

Research Article

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Assessment of Parents' Attitude Towards Foreign Body Inhalation

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ABSTRACT

Human trafficking flourishes because of the government's draconian immigration policy. Government controlled visa and work permits which are out of the reach of ordinary people play into the hands of traffickers. Again, some migrants travel to their destinations through their own judgement and with legal papers, only to discover that they have been trafficked upon their entrance. Most migrants who dreamed of a good life end up in tears; the traffickers force women to work as prostitutes to recoup their money and others made to work for longer hours and paid peanuts. Some of the migrants abused, humiliated, used, and finally dumped by their abusers. However, the states equally contributed to the plight of the migrants through their strict migration policy. This study seeks to examining theoretically, whether various governments' strict migration policies are necessary? This study argued that it is not necessary and that the states have a moral obligation to protect the victims of human trafficking. I opted to rational choice theory as a framework of my analysis. The secondary and primary sources anchored on existing literature. This study, therefore, recommends removal of stringent visa conditionalities, issue more work permits to migrants, respect the rights of those who are victims of trafficking, have more inclusive policies that accommodate the migrants rather than criminalising them, promote humane policies through trade with the developing countries, promoting human rights and good governance in developing countries.

Keywords: Foreign Body Inhalation, Attitude, Parents, Penetration Syndrome, Survey

Introduction

Compared to adults, children are at increased risk of foreign body inhalation. However, 80% of FBIs occur in children under three years of age [1-3]. FBI is often characterized by a clinical syndrome of high diagnostic value: penetration syndrome (cough, choking, and cyanosis) [4]. It can also lead to symptoms and complications that vary depending on the nature of the FBI, the anatomical level of the entrapment, and its duration, namely: recurrent respiratory infections, emphysema, atelectasis, or bronchiectasis (BBD) [5]. The objectives of this study were: To assess parents' attitudes toward FBI in their children.

Materials and Methods

This is a cross-sectional, descriptive and analytical study aimed at assessing parents' attitudes towards the inhalation of foreign bodies in their children. The survey took place at the Pediatric Emergency Department of the Mohammed VI University Hospital in Marrakech. It lasted approximately 6 months and 20 days. During the study period, parents who presented to the Pediatric Emergency Department of the Mohammed VI Hospital in Marrakech were invited, after oral consent, to participate in the survey; regardless of the reason for consultation or hospitalization concerning their children. The 330 parents interviewed were selected at random. In order to carry out this study, a questionnaire was developed based on questionnaires from similar studies consulted during the literature review.

It was adapted to the Moroccan sociocultural context and pretested with 6 parents before arriving at its final version. The questionnaire aimed to assess the attitude of parents towards the inhalation of foreign bodies in their children. The survey was conducted by a medical student nearing the end of her general medicine program, supervised by a professor of pediatrics. All participants were informed of the study's objectives; their participation was voluntary and their anonymity was respected.

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The interview lasted no more than 10 minutes to avoid tiring the parents' patience.

The data were collected using a previously computerized questionnaire completed with the consent of the subjects. The study data were obtained by the method of direct interview of the parents. This interview took place in the form of a questionnaire translated orally into Arabic dialect since our sample included illiterate people. After collecting all the responses, the questionnaire followed a discussion with the parent in order to raise awareness and correct bad practices related to the inhalation of foreign bodies.

The tools used for the realization of this study were: "Microsoft office Excel "which was used for the analytical study of the results "Google Forms "which was used for the entry and statistical analysis of the data.

Results

All parents invited to participate in the survey agreed to answer the questionnaire without hesitation. Of the 340 completed questionnaires, we discarded 10 with incomplete data. This left 330 questionnaires usable. This resulted in a response rate of almost 97%. The most common maneuver adopted by illiterate parents and those with primary education was "slapping the back of the head" with a percentage of 40%. Only 11% of parents were familiar with the Heimlich maneuver and had chosen it as the first action to take in this emergency. Among university graduates, the two most common behaviors were: "Slapping the back" and "Taking the child directly to a hospital or health center" with values of 38% and 34% respectively.

