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ABSTRACT

This work is part of a research project being carried out by the work team described above. It took place in the Valle de Puebla neighborhood of Mexicali, B.C. The results of a survey that was carried out in that neighborhood are presented, they mention that the service is not constant, they do not have precision when the collection truck passes, they do not have a representative of the neighborhood before the city council and when it passes on many occasions they ask them for some charge for collecting the garbage. This situation becomes a problem of image and public health because when the cleaning service does not pass with constancy, the neighbors take out their waste and the stray dogs spill it in the street, resulting in environmental pollution and harmful fauna.

Keywords: Environmental pollution, Survey, Harmful fauna, Public health, Solid waste.

1 INTRODUCTION

Solid waste, also called garbage, is any physical waste that is considered waste and needs to be disposed of. Garbage is a product of human activities that is considered of zero value because of the discard, it does not necessarily have to have an odor or be disgusting or undesirable, that depends on the origin and composition of it.

It is typically placed in predestined locations for collection to be channeled to landfills or landfills, landfills, or elsewhere. Currently, this term is used to refer to that fraction of waste that is not usable and that therefore should be treated and disposed of to avoid health or environmental problems.

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Waste, whether usable or not, is a problem for society, especially for large cities because overpopulation, modern human activities and consumerism have greatly increased the amount of waste we generate; In addition to the inefficient management of this waste (open burning, disposal in landfills or inefficient landfills, among others), it causes problems such as pollution, which generates health problems and damage to the environment, which usually leads to social and political conflicts (Ochoa, 2014).

Solid waste management has been a problem due, among other things, to the high volumes of solid waste generated by citizens; When these are not properly managed, they can affect the health of citizens and the environment. Having reliable information on the amount of garbage generated and its characterization is a tool for planning the processes of collection and management of these.

The separation of waste from where it originates allows better control to classify it into its different components such as food waste, fibre and paper and recyclable materials (different metals and glass), to be collected and sent to the appropriate recycling places which can be a material processing facility, treatment facility, etc. a transfer station or landfill.

1.1 BACKGROUND

Mexicali has a problem with the solid waste collection service. The collection of these solids in the colony that was investigated is on Wednesdays and Saturdays, but sometimes this occurs only one day, and the inhabitants do not know exactly what day it will be, so they resort to taking out their "garbage" normally on the aforementioned days, when the collection truck does not arrive it leads to a number of problems; Such as that dogs that are homeless take this waste and spread it throughout the neighborhood, the spilled garbage causes a bad image for both the home and the street, in addition to health problems. The problem is linked to a lack of communication with the municipal public administration, which is responsible for providing public services and managing the resources available to the municipality of Mexicali, including garbage collection, among others.

1.2 CITY COUNCIL INFORMS THAT IT BEGINS TO SOLVE GARBAGE PROBLEM

The garbage collection service in Mexicali begins to be regularized after the cleaning staff had to stop work due to the poor conditions of the collection trucks in the city.



1.3 GARBAGE COLLECTION REINFORCED IN NEIGHBORHOODS IN THE EASTERN ZONE OF MEXICALI

Assuring that the garbage collection service began to be reinforced on the routes in the eastern area of the city, where there had been problems of backlogging, the mayor reiterated that a macro-operation will be carried out in the same sector, so that the situation returns to normal.

The affected neighborhoods are González Ortega (Palaco), Villa Verde, Robledo, Encinos, Cónдор, Valle del Puebla (object of this investigation), Valle del Pedregal, Satélite, Nuevo Mexicali, Villa Florida, Santa Rosa, among others, in which work is being done to normalize the garbage collection service. The head of the Commune insisted that there are neighborhoods with up to two weeks of delay in garbage collection, so he said that the annoyance of the community that has expressed its disagreement in many ways is understood and justified, some people took their waste to deposit it in the center of the civic esplanade of the Municipal Palace.

