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GLITCHES ENCOUNTERED ON THE IMPLEMENTATION OF THE SOLID WASTE COLLECTION OF THE RESIDENTS OF SAN GABRIEL, TUGUEGARAO CITY

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ABSTRACT: *The Philippines ranked highest in the Southeast Asia regarding trash collection rate (Ranada, 2015) and the world's third biggest dumper of plastic in the ocean (Suarez, 2015).This study was conducted to determine the glitches encountered by the residents on the implementation of solid waste management.This undertaking made used of the descriptive research design utilizing descriptive statistics like frequency counts and percentages. The data gathering tool was used to collect the necessary data from the selected residents of San Gabriel, Tuguegarao City. The data gathering tool was patterned from the undergraduate thesis of Pascual Gerald et al. as the main instrument. As revealed from the findings of this study, majority of the respondents have not attended any seminars or trainings on solid waste management, though many of the respondents do practice the segregation of their solid wastes and the 4R's and the residents have predominantly experienced the problem on irregular collection of garbage by the garbage truck collector assigned in the area. Based on the findings of the study, the researcher recommends that the barangay health sanitation council should initiate the conduct of seminars/training on the proper wastes management and disposals on the residents and a stricter monitoring on the collection of solid waste in the area may be conducted to ensure that the collection is done regularly to protect the residents form diseases.*

Keywords: *glitches, solid waste, waste management, segregation, 4R's, trainings, seminars, waste disposals*

INTRODUCTION

Solid waste is one of the biggest problems in today's generation. It is a by-product of human activities. In our environment that ruins little by little because of improper disposal of solid wastes. Some people are unaware of the danger that might cause because of negligence in disposing our wastes. Unhealthy disposal of solid wastes might cause environmental

calamities such as flood, pollution and others. Moreover, it pollutes the air, water and land resources and therefore threatens the well-being of the people, animals and plant species. As safe potable drinking water becomes widely scarce, environmental contaminations attributed to poor sanitation and improper disposal of solid wastes render water sources, unhealthy for people. This is because of the carelessness of the people of the human activities and also because of the fast-growing of our country, the Philippines. Our country is facing a problem regarding solid waste disposal that is why our government enacted Republic Act No. 9003 also known as "The Ecological Waste Management Act of 2000".

The Philippines ranked highest in the Southeast Asia regarding trash collection rate (Ranada, 2015) and the world's third biggest dumper of plastic in the ocean (Suarez, 2015). Also, the National Solid Waste Management Commission (2013) reported that the Philippines generates waste every year on an average of 0.40 kg per capita. With this generation rate, the amount of waste is expected to increase to 16.63 million tons in 2020 from 14.66 million tons in 2014 with Metro Manila as the highest waste contributor (DENR, 2015). Critical to a successful solid waste management program is education. Educating people and inviting them to participate in waste management program and initiatives can help them understand the waste issue and its consequences on human and environmental health, and the ways they can to mitigate it (Chakraborti, Hussam&Alauddin, 2003). Relevant to this idea, R.A. 9003 mandates the stronger integration in the academic curricula of formal and non-formal education of ecological solid waste management and resource conservation and recovery topics to promote environmental awareness and action among the citizenry (Section 2).

According to the presentation of some authors, (Ejaz, Akhtar, Hashmi &Naeem, 2010; Neller&Neller, 2015; Domato, 2002), the indiscriminate dumping of solid wastes is one of the main threats to environmental and human well-being. Experts attribute the deteriorating problem on solid wastes dumping to the growing human population and rapid industrialization (Atienza, 2008 cited in Barloa, Lapie, & de la Cruz, 2016). Solid wastes are any rubbish or refuse generated from undesirable or useless materials or substances (Desa, Kadir, &Yusooff, 2011). As unescapable by-product of human activities as mentioned by Sinha et al., 2008, solid wastes can be classified as biodegradable, recyclable, residual, and special according to the composition. They are produced from various sources such as

households, commercial establishments, industries, and institutions. There is an estimate of 1.3 billion tons of waste that countries produced every year. With this trend, as Simmons, 2016 pointed out, the world is expected to generate 4 billion tons of waste by 2100.