More than half, or 56.3%, of parents would not want to take their children to the hospital after inhaling foreign bodies. This is in contrast to university graduates who felt it necessary to take their children to the hospital even if the symptoms disappeared after a while. About 60% (n=196) of the interviewees did not agree to take their child with a feverish respiratory symptom, and reported resorting to self-medication or traditional remedies. It should be noted that 66% of them were illiterate and their parents had a primary education.

Our study counted 68% of negative responses to follow-up with the same doctor. In contrast, 75% (n=33) of university graduates reported that their children were followed by the same primary care physician.

We can note that among illiterate parents, or those with a primary education level, their children's medical consultations mainly involved general practitioners, with respective rates of 76.2% and 68.5%. While among graduates, their children's medical consultations mainly involved pediatricians: 71% of high school graduates and 84% of university graduates.

Discussion

Our study was the first in Morocco to broadly explore Moroccan parents' perceptions and knowledge of the FBI. Indeed, to our knowledge, no similar studies have been conducted on a national scale before. The 330 questionnaires collected during the study place our sample among the largest in number compared to all the studies previously conducted on this subject. Pre-hospital

management of foreign body inhalation is currently well codified and is based on the European Resucitation Council (ERC) recommendations [6]. In the survey by Singh et al, when participants were asked how they would treat their children if an FBI occurred, 50.8% (n=32) of the parents stated that they would prefer to remove the foreign body themselves. Nearly half of the parents (46%) would take the child to a doctor while 3.2% of the parents surveyed did not know what to do if their child had inhaled a FBI. Nearly half of the educated parents (49%) and 60% of the uneducated parents stated that they would remove the foreign body themselves [7]. According to the survey by Ozdogan et al, 85.8% (n=145) of the respondents stated that they would go to the emergency room, 12.4% indicated that they would go to a medical center or hospital. While only 2 mothers indicated that they had no idea [8]. The survey by Alshehri et al, conducted among students, reported that the majority of respondents chose to remove the FB themselves with their fingers, while 22% opted to take the child immediately to the hospital. However, 15% did not know how to act when faced with an FBI [9]. In 2021, the study by Almutairi et al, carried out in Saudi Arabia, had objectified that the majority of parents (77.1%) would try to remove the foreign body with their fingers, while almost all participants (90.6%) tried to slap the child's back or perform the Hemlich maneuver if the child was able to speak [10]. In our study, the maneuver most adopted by illiterate parents and those with a primary education level was "slapping the neck" (32%). Only 11% of parents knew the Heimlich maneuver and chose it as the first action to take in this emergency. Among university graduates, the two most frequent behaviors were "Slapping the back" and "Taking the child directly to a hospital or health center" with values of 38% and 34% respectively. This discrepancy with the literature data can be explained by several factors, including the difficulty of accessing a healthcare facility, while knowing that nearly half of our participants lived in rural or peri-urban areas. The maneuvers known to the general public, particularly among the uneducated population, namely "slapping the neck"; "Trying to remove the FB with the fingers" are passed down from generation to generation and can be dangerous.

In the study by Al-Qudehy et al, 40% of parents considered the absence of symptoms after FBI as a reassuring sign that could exempt them from medical consultation [11]. In Saudi Arabia, the study by Almutairi et al indicated that the percentage of parents who would take the child to the hospital even if the child had no symptoms or if the symptoms had improved shortly after FBI was 52.2% [10]. Similarly, our study revealed that 56.3% of parents considered it unnecessary to take the child to the hospital after an asymptomatic FBI.