2 DESCRIPTION OF THE METHOD

This work is focused on the collection of solid waste (domestic garbage) in the Valle de Puebla neighborhood which is located in the east of the city of Mexicali, which is a municipality and capital of the state of Baja California, it owes its name to the etymology "*place where Mexico ends*" (Mexi) "*and California begins*" (Cali), It has an approximate population of 988,417 (INEGI, 2015).

To carry out this research, it was carried out in two stages:

1. Literature Review
2. Application of an 8-item survey in the Valle de Puebla neighborhood; Two of them are sociodemographic and the remaining 6 refer to solid waste management and its impact on the colony
3. The data obtained were recorded in an excel database

A visit was made to the Valle de Puebla neighborhood to carry out the following survey

1. How long have you been living in this colony?

Less than one year 2-4 years More than 5 years

2. How many members are your family?

1 Person 2-4 People More than 5 People



3. Mention the day(s) spent by the garbage truck

Monday Tuesday Wednesday Thursday Friday Saturday Sunday

4. How often does the collection truck not pass by your home?

1 day 1 week 1 Month

5. Do you know who to ask why the garbage truck doesn't pass by on the designated day(s)? (if yes, mention the name)

If you don't name _____

6. If the answer to the previous question is no, what do you do with the garbage?

Burn it Save it Pay for someone else to remove it

7. Is there anyone in the colony who organizes or represents everyone to bring the issue of collection before the appropriate authorities? (Who, what they do, what kind of communication they have)

If you don't Quién _____ what hace _____ Tipo de comunicación _____

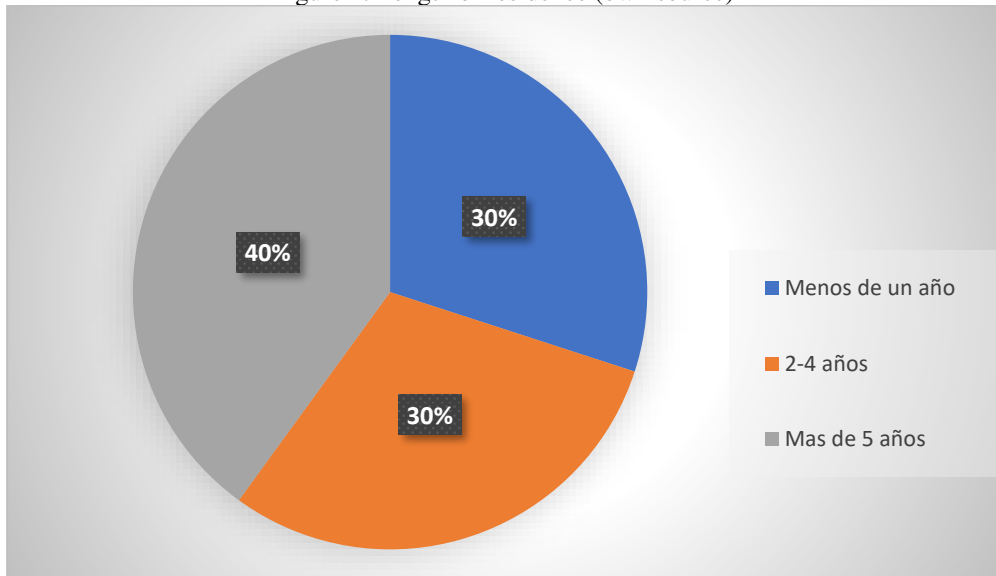
8. Have cleaning workers ever asked or demanded payment from you?