STATEMENT OF THE PROBLEM

This study was conducted to determine the glitches encountered by the residents on the implementation of solid waste management. Specifically, it sought to answer the following questions:

1. What is profile of the residents in terms of?
    1.1 Age
    1.2 Sex
    1.3 Number/s of Trainings/Seminars attended in Solid Waste Management
2. How do the residents collect and dispose their solid waste?
3. What are the glitches encountered by the residents in the implementation of solid waste management?

RESEARCH METHODOLOGY

This undertaking made used of the descriptive research design utilizing descriptive statistics like frequency counts and percentages. The data gathering tool was used to collect the necessary data from the selected residents of San Gabriel, Tuguegarao City. The data gathering tool was patterned from the undergraduate thesis ofPascual Gerald et al. as the main instrument.

RESULTS AND DISCUSSIONS

Table 1: Frequency and Percentage Distribution of respondents as of Sex

SEX	**Frequency**	**Percentage**
Male	19	25.00
Female	56	75.00
Total	**75**	**100.00**

The data on the table shows the frequency and percentage distribution of respondents as to sex. As gleaned from the table, 56 or 75.00 percent are female which manifests that majority of those who participated in this undertaking involved housewives who have the proximity of the household.

Table 2: Frequency and Percentage Distribution of respondents as of Age

AGE	Frequency	Percentage
22-32	18	24.00
33-42	39	52.00
43-52	13	17.00
53-62	3	4.00
63-72	2	3.00
Total	75	100.00

Table 2 shows the frequency and percentage distribution of respondents in terms of age. As revealed from the results, 39 or 52.00 percent belong to the age bracket of 33-42 years of age which implies that majority of the respondents are on the fulfillment of their professional lives and have reached a certain maturity, competence and stability in life and derived satisfaction form family and social-work life.

Table 3: Frequency and Percentage Distribution of respondents as of Number of Seminars/Trainings attended related to Solid Waste Management

Number of Seminars/Trainings attended related to Solid Waste Management	Frequency	Percentage
0	48	64.00
1	14	18.67
2	7	9.33
3	6	8.00
Total	**75**	**100.00**

Data on the table showed the frequency and percentage distribution of the respondent as to number of seminars or training they have attended. As revealed from the data, majority of the respondents with a frequency of 48 or 64.00 percent have not attended any seminars or training in relation to solid waste management. This result implies that the respondents may not have enough information and education on the proper way of solid waste management, thus may result on the poor management and disposal of solid waste.

Table 4: Problems encountered by the respondents on the implementation of solid waste management

Problems encountered	Frequency	Rank
Irregular collection of garbage	36	1st
Non operation of a good disposal facility	14	2nd
Public Indifference (Public don't care)	13	3rd

Table 4 shows the problems encountered by the respondents on the implementation of solid waste management in which irregular collection of garbage is the worst problem that they have experienced. This implies that the scheduled collection of solid wastes by the garbage truck collector was not followed thus, the collected and segregated solid wastes by the household have been dumped and cause odorous smell in the household area and may cause the accumulation of flies that may eventually cause diseases to the household members.

CONCLUSIONS

Based from the findings of this study, majority of the respondents have not attended any seminars or trainings on solid waste management, though many of the respondents do practice the segregation of their solid wastes and the 4R's and the residents have predominantly experienced the problem on irregular collection of garbageby the garbage truck collector assigned in the area.

RECOMMENDATIONS

- There must be a regular collection of garbage by the assigned unit of the institution
- A stricter penalty be imposed for those who will not comply with the provision of the law on the proper disposal and segregation of solid waste.
- The barangay health sanitation council should initiate the conduct of seminars/training on the proper wastes management and disposals
- Residents should be encouraged to attend a seminar/training related to the proper wastes management and disposals
- A stricter monitoring on the collection of solid waste in the area by the concerned city council.
- There must be a regular collection of garbage by the assigned unit of the institution

- A similar study may be conducted that will include variables/areas not covered in the present study.

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