On the other hand, clinicians may not consider the diagnosis of an inhaled foreign body when a child has no symptoms on admission and the physical examination and chest X-ray findings are normal [12]. Therefore, targeted questions during the history taking regarding not only the history of choking, but also a detailed history of food consumption, should be asked when children present with cough, wheezing, recurrent pneumonia, or persistent cough despite medical treatment [13]. It is important to recall the role of general practitioners in the early diagnosis of FBI, because as can be seen, more than half of the participants in our survey (56.3%) stated that in case of respiratory symptoms

in their children, they would primarily call general practitioners. The latter are called upon to consider the diagnosis of FBI in the face of any doubtful history, sudden or recurrent respiratory symptoms and not to limit themselves to easy diagnoses. In case of the slightest diagnostic doubt, the general practitioner should refer the child for a specialist opinion and possible exploratory bronchoscopy.

Conclusion

Foreign body inhalation is a potentially fatal event, frequently encountered in the pediatric population, and which nevertheless remains a preventable condition. Our study revealed, on the one hand, significant deficits in parental knowledge and their attitude towards foreign body inhalation. On the other hand, that the parents' level of education played an important role in the prevention of this accident so that the higher the level of education, the more correct the attitudes. Parents must therefore follow in-depth and continuous training using visual and verbal tools, on the recommendations to follow and the first aid actions to use in emergency situations.

Statement of Ethics

This study has the authorizations of Maternal and Child Hospital numbered with a Ref. (SAA No. 252/2020).

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

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References

- 1. Cataneo AJ, Reibscheid SM, Ruiz Jr RL, Ferrari GF. Foreign body in the tracheobronchial tree. Clinical Pediatrics. 1997. 36: 701-705.
- 2. Mani N, Soma M, Massey S, Albert D, Bailey CM. Removal of inhaled foreign bodies—middle of the night or the next morning? International journal of pediatric otorhinolaryngology. 2009. 73: 1085-1089.
- 3. Ciftci AO, Bingöl-Koloğlu M, Şenocak ME, Tanyel FC, Büyükpamukçu N. Bronchoscopy for evaluation of foreign body aspiration in children. Journal of pediatric surgery. 2003. 38: 1170-1176.
- 4. Granry JC, Monrigal JP, Dubin J, Preckel MP, Tesson B. "Foreign bodies in the airways". 1999.
- Yang YH, Zhang XG, Zhang JL, Zhang YB, Kou CP. Risk factors for preoperative respiratory complications in children with tracheobronchial foreign bodies. Journal of International Medical Research. 2016. 44: 338-345.

- 6. Biarent D, Bingham R, Eich C, López-Herce J, Maconochie I et al. European resuscitation council guidelines for resuscitation 2010 section 6. Paediatric life support. Resuscitation. 2010. 81: 1364-1388.
- Singh A, Ghosh D, Samuel C, Bhatti W. Pediatric foreign body aspiration: How much does our community know? Journal of Indian Association of Pediatric Surgeons. 2010. 15: 129-132.
- 8. Özdoğan Ş, Gürpınar GÖ, Avcı Ö, Duran N, Atlı B et al. "MOTHERS' KNOWLEDGE ON FOREIGN BODY ASPIRATION". Yeditepe Med. J. 2015. 11.
- 9. Alshehri KA, Alharbi AA, Yaghmoor BE, Salman AK, Alaydarous SA et al. "Awareness of the first aid management of foreign body aspiration among students: A cross-sectional study". J.Educ. Health Promot., 2019. 8: 220.
- 10. Almutairi AT, Alharbi FS. "Parental knowledge and practices toward foreign body aspiration in children in the Al Qassim region of Saudi Arabia". J.Fam. Med. Prim. Care, 2021. 10: 199-204.
- 11. Al-Qudehy Z, Al-Sheif H, Al-Qudaihi G. "Parental Knowledge of Foreign Body Aspiration: A Comparative Study between Saudis and Other Nations". J. Otolaryngol.-ENT Res., 2015. 2: 00008.
- 12. Hilliard T, Sim R, Saunders M, Hewer SL, Henderson J. Delayed diagnosis of foreign body aspiration in children. Emergency Medicine Journal. 2003. 20: 100-101.
- 13. Srivastava G. Airway foreign bodies in children. Clinical pediatric emergency medicine. 2010. 11: 67-72.

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