Workers Knowledge about First Aids of Emergency Accidents at Industrial Sector of Al-Najaf City in Iraq

Tamim Yakoob AI-Sallami[1], Fatima Wanas Khudair[2]

[1]Research Scholar, Corresponding Author, Department of Community Health, Faculty of Nursing ,University of Kufa, Iraq, [2]Professor, Department of Community Health, Faculty of Nursing , University of Kufa, Iraq

Abstract

Unintentional accidents and sudden illnesses are two of the most common causes of disability and death among workers, especially those under the age of forty . Using a simple random sample, twenty workers in the industrial workshops were randomly selected . A questionnaire consisting of two main groups was used. The result revealed that out of a total of 201 workshop workers included in the study, 59 (29.4%) of them had overall fair knowledge and 125 (62.2%) of the participating workers had poor knowledge, in addition to none having good knowledge. The results showed that only 17 (8.5%) of the workers had a positive attitude towards first aid. With regard to the relationship between the social and demographic data of the participants and their levels of knowledge, no an important correlation was not identified except for the monthly income, number of children and age, while with regard to workers' attitudes towards first aid, residency in urban areas, years of experience, marital status, education level and receiving information about first aid showed significant correlation with their social relationships - demographic data.

Keywords : *aids , emergency accidents , industrial sector*

Introduction

First aid is the first most essential care given to an injured or an ill individual in a life-threatening circumstance, first aid means the assessments and interventions that can be performed by a bystander to the victim immediately with minimal or no medical equipment First aid is generally of a series of Simple steps, sometimes life-saving medical techniques, that a caregiver takes, either with or without a formal medical. The bulk of first-aid medical emergencies occur in workshops. With respect to the prevalence of these medical emergencies, little is understood [(1)]. When given proper first aid, the severity of the injury and resulting damage to the brain is reduced. First aid procedures must be simple to understand, execute, and provide a level of analgesia, with all necessary supplies readily accessible. Furthermore, the procedure must not have a detrimental impact on subsequent specialized assessment and care. The goal of first aid is to stop the progression of a burn by adequately cooling the affected area and providing symptomatic relief [(2,3)]. Until competent medical services can be given, first aid is used to treat any accident or sudden illness. The goal is to keep the condition from getting worse, to ensure a quick recovery, and to keep the patient alive. Human life is priceless. The majority of injuries are minor and can be treated without seeking medical help, such as

Corresponding Author:
Dr. Siti Khaerunnisa M.Si
Researcher Department of Biochemistry, Faculty of Medicine, Universitas Airlangga
Email: st.khaerunnisa@fk.unair.ac.id

bruises, mild fractures, sprains, and strains, to name a few. When properly applied, first-aid knowledge can make the difference between a temporary or permanent injury, a quick recovery, or a long-term disability [4]. Accidents and illnesses inevitably occur in a variety of settings and at different times in one's life. In several nations, programs are often missed. This is expressed in a lack of knowledge and understanding of common illnesses and first-aid procedures. Accident-related involuntary injuries, in particular, are a global public health concern, and they are one of the leading causes of death and disability [3,5] . First aid for acute illness or injury was given as assistive behavior and primary care. The first aid provider's priorities include sustaining life, alleviating pain, preventing further disease or injury, and facilitating recovery. In any case, first aid can be started by anyone and requires self-care. The assessments and procedures for first aid must be medically sound and based on empirical evidence or in the absence of such evidence, on the consensus of experts. Require first aid skills, at the level of a more first aid for acute injury or illness can be described as therapeutic primary care given and assistance. The primary aid provider's priorities include sustaining life, alleviating pain, preventing further injury or illness, and facilitating rehabilitation [6,7]. Managers and supervisors in the workplace are expected to be highly competent when it comes to managing first aid for minor accidents and severe emergencies. With this knowledge, supervisors will be in a better position to protect employees in any dangerous situation [8]. Truly mishaps these days are a lot of because of the enormous number of groups and constant illnesses widespread in our Arab society, for example, coronary illness, asthma, auto crashes, introduction to compound toxins and other perilous mishaps [9,10].

Materials and Methods

Its part will clarify the current study's methodology as well as all of the various phases that have occurred, from the beginning of its acceptance to the conclusion of the data analysis. A convenience sample is a non-probability sampling technique that selects a cumulative sample of 201 participants from Al-Najaf City's industrial sector. These individuals showed a willingness to participate in the study on a voluntary basis during the duration of the study. Using a simple random sample, twenty workers in industrial workshops were randomly selected, then 230 workers were randomly selected, through an equation used to determine the sample size. Finally, the total number of questionnaires valid for analysis was 201. The study instrument's reliability was determined using Cronbach's Alpha coefficient test, which was also performed separately for information questions. That test resulted in reasonable reliability based on the Cronbach's Alpha value of (0.761) for the information scale. Furthermore, data were collected from (20) workers in the industrial sector using a specially designed questionnaire. The data was collected using a developed and updated questionnaire and a self-administered technique. In addition, the researcher interacted with the workers and inquired about socio-demographic data that existed at the time of the study in order to select participants at random. The researcher then received verbal consent from the chosen workers to participate in the analysis. The subject of study and the correct way to fill out the questionnaire sectors were then clarified for each chosen section. It took about (30-40 minutes). Finally, since many of the selected workers could not read or write, they completed questionnaires under the supervision of the researcher. In total, 201 questionnaires were obtained and used for statistical analysis, with 11 questionnaires being invalid due to filling errors and 15 not being returned at all, and three questionnaires lacking socio-demographic data. The data was obtained from December 28th, 2020, to February 24th, 2021.