Yes No

3 ANALYSIS OF RESULTS

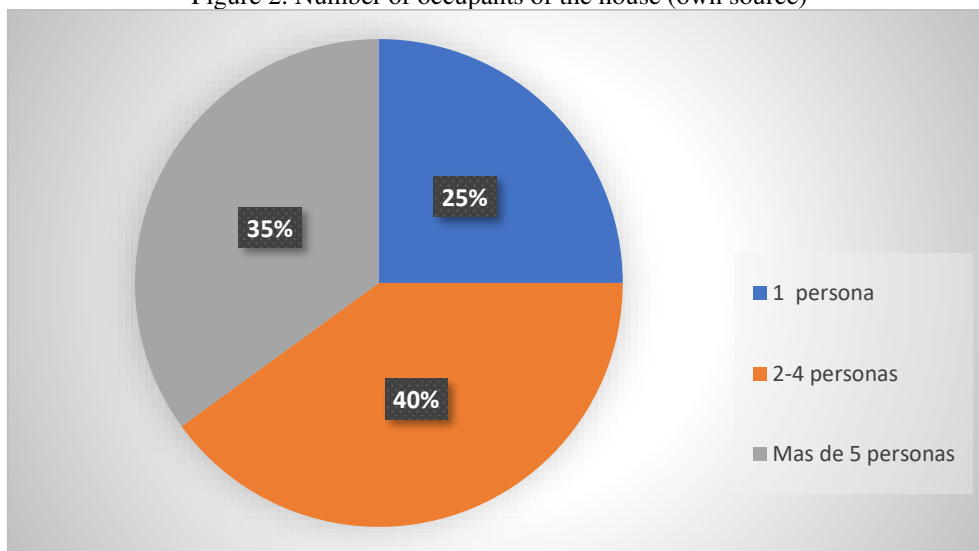
The answers to the first question are shown in figure 1, time (%) in which the respondents have lived in that neighborhood, as can be seen almost half of them are people who have been living there for more than 5 years, which indicates that they are already rooted in that place.

Figure 1. Length of residence (own source)



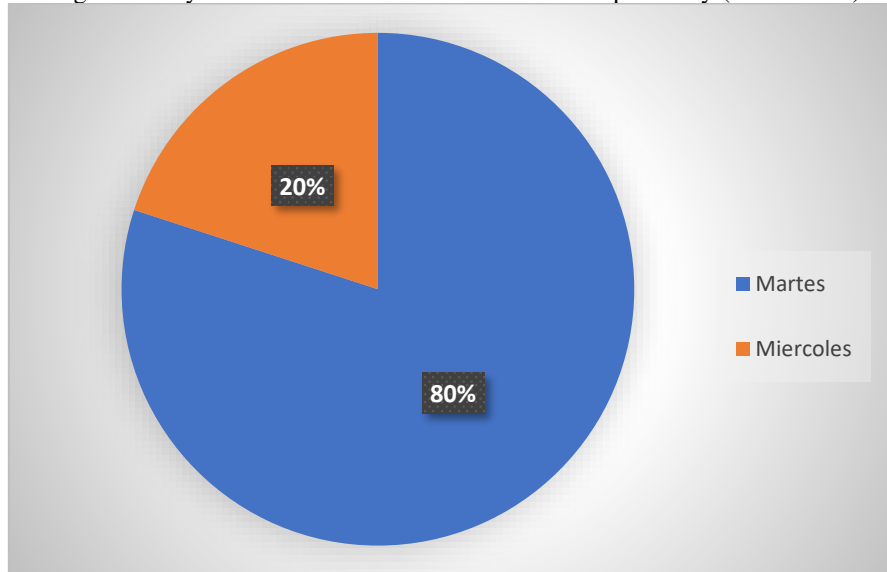
In question two, 40% of the respondents answered that the family is made up of between 2 and 4 members, as shown in figure 2, in addition to 35% answered that the members of the family are more than 5, it should be noted that a quarter of them live alone, many of them, for study reasons, They're renting the house.

