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Young Egyptians' perceptions, attitudes and knowledge of injuries

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Abstract

The objective of this study was to qualitatively evaluate young Egyptians' perceptions, attitudes, knowledge and behaviour towards injuries before implementation of an extensive questionnaire about injuries among Egyptian youth. In 2008, five focus groups of three to nine participants each were conducted in Cairo, Egypt in Arabic to evaluate young Egyptians' attitudes towards injuries, injury prevention, and their understanding of 'accidents' and fatalism. Participants were 14–26 years of age and were from medium to high socioeconomic status. Focus group participants noted that the concept of *hadthah* ('accident') signified an event determined by destiny, whereas *esabah* ('injury') was the result of human actions. The results of these focus groups indicate that young, educated Egyptians are interested in injury prevention programmes despite low confidence in the preventability of injuries.

INTRODUCTION

Injuries are a leading cause of death and disability worldwide, and are projected to grow in proportional morbidity and mortality.¹ The Egyptian Ministry of Health estimated that 24 222 deaths, 127 216 hospitalisations and 847 912 disability-adjusted life years occurred due to injuries in 1999.² Road traffic crashes (RTCs) are thought to account for one-quarter of

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all injury deaths in Egypt, with ~28 000 people injured and 6000 killed in 27 000 RTCs in 2002.³ Approximately 45% of Egypt's population is under the age of 20 years,² which is noteworthy considering that RTCs are the leading cause of death for people aged 15–29 of both sexes in the Eastern Mediterranean Region of the World Health Organization.¹ Despite the significant impact on the population, little public attention has been given to injuries and trauma in Egypt.

In this study, we report a series of focus groups designed to explore the knowledge, attitudes, and perception of injuries and their prevention among young Egyptians. These focus groups evaluated the comprehension and appropriateness of a survey about injuries before its administration among Egyptian secondary school students, and explored perceptions of the Arabic words *hadthah* ('accident') and *esabah* ('injury').

METHODS

Participants

Focus groups were used to investigate knowledge and attitudes about injuries as well ideas about injury prevention in young Egyptians in Cairo. Convenience samples of young Egyptians, primarily from sport and social clubs in the Cairo metropolitan area, were gathered in August 2008. Several university staff members and students spread word of the focus groups to friends and family. Youth over the age of 13 were asked to assemble at a set location and time to meet the moderator. This study received institutional review board approval from University of Maryland and Ain Shams University. At the end of the focus groups, participants received a nominal gift (a pen or keychain) to thank them for their participation.

Procedure

Five focus groups, of ~1 h each, were completed in sport and social clubs in Cairo during August 2008. Written informed consent was obtained from each participating adult, while assent plus parental consent was obtained for participants under 18 years. An experienced, bilingual (Arabic/English) focus group leader led the discussion in Arabic according to an established protocol. The protocol was developed by consensus of a subset of the authors (HRD, MAE, JMH, GSS) before assembling of the focus groups. All focus groups were audio-taped; a note taker assisted with recording, noting only age and sex to link each comment to an individual participant. Participants were encouraged to discuss topics from the protocol manual.

Data analysis

The focus group leader provided an Arabic transcription and an English translation, indicating comments by age and sex of participant only. The main method of analysis was long table analysis.⁴ The first author (HRD) was responsible for grouping and developing codes to represent themes that emerged repeatedly across the focus groups.

RESULTS

Participant characteristics

The five groups were made up of a total of 28 young Egyptians, 14–26 years old. Eleven participants (39%) were female. The education levels of the participants varied: four (14%) had finished preparatory education (approximately equivalent to early high school in the USA), six (21%) were still in secondary school, four (14%) had finished secondary school, eight (29%) were currently attending university, one (4%) had finished university, and five

were employed (18%) (table 1). Focus groups were of mixed gender and age, as no participants were turned away if they desired to participate.

Focus group themes

Perceptions of ‘accidents’ and ‘injuries’—Participants generally concurred that an *esabah* (‘injury’) was some form of bodily damage. A *hadthah* (‘accident’) was usually perceived as more dangerous than injuries. In two groups, a *hadthah* required hospital attention, whereas an *esabah* was ‘simpler’ or ‘cured faster’. Three groups discussed the idea that a *hadthah* was due to ‘destiny’ or was ‘out of one’s control’, indicating ‘hadthah’ are less preventable than ‘esabah’. One young man stated that ‘(If) one knows that what he does could cause an *esabah*, this is an *esabah*. But a *hadthah* is related to destiny, something unexpected.’ One group mentioned that a *hadthah* occurred between *someone* and *something*.