Results

The result showed that out of a total of 201 workshop workers included in the study, 59 (29.4%) of them had overall fair knowledge and 125 (62.2%) of the participating workers had poor knowledge, in addition to none having good knowledge. The results showed that only 17 (8.5%) of the workers had a positive attitude towards first aid. With regard to the relationship between the social and demographic data of the participants and their levels of knowledge, an important correlation was not identified except for the monthly income, number of children and age, while with regard to workers' attitudes towards first aid, residency in urban areas, years of experience, marital status, education level and receiving information about first aid Showed significant correlation with their social relationships - demographic data.

Table (1): Overall participant 's Knowledge about first aids

Levels of knowledge	Frequency	Percent	mean of score	Overall evaluation
poor	125	62.2	1.60	poor
Fair	59	29.4		
Good	17	8.5		
Total	201	100.0		

Table (2): participant 's responses for first aid domains

First aid domains	Levels	frequency	Percent	Mean score	Evaluation
General information about first aid	Fair	113	56.2	1.684	Fair
	Good	25	12.4		
	poor	63	31.3		
Wounds and bleeding	Fair	44	21.9	1.554	poor
	Good	17	8.5		
	poor	140	69.7		
Bones and joints injuries	Fair	58	28.9	1.599	poor
	Good	20	10.0		
	poor	123	61.2		

Cont... **Table (2): participant 's responses for first aid domains**

Other medical conditions	Fair	47	23.4	1.60	poor
	Good	16	8.0		
	poor	138	68.7		
Burns	Fair	76	37.8		
	Good	11	5.5	1.580	poor
	poor	114	56.7		
Bites, Stings, and Foreign Bodies	Fair	65	32.3	1.598	poor
	Good	22	10.9		
	poor	114	56.7		
	Total	201	100.0		

Table (3): Mean differences by (Independent T- test) of participant's Knowledge about first aids according to their residency& Receive information.

Demographic data	Rating	N	Mean	SD.	T value	Df.	p-value
Residency	urban	148	1.6556	0.38390	3.59	199	0.001 HS.
	rural	53	1.4434	0.32273			
Receive information	no	140	1.4801	0.31530	7.68	199	0.001 HS.
	yes	61	1.8740	0.37473			

Discussion

Internationally, injuries and accidents in industrial cities are among the most dangerous life-threatening things, in addition to that the workers' lack of knowledge of how to use first aid to provide it to the injured. This table shows the characteristics of our sample mainly the age that ranging from (33-51) that reflect the reproductive age in our society with such qualifications that met such work. This outcome is consistent with studies [11,12]. In relation to residency area, the majority of workers (73.6 %) were from urban. This result can be interpreted those

lived in nearest areas from the industrial sector. This study is consistent with a research from 2011 [13,14]. According to level of education, (26.9%) of the respondents were unable to read and write with years of experience (41.8%) this result reflects that such work needs experiences rather than level of education. In Compatible with studies [15,16]. More than two third of workers have low level of knowledge regarding first aid (62.2%) and (29.4%) of them have moderate knowledge followed by (8.5%) were good. Such result can be interpreted by those workers doesn't pay attention to such vital issue to save their life also there is no formal or governmental agency advocate training courses or monitoring to detect emergency cases. A study conducted in Singapore in 2020 by Pisharody and others shows that workers have knowledge of first aid through courses and television, so the media is essential for the transfer of general knowledge [17]. Other studies also demonstrated the need workers to take special first aid courses and not to rely exclusively on television or the Internet [18,19].

This part shows that evaluation of knowledge about General information about first aid is fair, while evaluation of knowledge was poor for (wounds and bleeding, bones and joints injuries, Other medical conditions, Burns and Bites, Stings, and Foreign Bodies) about first aid. The percentage of workers' information about general information was, those whose level was fair (56.2%), and the people whose information percentage was poor (31.3%), and a small group of respondents was good (12.4%). In general, when the group was tested more closely regarding their knowledge of wounds and bleeding, their level was bad and the rate of right was low (21.9%) and the percentage of poverty was the highest (69.7%) and the percentage whose level was decent (8.5%) was the lowest. In the questionnaire collected through the study, bone and joint injuries played a role in the ranking, if we note in Table (3), and respectively from fair to success (28.9 %, 61.2 %, 10.0 %). We remember that the largest proportion of individuals do not have adequate knowledge of first aid (61.2 %). Bearing in mind the necessity for workers to obtain first aid for other chronic health problems such as asthma, epilepsy, diabetes, food poisoning, etc. They found the highest percentage of those with insufficient knowledge (68.7 %) and the proportion of respondent's fair (23.4 %), and the few who had good information regarding other medical conditions (8.0 %). This is because they did not realize the benefits of their knowledge of first aid. Also, there is no governmental or supervisory body specialized in the health aspect to take care of them. And previous studies found support for this study [20,21].

Conclusions

According to the study, the Ministry of Health, the Ministry of the Environment, and the Ministry of Municipalities should work together to include this industrial sector in occupational health and safety initiatives.

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