Figure 2. Number of occupants of the house (own source)



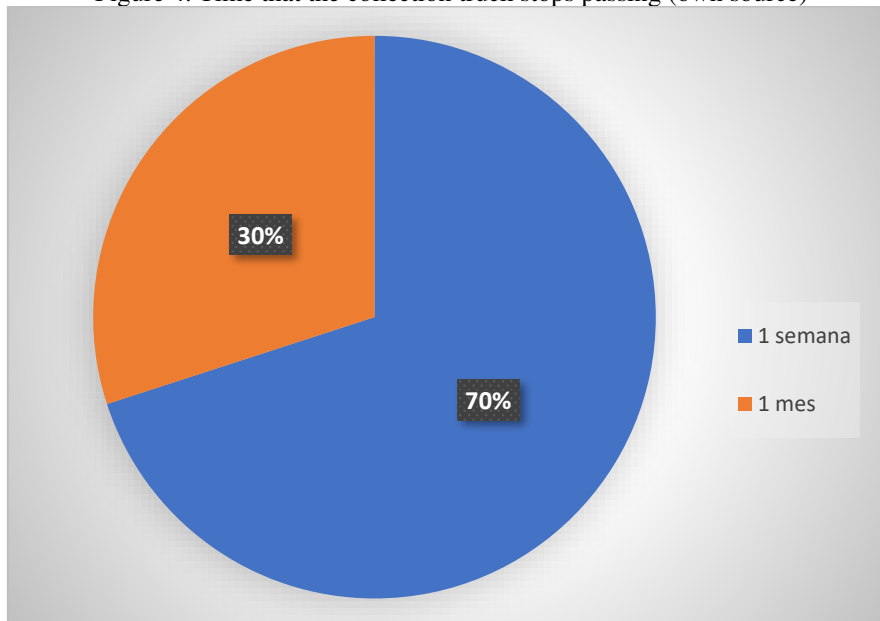
In question three, in relation to the days of the week on which the collection truck passes, 80% answered that it was Tuesday and the remaining 20% said that it was Wednesday (figure 3), the truth is that it passes one day a week, but since it is not constant, some did not remember when it passed or in some cases, Not a day passed and the administration sent the collection truck on a different day (in this case Wednesday).

Figure 3. Day of the week when the collection truck passes by (own source)



70% of those surveyed answered that there are times when the truck stops passing through the neighborhood for up to a week, 30% answered that sometimes it passes every month (Figure 4).

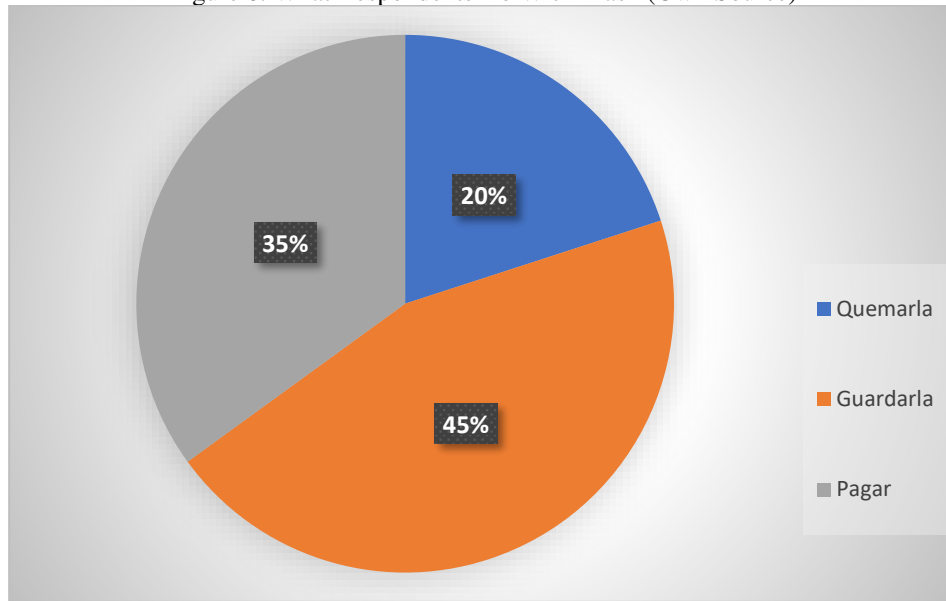
Figure 4. Time that the collection truck stops passing (own source)



In question 5, referring to whether they know who to go to when the collection truck passes through the neighborhood, 100% of them answered that they do not know who to go to.

