

Prevalence of Choking and Awareness About its Proper Management Among the Residents of the United Arab Emirates: Cross-sectional Study

Mariam Sayed Eltabbakh¹, Amna Saeed Alkethbi¹, Mohammad Ala' Alajjuri¹, Mouaz Ibrahim Dudhi¹, Heba Mohammad Abou Ali¹, Lamya Yousif Alhajeri¹, Asima Karim¹, Amal Hussein¹
¹College of Medicine, University of Sharjah, Sharjah, United Arab Emirates



Introduction

The WHO reports choking as one of the major causes of unintentional deaths in children.

To this day, respiratory tract obstruction is considered one of the leading causes of accidental deaths in adults. However, we lack a lot of necessary data in our region, to study this dilemma.

From this point of view, our aim was to measure the choking prevalence and the correct knowledge regarding its management.

Secondary objectives

- To evaluate the prevalence of choking and its occurrence in the citizens of Sharjah and Abu Dhabi.
- To identify the most common cause of choking according to different age groups.
- To assess the community's awareness about management of choking in different age groups.

Methods

Cross-sectional study

Sample selection



Adults above the age of 18.
 Legal guardians of children.
 English/Arabic speakers.

A minimum of 385 subjects were involved based on 50% prevalence and 5% marginal error ($p < 0.05$).

Exclusion criteria

People with medical conditions related to SWALLOWING.

Data analysis

Data was coded, entered and analyzed using SPSS 22 software.

Chi-square test was used to study relationships between variables. The level of significance was set at 5%.



Demographics

213



404

187

Participants



165 - Abu Dhabi

181 - Sharjah

58 - Other emirates

Results

Prevalence of choking

- 175 Participants have experienced a choking incident.
- 212 Participants have witnessed someone choking in front of them.
- 134 Participants have experienced a child choking.

In adults, the item that was most choked on was food.

Types of food people choked on



■ Vegetable ■ Fish bone
■ Sweet ■ Chicken and meat
■ Nuts and seeds ■ Carbohydrates
■ Fruits

Knowledge

- 23.68% Correctly identified hands around the throat as the cardinal sign for choking.
- 62.7% Knew that management is different between children and adults.
- 85.0% Knew that the correct way of managing a choking baby is by hitting the baby on the back.
- 47.0% Correctly identified the most dangerous object to choke on as coins in children.

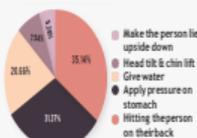
Cardinal signs of choking



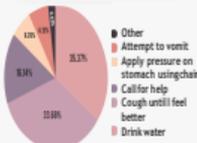
Management

- 31.4% Were aware of the correct management of a choking person.
- 8.5% Chose the correct management in self management.
- Females were 1.14 times more aware of the management than men.
- The older the participant, the more aware they were of the management.

Management of choking person



Management of choking self



Discussion & limitations

The most concerning result was that the choking incident (43.3%) was quite high and the majority of whom experienced choking reported that it was mild to moderate in severity and distress.

We found out that 41.6% of the population knew how to manage a choking incident if they witnessed it.

The results of other studies in the MENA region were in agreement with our findings and supported our results.

The limitations of our study were mainly due to the convenience sampling method as well as the small sample size comparatively.

Conclusion

The prevalence of choking is on the rise as stated in our study. Half the participants experienced choking incidents.

We found out that people less than 28 years of age were more likely to choke.

Adults' incidence of choking was mainly on food compared to coins and other small objects in children.

Recommendations

We highly recommend other researchers to dig more into such a problem to enrich the literature with needed data, and to implement multiple campaigns to spread awareness as our community lacks the experience in choking management.