

Occupational safety and working conditions provided by the Municipality of the capital for waste removal workers: study in one of the municipal departments

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Abstract: The study which was carried out in the cleanliness department of the Karrada municipality department, related to the workers of waste removal, showed that there is a lack of awareness on the part of waste workers towards the occupational health and safety equipment that serves them for the purpose of maintaining health and protecting them from work hazards, such as gloves, occupational safety shoes, head cover and rain suits. In the winter and other equipment and showed the lack of several first aid in the wheels of lifting waste and the lack of periodic checks for workers from infectious diseases and heavy elements and that most workers work daily wages and few of them on a temporary contract, as well as between the study Not to participate in training courses in the field of waste lifting and occupational health and safety The study showed the interest of officials to maintain the health and safety of workers and achieve their satisfaction and the adoption of complaints submitted by them and there are amounts calculated on the basis of the wages of lifting waste and cleaning sewage and written in the lists of wages of pure water, but spend on other things.

Key word: hazards waste, gloves, helmet, safety shoes, rain wear

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Introduction: The annual statistics of international organizations show that 110 million workers die from 180 different injuries each year, with an average of one thousand injuries each year. 3 minutes of serious accident so it is safe to provide a working environment of different industry hazards and raise the level of efficiency, the means of prevention will undoubtedly reduce injuries and occupational diseases and protect workers from accidents(Roy,2018).Safety in general is a science that seeks to protect and avoid danger in any area, including loss of life and property Whenever possible, occupational safety is a science that is concerned with maintaining the safety and health of the person from the risks that may be exposed to it Because of the work performance, by providing a safe working environment free from the causes of accidents and occupational diseases(Nlsm,2019).Personal protective equipment includes all protective devices, tools and materials used by employees that are designed to protect workers from hazards arising from work that affects health and safety. Proper personal protective equipment should be provided to staff in accordance with the nature of work (OIC, 2014). All personal protection equipment should;

- 1- Prevent risks without creating additional risks.
- 2- Be suitable for working conditions.
- 3- Complies with ergonomic requirements and health status of employees.
- 4- Fit and be of a suitable size and reasonably comfortable for the person wearing it.
- 5- Be conservative and provided for decent service (OIC, 2013).

Collection and transportation of waste

Accident insurance associations and enforcement agencies give specific guidance regarding :

- a) Safe driving of collection and transport vehicles.
- b) Safety measures for reversing such vehicles.

c) Standing on the footboards while the vehicle is in motion. They also give recommendations on how to move the waste bins and containers in order to avoid musculoskeletal problems. Measures to clearly label, safely store and restrict access to waste fractions are also important (HSE, 2013).

Management of health-care waste

Initially, the task of legitimate and budgetary obligation regarding safe administration to the waste producer and furthermore the duty of obligation of care. Insurance ought to be applied at whatever point dangers are questionable. It is fundamental that everybody worried by social insurance waste ought to comprehend that medicinal services squander the board is an essential piece of human services, and that making hurt through deficient waste administration diminishes the general advantages of human services. Approaches and plans for the protected administration of medicinal services waste should address the accompanying three components; The foundation of a complete arrangement of social insurance squander the executives, from the age of waste to its transfer to be actualized bit by bit, the preparation of every one of those included and expanding mindfulness and the determination of safe and condition neighborly choices for the administration of human services squander (DPHEWHO, 2000).

Causes of Work Accidents

A Typical error when the reasons for accidents are explored is the absence of profundity or be happy with a hurried identification of the quick causes, which are now and again evident and bewilder the reception of restorative or preventive measures. The principal consideration, ought to be towards the dangerous demonstration, risky ecological conditions or both, the reaction gives data that will recognize the intercede causes, if there are, like this you will have the option to lead a viable activity upon the genuine reasons for the mishap. The succession of occasions for accidents beginning from the outcomes can be arrived at the causes. Experience shows that 80 % of accidents have its starting point in the human factor and 20% in the natural factor. This proposes preventive program must give essential significance to the redress (or anticipation) of dangerous conduct of Workers. The recognizable proof of the reasons for accidents can be come to through two systems: review and prospective. The review strategy depends on the examination of accidents inside the organization. It isn't extraordinary that the examinations were constrained to situations where there has been handicapping damage. Being exacting, the examinations ought to be progressed for all occasions shrouded in the specialized meaning of accidents. Two confinements ought to be referenced for the review technique:

1-is important to trust that accidents will recognize causes .

2-The preventive activities will be just for accidents like the ones happened previously .The planned or expectant strategy additionally called hazard examination depends on the recognizable proof of potential dangers to manage the reception of preventive systems before accidents happen. It has the upside of covering the most stretched out scope of plausible accidents. The systems are not fundamentally unrelated and might be utilized practically speaking a blend of both which is energetically recommended (Jorge,2019).