Hadthah was more commonly used for describing traumatic events in general, such as animal bites, violence, bicycle crashes, falls, RTCs, drownings, poisonings, pedestrian injuries and burns. Most participants agreed that RTCs were *hadthah* and not *esabah*, with only one person considering RTCs as *esabah* (figure 1). *Esabah* was more commonly used for violence and bites. Interestingly, participants thought neither *hadthah* nor *esabah* correctly described fires and burns; no better word was mentioned.

Causes of injuries and participants responses—Several themes emerged as causes of traumatic events including carelessness/lack of awareness, lack of responsibility and lack of commitment. Related to carelessness was the idea that the law, including lack of respect for it, played a large role in causes of traumatic events in Egypt. One participant stated: ‘People do not abide by the laws, when someone drives fast, he does not respect (the) law and this leads to a crash.’ Others felt that it was not only a lack of people’s respect for the law, but also the ease of circumventing it by paying money to avoid a fine.

Three groups mentioned that respect for laws should be an integral part of prevention; two groups mentioned increased penalties (punishments and fines). ‘If everyone (who) broke the law was punished and paid the fine, all people would abide by the law.’ Specific ideas for how to avoid crashes included increased/strict road surveillance, radar/camera use, and education on relevance of the laws. The need for laws regulating helmets and seatbelts, public transportation and trucks was emphasised.

Involving the police was discussed in three focus groups, although this action was controversial. One participant said he would contact the police only if he witnessed a crash. Another individual stated he would be willing to testify. A third focus group participant thought helping at an incident scene could lead to blackmail or accusations of responsibility.

Several participants felt that infrastructure problems, such as inadequate road design and crowding, lead to traumatic events in Egypt. Several participants discussed the importance of fire extinguishers and lack of fire alarms in Egypt. The need for pedestrian ‘bridges in the highways and streets’ was highlighted.

Overcrowding and lack of order on public transportation was seen as a problem. For example, ‘If each driver stands in the specified garage or bus stop, there would be no crashes. The microbus stops in any place to drop someone off or pick someone up.’ The dangerous practices of truck drivers were mentioned by two groups.

Injury prevention ideas focused on education, enforcement and engineering. The idea of educational or awareness campaigns in schools and public locales was strongly supported by

the participants, especially through media such as television, email, newspaper, or even adverts in the metro. Participants were eager to point out changes that could reduce injuries in Egypt, and had many suggestions for how law enforcement and technology could be used to prevent injuries.

DISCUSSION

These focus groups qualitatively investigated injury-related knowledge, attitudes, perceptions and prevention ideas of young, educated Egyptians in the metropolitan area of Cairo. All participants involved in the focus groups thought injuries were an important cause of morbidity and mortality in Egypt and were receptive to the idea of injury prevention.

A key finding was that participants thought *hadthah* (accidents) were more serious than *esabah* (injuries) and that *hadthah* were less preventable (more likely to be out of one's control) than *esabah*. This is interesting considering that, in English speaking countries, injury prevention researchers have pressed for the word 'injury' to be used instead of 'accident' in order to convey the idea of preventability.⁵⁶ When translating injury questionnaires into Arabic, it is important to keep in mind that Egyptians may not identify with the use of the word *esabah* to describe certain events.

The idea that *hadthah* was out of one's control was consistently expressed, suggesting that participants consider *hadthah* less preventable than *esabah*. Road traffic injuries were nearly unanimously thought of as *hadthah*. Of interest is the apparent conceptual inconsistency of the inevitability of *hadthah* compared with the frequent discussion of prevention strategies for RTCs.

Individual responsibility, as indicated by the concepts of carelessness and lack of respect for the laws, was viewed as the main human cause of injuries in Egypt.

Similar to our results, a recent study in Iran⁷ also found that people believed law enforcement was important for RTC prevention, and that education had an important role in the prevention of traumatic events in general. Like Egypt, rough and careless driving was a perceived cause of road traffic injuries in South Africa.⁸ Police deterrence and enforcement were two suggestions for preventing injuries in South Africa.⁸ Participants in our study felt law enforcement could play a positive role in injury prevention, but this will be a sensitive issue, as some participants were reluctant to be involved in legal matters related to car crashes or traumatic events.

The participants' focus on aspects of infrastructure, including public transportation and city planning, suggests that Egypt is still in the early stages of injury prevention, and basic engineering measures are needed to prevent many injuries. However, participants were also open to educational preventive measures, which suggests they recognise some human responsibility in certain events.