Figure 5 explains what they do when the collection truck does not pass through the colony; 45% of them answered that they keep it until it passes, 35% said that they paid for a picker to take it away and 20% of them answered that they burn it.

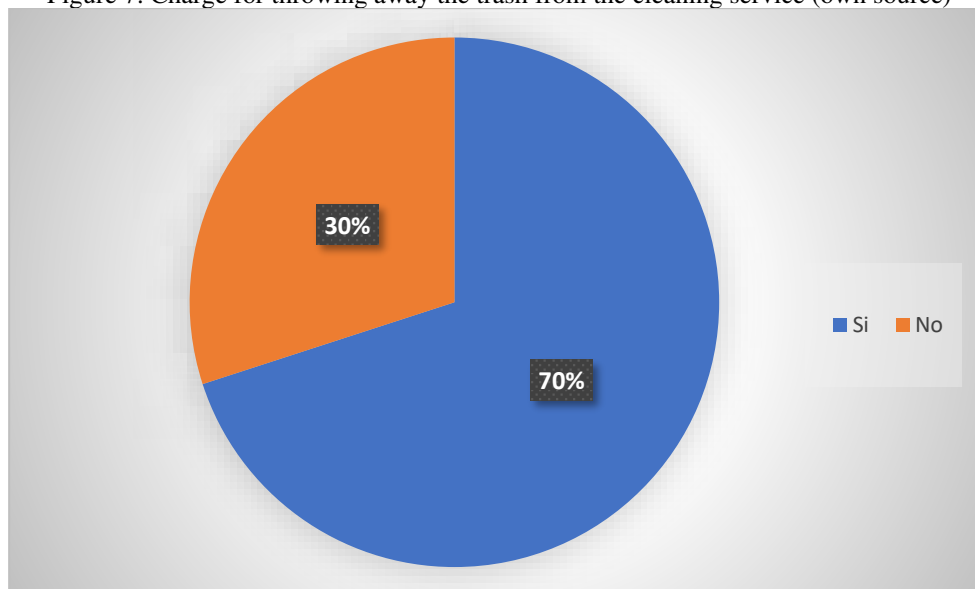
Figure 6. What Respondents Do With Trash (Own Source)



In question 7, 100% of the respondents answered that there is NO representative of the colony before the municipal authorities to be in communication between the parties.

Finally, Figure 7 shows that 70% of those surveyed say that cleaning workers, when the truck passes, ask them for and in some cases demand some payment for throwing their garbage, 30% answered that they do not ask for money.

Figure 7. Charge for throwing away the trash from the cleaning service (own source)



4 RESULTS

In this research work, the objective was to know the problem of solid waste collection in a neighborhood of Mexicali, B.C. A preliminary analysis of the responses to the 8 questions



asked by the interviewers is included. The review of the literature, especially in the form of articles in the local press, does not reflect the serious problems that the members of this popular colony in Mexicali have, finally it is pertinent to comment that this analysis is part of a research project that the members described above are carrying out.

5 CONCLUSIONS

The analysis of the results show that, in this neighborhood, there is a serious problem with garbage collection, which leads to a social, environmental and public health impact, since the respondents mention that the collection truck stops passing for up to a month, so the inhabitants manage as best they can to solve the problem of having garbage either inside (stored) or outside the house (spilled on the street). The work team was able to realize that the differences between the answers given by the people surveyed have to do with the fact that, in many of the households, both the father and the mother go to work leaving their children in charge of an acquaintance (relative, friend or older children) and some of them had no knowledge of when the truck passed. or whether it happened or not.

6 RECOMMENDATIONS

The task force recommends that one way to initiate communication with the municipal authorities is for the members of the colony to meet to appoint a person responsible to the authority. In fact, the members of the work team themselves will propose to the authorities to help them get closer to the members of the colony, either by handing out informative flyers or sending information through social networks, etc.



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