Practical side:

The research has 50 Waste removal workers Divided into age groups as in Table (1)

Table (1): Age groups of waste removal workers by years

18 – 27	28 – 37	38 - 47	48 and more
30	9	6	5

The study showed that the most age groups were in the category (18-27) years where the minimum work was taken 18 years, which is allowed by the work law in Iraq and the world. The study showed that the highest number of waste removal workers have primary education and below, then the middle education, and then read and write only and the sample was absent from the preparatory education.

Table (2): The educational attainment of waste removal workers

Primary	Middle	Secondary	read and write
37	10	0	3

The Waste removal workers are working in morning and evening system and the number of workers in the morning system ranges from (100-150) workers and the evening system is between (50-75) workers and the systems are able to increase or decrease as needed in the section that is completed the study (the department of cleanliness that return to the municipality of al-Karrada), and all of them are work as shown in table(3).

Table (3): Number of working hours for lifting waste

8	9-14	15 or more
50	0	0

And the extents of the provision of occupational safety and health in the work environment by the municipal centers affiliated to the municipality of al-Karrada have been. The study pointed out that the municipal department is providing gloves to the waste workers, but a large part of them refuse to wear them, even though they are safety equipment because they are ignorant of their importance as they deal with wastes that are not sorted or may contain medical waste, broken glass or sharp material and This is what the researcher pointed out in the importance of sorting before landfill or burning (Alsaffar,2017), see table (4).

Table (4): Does the department provide nylon or cloth gloves to Waste removal workers?

Yes	No
Yes	-

In table (5) the waste removal workers does not have safety shoes in the work because it not imported But from the researcher's point of view its very imported Where the waste container can fall on their feet note that some of the containers do not contain wheels as shown in figure(1).

Table (5): Does the municipality provide safety shoes to Waste removal workers?

Yes	No
-	No



figure (1):containers do not contain wheels

The study showed that the helmets were not provided for workers, especially in the summer Which may reach 50 and above, due to the lack of workers in a construction site as shown in table (6).

Table (6): Does the municipality provide Helmet for waste removal workers, Especially in the summer?

Yes	No
-	No

The study showed that most of the workers did not wear work allowances, although they were provided by the department of cleanliness that return to the municipality of al-Karrada as in table(7).

Table (7): Is there special clothing for waste removal workers?

Yes	No
Yes	-

The study also showed that workers did not wear rain suits even though they were provided before the department of cleanliness that return to the municipality of al-Karrada as in table(8).

Table (8): Is there special raincoat for waste removal workers in winter?

Yes	No
Yes	-

The research shows that there is no medical aid in the dump trucks in spite of the way that no genuine wounds or profound injuries were recorded Minor injuries are wrapped with a pies of material or when they come back to the branch of tidiness when the working hours are finished. What's more, in this time some Unsafe Substances and hurtful substances that can be found in waste can be portrayed as either synthetic compounds or natural operators .The Synthetic substances include: pesticides, cleaning

items, paint, fade, batteries, and so forth, and natural specialists can be found in: human waste (e.g., from diapers), creature squander, nourishment squander, therapeutic waste (e.g., utilized syringes and needles), etc.

Unsafe Substances and by what means can these materials enter the body

Synthetics and natural specialists found in waste can enter the body by means of the accompanying courses of exposures by Contact with the skin, for example, through cuts and scraped spots, just as by means of entrance from sharp items and Ingestion or hand-to-mouth contact when eating, drinking or smoking lastly Inward breath by breathing irresistible beads from the air.

Working environments and What Ought to Do about Waste

The obligation of managers to guarantee that the dangers and dangers related with squander are viably managed so they don't influence the wellbeing and security of their Workers, or contrarily sway on nature. The advancement and execution of a work environment squander the board program is one of the best systems in tending to the issue of waste in the work place (Siwhac,2019).see table(9,10)

Table (9): Is there a first aid box in the garbage trucks?

Yes	No
-	No

Table (10): Are there cases of injuries to waste removal workers?

Yes	No
Yes	-

Workers complained about the fixed waste containers because it's heavy and difficult to move and they prefer wheeled containers, see table (11).

Table (11): Are the waste containers fixed or wheeled?

Fixed	Wheeled	both together
-	-	Yes

The study showed that there are no training courses for workers in the field of waste removal on occupational safety and working conditions despite its importance to introduce them to safety equipment and accident prevention, see table (12).

Table (12): Are there training courses for workers in the field of waste removal on occupational safety and working conditions?

Yes	No
-	No

Despite minor accidents, workers are not given antibiotics to prevent them from infectious diseases and the research see its very important, see table (13).

Table (13): Are there periodic antibiotics given to workers to prevent Them from infectious diseases?

Yes	No
-	No

The study showed that there are no periodic tests for the workers of the lifting of waste, especially the examination of heavy elements, despite their treatment with medical and other wastes, as in table (14).

Table (14): Are there periodic inspections of workers, including the Examination of heavy elements?

Yes	No
-	No

All the garbage trucks have picked and sweeper to help raise waste, see table (15)

Table (15): Is the waste lift wheel fitted with pick / sweeper?