These focus groups have served to re-evaluate the terminology recognised by lay people related to injuries in Egypt, and has uncovered an openness to prevention along with advice for how and where to implement educational and prevention methods in Egypt.

Limitations of this study include small sample size, potential bias due to mixed age/gender focus groups, and the fact that the focus groups were a convenience sample of young Egyptians. Although the groups only represented urban upper middle class young adults, these relatively well-educated young people were easily able to vocalise ideas for prevention and to discuss the problems they see in Cairo, where the majority of urban Egyptians live. Overall, the results of these focus groups uncovered language issues (*hadthah* vs *esabah*),

which are important to keep in mind for future surveys in Egypt. It is important to note that causes, knowledge and prevention strategies related to injuries might differ in rural areas and should be the target for future research.

CONCLUSIONS

The results of these focus groups show that young, educated Egyptians are prepared for the implementation of injury prevention programmes. In one participant's words: 'It is not wrong to learn good lessons and practices from other countries like European countries. We can use the cameras in monitoring traffic like in Saudi Arabia.' However, it is important to take into account the different concepts of the words *hadthah* (accidents) and *esabah* (injuries) in order to try to move beyond fatalism so as to change attitudes and behaviours towards injuries.

What is already known on this subject

- Egypt has high rates of morbidity and mortality from injuries, and road traffic crashes are thought to account for one-quarter of all injury deaths in Egypt.

What this study adds

- Qualitative analysis showed that, in Egypt, *hadthah* (accidents) are perceived to be more dangerous than *esabah* (injuries), but participants used the word *hadthah* (accident) to describe traumatic events more often than the word for injury (*esabah*).
- Despite belief that *hadthah* are often controlled by fate, participants were still open to preventive measures such as engineering efforts, city planning and educational campaigns.

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REFERENCES

1. Peden, M.; McGee, K.; Krug, E., editors. Injury: a leading cause of the global burden of disease, 2000. Geneva: World Health Organization; 2002.
2. Anon. Egyptian Ministry of Health. Cairo, Egypt: 2005.
3. Central Agency for Public Mobilization and Statistics (CAPMAS). [accessed 5 Apr 2009] <http://www.capmas.gov.eg/>
4. Krueger, RA.; Casey, MA. Focus groups: a practical guide for applied research. 3rd. ed. Thousand Oaks, CA: Sage Publications; 2000.
5. Loimer H, Guarnieri M. Accidents and acts of God: a history of the terms. Am J Public Health. 1996; 86:101–107. [PubMed: 8561226]
6. Girasek DC. How members of the public interpret the word accident. Injury Prevention. 1999; 5:19–25. [PubMed: 10323565]
7. Rezapur-Shahkolai F, Naghavi M, Shokouhi M, et al. Unintentional injuries in the rural population of Twisarkan, Iran: a cross-sectional study on their incidence, characteristics and preventability. BMC Public Health. 2008; 8:269. [PubMed: 18671856]
8. Butchart A, Kruger J, Lekoba R. Perceptions of injury causes and solutions in a Johannesburg township: implications for prevention. Soc Sci Med. 2000; 50:331–344. [PubMed: 10626759]

Figure 1.
Focus group participants' preceptions of whether 'traumatic event' was a *hadthah* (accident) or *esabah* (injury).

Table 1

Demographic characteristics of focus group participants, Cairo, Egypt, August 2008

Focus group location and date	No of participants	Age (years)	Gender	Education/work
Ahly Club 9 August 2008	3	About 14–15	3 female	Finished preparatory education
Zohour Club 22 August 2008	5	(2 female) 17 (2 female) 20 (1 male) 24	4 female 1 male	(2) finished Thanawaya Amma (2) 3rd year university (1 male) graduated engineering degree
Shams Club 23 August 2008	6	(5) 20 (1) 19	6 male	(6) 3rd year Faculty of Engineering
Shams Club 30 August 2009	9	(8) 16 (1) 15	9 male	(5) 2nd year secondary school (2) finished Thanawaya Amma (1) 1st year secondary school (1) finished preparatory
Faculty of Medicine 20 August 2008	5	(4 female) 21–26 (1 male) 21	4 female 1 male	(5) employees
Total	28		11 female 17 male	(4) finished preparatory school (14%) (4) finished Thanawaya Amma (14%) (6) in secondary school (21%) (8) in university (29%) (5) employed (18%) (1) graduated university (4%)