

# IMPACTS OF THE SITUATION OF SLAUGHTER HOUSES ON THE PERSISTENCE OF PARASITIC DISEASES IN THE DEPARTMENTS DJELFA AND TIZIOUZOU ALGERIA

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**Abstract.** A preliminary investigation was conducted on thirty slaughterhouses and killing of two different departments of Algeria, Tizi-Ouzou is located in the north of the country characterized by a humid climate, very cold in winter and high temperatures in summer and Djelfa region is an internal region of the country, it is defined by its dry climate in summer and sandstorms, cold winter, the objective of this work is to shed light on the situation of places sacrifice of the animals, which can be a source of parasitic diseases, we mention that hydatid disease is expanded in our country on a large scale due to the presence of dogs in these places, and many other bacterial diseases. Our results have reached a deplorable situation to irreversible if we do not perform repair deficiencies and problems found in the heart of the investigation. An architectural structure and a carefully planned infrastructure to international standards calculated with good administrative organization for internal and external, and compliance with all standards and hygiene with regular monitoring and control of these places will change the logging actual situation and to minimize the maximum transmitting several diseases, and decrease the rate of prevalence of parasites especially.

**Keywords:** slaughterhouse, investigation, parasitic diseases, killings, situation

## INTRODUCTION

An investigation was conducted at 12 dairâtes of the province of Djelfa and 18 places of sacrifice in the wilaya of Tizi-Ouzou about the actual situation in slaughterhouses and the killing of red meat, it has been shown that the persistence of parasitic diseases was directly related to the actual hygiene of these places, despite all the legislation enacted laws in the official gazette on infrastructure and development of such slaughterhouses and establishments classified killings, but the application of these remains always limited to the lack of financial resources and personnel.

The impact of this situation for the scale of the coming years will be very serious and uncontrollable for Type parasitic disease spread especially dogs and rats have found shelter very favorable for the complete life cycle of many parasitic very dangerous public health whose example is the cyst.

However you should know that slaughterhouses are special establishments for slaughter or sacrifice of animals for slaughter. Containing killing halls, halls drying`s, cold rooms, cutting rooms.

There are some public slaughterhouses belonging to municipalities and private slaughterhouses industrial infrastructure with very strict conditions to ensure that consumers buying meat with a healthy safety, do with no risk to their health we quote: Administrative block for veterinarians and attendants, cloakroom and toilet block, stable or

waiting room divided between cattle, sheep, goats and other local drain and wash viscera, room cooling, water availability, local slaughter health.

## MATERIAL AND METHOD

The survey was done almost every day for several months since the year 2009 until the end of 2010 or by moving to municipalities with killing red meat or questionnaire directly to veterinarians responsible for these establishments, the aim of assessing the current situation, health status, and environmental implantation and at the end the most important part of this survey touched hygiene, this work has been realized with the help of several colleagues, because the distances between these places are very big with difficult access related to climate factors and other factors.

## RESULTS AND DISCUSSION

### 3-1.REGION OF DJELFA

Situation of communal killings:

#### a-MESSAAD

The killings was missing of the following structures

- Not connected to the sewerage system.
- The availability of water is discontinuous.
- The property does not have a local conservation.
- No refrigeration equipment.
- No treatment workshop fifth district.
- The lack of local slaughter.
- The suspicious products and set point are not made in suitable premises.
- No-sanitary (Sinks, Shower, Cabinet ease.)
- No local administration.

#### b-FEID EI BOTMA

-We noted the following unavailabilities:

- No-slopes of sewage.
- Disinfectants are not available and insufficient.
- No-water system for cleaning after work.
- No sanitary facilities.
- No lairage manure heap.
- local administrative unavailable.
- No attendants and lack of health personnel (veterinary doctor).

#### c- AIN OUSSARA

- She does not have a lairage.
- Not with a local refrigeration.
- No local set target of suspect products.
- Non-equipped with the necessary equipment to destruction.

#### d- HASSI BAHBAH

- No lairage.
- No equipment needed with the various logging operations and stamping.
- Roulette-stamp defective.

- The lack of facilities for food storage.
- No local commissioning set of suspect products.
- No equipment needed with the destruction

#### **e-BIRINE**

- The walls are not coated.
- The water is only available 2J / 7.
- The state handling system is antiquated and hooks.
- No equipment needed with the various culling and stamp.
- The stamp used is outdated.
- Not equipped with a local refrigeration.
- No local commissioning set of suspect products.
- Non equipped health facilities.

#### **f-HAD EL SAHARY**

This is a killer who has nothing.

#### **A/THE HYGIENIC CHARACTERISTICS OF PREMISES**

This is the percent existence of the major factors favoring the persistence of hydatid cyst in the slaughterhouse of the province of Djelfa we quote:

- Presence of dogs
- Presence of rats.
- Presence of cats.
- throwing the bodies seized by land.
- Respect forward.
- Separation of clean and contaminated sector is not respected
- Respect of the water diet is not applied
- Pre-mortem inspection is not carried out thorough way
- Presence ferrous corrosion on the hooking system of the animals.