Yes	No
Yes	-

The study showed that the workers is in the allowed age of work as work law in Iraq and the world, see table (16).

Table (16): Are waste removal workers within the allowed age of work?

Yes	No
Yes	-

Also The study showed that there is a special union for workers in general, including the workers to raise the waste, but the workers do not join them because of their instability in their work and also because the accession to be paid for certain wages, as in Table (17)

Table (17): Do workers belong to a trade union, association, or Association of their own?

Yes	No	Not all of them
-	-	Yes

The study showed that there is no special budget for occupational health and safety equipment according to what was provided to us by the director of hygiene department in Karrada municipality department.

Table (18): Are there special amounts for occupational safety and health equipment?

Yes	No
-	No

The study showed the instability of the waste-raising workers in their work and all of them aspire to better work and most of them work daily wage and some of them work in the form of a temporary contract as in table (20)

Table (20): the time of waste workers work within

Daily fees	temporary contract	permanent contract
38	12	-

The study showed the interest of officials and their follow-up to workers in order to maintain their safety and reach a state of satisfaction at work, as in table (22.21).

Table (21): Is there an interest from those responsible for the safety Of workers and their satisfaction and comfort at work?

Yes	No
Yes	No

Table (22): Is there a follow-up by the workers' official about their health, safety and well-being?

Yes	No
Yes	-

The study showed that there is a special fund for complaints by workers or is communicating directly with the higher authorities to take the complaint, Table (23)

Table (23): Are complaints made by workers?

Yes	No
Yes	-

Table (24): Are the waste removal workers aware that their fees are deducted with the fees of the net water lists?

Yes	No
-	No

Risk assessment in waste management

The premise of good wellbeing and security the executives is an exhaustive and nitty gritty hazard appraisal and similar standards apply to evaluating dangers in squander the executives as to some other working environment movement. Most administrators will be acquainted with the hazard appraisal process, which essentially expressed is :

- 1- Recognize the risks .
- 2- Choose who may be hurt and how .
- 3- Assess the dangers .

- 4- Settle on control measures .
- 5- Record noteworthy discoveries and actualize controls .
- 6- Survey the appraisal and update if fundamental .

Where chemical wastes are included, a Control of Substances Dangerous to Wellbeing appraisal will be required; the business must distinguish the perils and dispense with or limit the dangers, utilizing individual defensive gear just if all else fails. Workers must get reasonable preparing in safe working and explicitly in its utilization (Kurina,2016).

Insurance requirements for work environment

The protection need for four spot at work place

- 1- for head: stun safe protective caps, not really dielectrics, Proper respirators when are required, and Tissues and clothes are not substitutes for respirators .
- 2- for hands: calfskin gloves with palm support, elastic gloves with cotton inside covering, and palmar outside fortification with a harsh surface for good grasp .
- 3- for feet: security shoes with steel toe and slip bottoms .
- 4-for trunk: uniform made of safe texture and twofold crease; exceptionally unmistakable hues (yellow, orange, greenish yellow), Right size without being excessively tight. Short sleeve is liked or long sleeve with tight clench hands, Thin and smooth boot (no twisting), No free parts (save cuts), Cowhide fixes on the shoulders and hips (as indicated by the type of moving the items), Overcoats for blustery climate, light-hued or dim with yellow or orange stripes (Siwhac,2019).

Discussion:

All activities in solid waste management involve risk, either to the specialist straightforwardly included, or to the close by occupant. Dangers happen at each progression all the while, from the point where inhabitants handle squanders in the home for assortment or reusing, to the point of extreme transfer (Wee,2017).

Despite the fact that work environment security is the duty of the management, the individual recipients of the wellbeing and security program are fundamentally the individuals who shield the person from the dangers of the working environment. The cleaning department of the municipality of al-Karrada for gives nylon or fabric gloves to waste removal workers,, special clothing, special raincoat, but it did not complete occupational safety requirements like Protective cap, safety shoes, first aid box, training courses for workers in the field of waste removal on occupational safety and working conditions.

Recommendations

- 1- Raising workers awareness of the need to follow the requirements of occupational safety and health in the performance of work and the use of individual means of prevention adequately and properly.
- 2- Periodic monitoring of workers lifting garbage for wearing gloves for their safety during the lifting of waste.
- 3- Waste removal workers were obliged to wear safety shoes to protect their feet from falling containers on it.
- 4- Providing uniform work suits in the form and color to the workers of waste removal workers, as in other countries
- 5- It is necessary to provide a first aid box in case of accidents and other.
- 6- Seek to provide wheeled waste containers to facilitate the work of waste removal workers and wheel less containers are difficult to move and to reduce the effort on the workers.
- 7- Setting the budget necessary to achieve occupational safety and health annually and allocating a budget for emergencies.
- 8- Conducting training courses related to occupational health and safety to raise awareness for waste removal workers.
- 9- Give them incentive incentives from the amounts collected with water lists.

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