age, education level, ethnicity
  - (ii) **Knowledge on asthma**: 33 items using close ended question: True, False and Don't know.
  - (iii) **Coping with asthma using CHIP** ( Coping Health Inventory for Parents ) :  
45 items using 4 point Likert scale:

# METHODOLOGY

- **Ethical**

Approval from NMRR and hospitals directors

All information was anonymous and confidential.

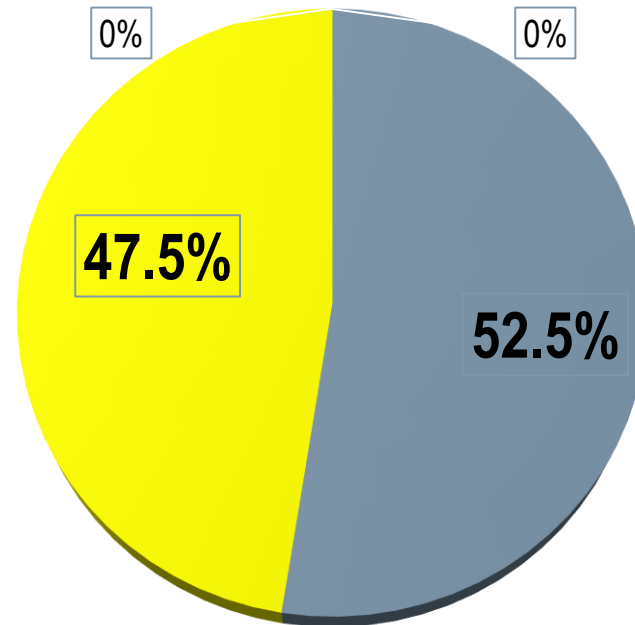
# DATA ANALYSIS

- ❑ Data was analyzed using SPSS version 21
- ❑ Descriptive statistic for demographic variables, knowledge and coping score.
- ❑ Frequency and percentage for level of knowledge and coping.
- ❑ Inferential statistic for general characteristic and level of knowledge and coping
- ❑ Pearson Correlation Coefficient for relationship between level of knowledge and level of coping

# RESULTS: SOCIO DEMOGRAPHIC CHARACTERISTIC

Characteristic	Frequency/Percentage	Mean/SD	Min, Max
Age		36.84( $\pm$ 7.81)	24 , 62
Gender			
Female	n=134 (65.7%)		
Male	n=70 (34.3%)		
Education level:			
secondary	n=124(60.8%)		
Diploma	n=44(21.6%)		
Degree	n=36(17.6%)		
Race:			
Malays	n=137(67.2%)		
Indian	n=40(19.6%)		
Chinese	n=27 (13.2%)		

# OBJECTIVE1: KNOWLEDGE LEVEL OF ASTHMA



■ Poor knowledge      ■ Good knowledge

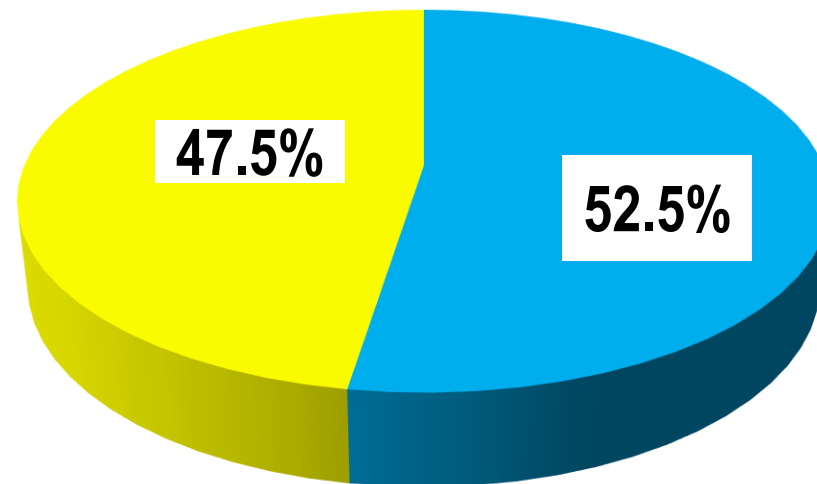
In Malaysia, a study done in tertiary hospital found unsatisfactory result on knowledge of asthma among parents. (Norzila, M.Z., 2013) .

In China, study found that parents had inadequate knowledge on asthma.(Zhao et al.,2013)



# OBJECTIVE 2: LEVEL OF COPING

- Majority of the respondent had poor coping



Good Coping 

Poor Coping 

# COPING DOMAIN

Subscale	Poor	Good
<b>Subscale 1</b> Integration, Cooperation, Optimism(ICO)	n=92 (45.1%)	n=112 (54.9%)
<b>Subscale 2</b> Social Support, Self Esteem and Stability	n=114 (55.9%)	n=90 (44.1%)
<b>Subscale 3:</b> Medical, Communication and Consultation (MCC)- 8 items	n=93 (45.6%)	n=111 (54.4%)

# LEVEL OF COPING

- A study using CHIP had found participants frequently utilized strategies focused on family life and maintaining an optimistic viewpoint. (Garro.A., 2011)
- Mothers also sought help from doctors and social support during child asthma attacks. ( A.M Binali., 2010).
- Emphasis on family responsibility may have entailed less involvement in coping behavior outside home because majority of carers were female. (Garro.A., 2011)

## OBJECTIVE 3: ASSOCIATION BETWEEN KNOWLEDGE AND DEMOGRAPHIC

Source	F	sig
Gender	3.68	0.047
Carers edu	0.37	0.688
Age	0.679	0.411

## OBJECTIVE 4: ASSOCIATION BETWEEN COPING AND DEMOGRAPHIC

Source	F	Sig
Sex	1.13	0.289
Carers education	10.64	0.000
Ethnic	13.39	0.000
agegroup	3.65	0.028

# OBJECTIVE 5: RELATIONSHIP BETWEEN KNOWLEDGE AND COPING

	r	sig
Knowledge score	0.253	0.000

Pearson correlation coefficient test was used.

There is weak positive association between knowledge and coping.

Parents who lack knowledge will also lack the confidence to appropriately address disease related problem. (Aziz et al.,2006)

# ASSOCIATION BETWEEN DEMOGRAPHIC, KNOWLEDGE AND COPING

Source	Sig
Knowledge	0.000

R squared=.074 (Adjusted R squared=.070)

Source	Sig
Carers edu	0.000
Ethnic	0.000
Age group	0.023
knowledge	0.000

R squared=.29.4

There is significant association between knowledge and coping.

Demographic variables explains 22% of the variance in respondents score in coping.

So overall, knowledge and demographic significantly influenced 29.4% of the level of coping.

# LIMITATION

- Small sample size
- Convenience sampling might cause biases
- Factors such as family income and history of asthma were not included to describe more cohesive pictures of the study.



# IMPLICATIONS AND RECOMMENDATION

- As higher knowledge of asthma is associated with better coping, it is importance to improve the knowledge of asthma among carers.
- More efforts should be made to disseminate asthma knowledge to carers.
- Nurses should always update their knowledge on latest CPG from national and international perspective to manage the carers need on knowledge and coping.

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Thank you