#### **3-2 WILAYA TIZIOUZOU**

We cite the deficits as dashes:

- No closing of slaughterhouses and killing
- Absence of incinerators for the destruction of meats unfit for human consumption
- No-respect of the principle of Schwartz
- Ceiling leaking
- Using non-food anchor for stamping
- Sewerage-defective
- The surface-slaughter is not smooth
- Insufficient light
- Lack of water
- Cold room-not the most functional hand down
- Work bench-inspection is degraded
- Earthenware inside is chipped
- The bathrooms are in disrepair
- The held-workers are very dirty
- The machinery (compressor, electric saw down)
- Drinking-water leak open
- Poor hygienic condition both inside and outside of the room slaughter
- Nauseating odors, degrades the slaughterhouse
- Absence of refrigerators

- Tulle and broken windows
- The Centenary of foreclosures is reformed
- The absence of medical and office
- The housing area undeveloped
- Sewage disposal-open
- Access to slaughter in winter is difficult
- The storage chamber hides unfinished
- Dump-just close to killing
- Mure non-smooth, hard to wash, blackberry unwashable
- Absence of portal slaughterhouse
- Absence of-mosquito net
- Absence of scales
- Lack of control for the medical staff of the slaughterhouse
- Absence of disinfectants
- Stagnation of water inside the rooms killing
- No compliance with the water diet
- The immediate environment inside is deplorable slaughter
- Some slaughter are located near homes.

Slaughterhouses are among the oldest institutions administratively classified dangerous for public health. Since the 19th century, they are subject to standardization is to train butchers health discipline [1]

There are several years in Algeria trying to build slaughterhouses standards and implement means of safety control and combat clandestine slaughtering but until now, nothing has yet materialized.

Currently, slaughterhouses do not conform to the regulations as we showed our results, so this pitiful state places of sacrifice suggests that meat intended for human consumption is equipped with microbes lack of hygiene and impropriety, knowing that handling meat hand dirty the blame has repercussions on the population despite outreach programs and awareness on the importance of slaughterhouses in the inspection and control of red meat carcasses and even in consumer food safety but they prefer to slaughter their animals alone.

Algerian law is clear on this point, because it determines the general protective measures and safety applicable to all establishments in which is carried a commercial, industrial or professional, in food characters.

In addition to compliance with the terms of the work of all the officials, and the complicity between workers makes them attractive places of sacrifice by farmers and thus the effort will be made by the two sides in any case that this issue is currently spread in Tunisia [3], according to several national and local newspapers, thus it is important to reduce the uncontrolled logging and explain to the public the role of the dog in the cycle, and especially food hygiene

## CONCLUSIONS

In order to avoid any risk of persistence of major parasites as an example of hydatidosis must:

I-Construction of facilities or regulatory taking into account the health and hygiene standards that are made mandatory by legislation they will have to be designed in a way to

reflect the principles governing the hygienic and sanitary management and operation of these places , in general points to follow and achieve are:

**1 /**

- \* Separation of clean and dirty areas.
- \* Walking forward.
- \* Availability of clean water.
- \* System of solid waste and liquid.
- \* Pipe waste disposal.
- \* Rentilation and light places of slaughter.
- \* Local treatment of the fifth district.
- \* Refrigerator.
- \* Hooking system adequate and sophisticated animals.
- \* Availability of annexes (fences, incinerator or septic ....). [2]

**2 /** The Review of ruminant offal for detection of disease (hydatid cyst) must be as following:

### **1. The liver**

Must be examined on both sides one is rounded and the other flat smooth marked in the center of a hollow or open holes of blood vessels and bile ducts, on palpation, the liver must be uniformly smooth, if it has visible damage to the surface or perceptible to the touch, it takes place suspected hydatid disease which can have various sizes and at different evolutionary stages, they appear as vesicles of varying sizes globular most often and color whitish and opaque thick colorless liquid containing a yellow sometimes, but eventually degenerate cysts and creamy content becomes. Then thickens and become caseous and calcareous salts seeps and calcify and decrease volume.

### **2. The Lungs**

They should have a uniform pink color and be flexible in all their parts, their surface should be smooth with the same look with a regular shape without bumps and hollows, on palpation there is no nodule felt superficial or deep. [2]

This is the operations performed by the veterinarian inspector slaughterhouse they affect animals and butchers offal seizures involve primarily the lungs and liver, the heart, and in situ removal by the staff of the slaughterhouse and other agents when needed requires several ways to implement:

- Material portage (Plastic containers, wheelbarrows).
- Material Biosafety (apron, goggles, masks, gloves).
- Quicklime, Chlorine disinfectants.
- Incinerators.

Incineration and landfill are the methods used for the removal of offal from infected animals for slaughter, can even tolerate chemical denaturation.

There are several ways to capture stray dogs either by the lasso, cages or trap, net, snare, then contentonner either shotguns that allows chemical restraint Exp: anesthetics and tranquilizers and finally to avoid landfill any contact with the outside bodies and donations decontamination and continuity of parasitic cycles. [2]

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