

FACTORS AFFECTING THE ACHIEVEMENT OF ZERO OPEN DEFECATION PROGRAM OF THE 16 BARANGAYS OF MUNICIPALITY OF KABUNTALAN

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Abstract: This study aims to determine the different factors affecting the achievement of Zero Open Defecation in the 16 Barangays of Kabuntalan Maguindanao. To accomplish this, the study used the quantitative and qualitative research design. The study was conducted in 16 Barangays of Kabuntalan Maguindanao and the researchers selected 320 residents to participate. The study utilized the random sampling technique and that it used a researcher-made survey instrument to gather data that is composed of their demographic profile, factors affecting the achievement of Zero Open Defecation (ZOD) program ZOD as well as an open-ended question regarding the problems encountered by the respondents towards achievement of ZOD program. Frequency distribution and percentage were used for the analysis of the profile, mean and standard deviation for the factors affecting the achievement of Zero Open Defecation (ZOD) program and Pearson-r for the relationship between the demographic profile of the respondents and the factors affecting the achievement of Zero Open Defecation (ZOD) program while ANOVA was used for the difference between the factors affecting the Zero Open Defecation program and the problems encountered by the respondents.

The study concludes that financial aspects, availability of resources and waste disposal can really affect the achievement of Zero Open Defecation. Problems encountered by the respondents towards the achievement of Zero Open Defecation were concluded as well as the significant relationship between the demographic profile and factors affecting the achievement of Zero Open Defecation Program. It is also concluded that there is a significant difference between the factors affecting the achievement of Zero Open Defecation Program and the problems encountered by the respondents.

Keywords: Open Defecation, Zero Open Defecation Program, Kabuntalan, Maguindanao.

1. INTRODUCTION

Open defecation is defined as the practice of defecating in open fields, waterways and open trenches without any other disposal of human excreta. The term “open defecation” is credited to the publication of Joint Monitoring Program (JMP) in 2008, a joint collaboration of World Health Organization (WHO) and United Nations International Children’s Emergency Fund (UNICEF).

Open defecation continues to be a critical health condition that contributes significantly to an estimated 842,000 people who die yearly from sanitation-related diseases and affects 1 billion people worldwide. Based on the data of World Health Organization (WHO) and United Nations International Children’s Emergency Fund (UNICEF) in 2010, it is an estimated 1.1 billion or 17% of the world population still defecate in the open area. From the 82% of the population who behaviour

of open defecation in 10 countries, Indonesia is the second country after India (58%), Indonesia (55%), China (4.5%), Ethiopia (4.4%), Pakistan (4.3%), Nigeria (3%), Sudan (1.5%), Nepal (1.3%), Brazil (1.2%) and Nigeria (1.1%). Countries where open defecation is most widely practiced have the highest numbers of deaths of children under the age of five, as well as high levels under nutrition, high levels of poverty and large disparities between the rich and poor.

According to 2008 United Nations data, 2.6 billion people still do not have access to or have inadequate sanitation facilities. Every 20 seconds, a child dies as a result of poor sanitation. In the Philippines, 23% of the Filipinos or roughly 19 million still do not have access to sanitary toilets.

The Joint Monitoring Program estimate suggests a steady increase in improved sanitation coverage in rural areas in the Philippines from 45% in 1990 to 69% in 2010, and 71% by 2015. The National Sustainable Sanitation Plan (NSSP) sets a goal of all barangays or villages must be a certified zero open defecation by 2022. The Local Government Units in the Philippines are definitely facing a challenging task, which is the development and implementation of sustainable sanitation program that directly addresses their key concerns.

Through the implementation of Zero Open Defecation Program, LGUs are enable to contribute to the attainment of the MDG target. It maximizes community participation with the aim of empowering communities to make decisions, collectively help others abandon the practice of open defecation and adopt sound sanitation practices through community wide initiatives that emanate from grassroots level.

This study aims to determine the factors that affecting the achievement of Zero Open Defecation in the Municipality of Kabuntalan. It is conducted to create awareness and knowledge for the officials and residents and probably make a solution to have a proper sanitation and prevent sanitation-related disease through zero open defecation.

2. METHODS

The research study used quantitative form of inquiry with findings presented in narrative form. Quantitative and qualitative research design described and determined the factors affecting the achievement of Zero Open Defecation of 16 Barangays of Kabuntalan, Maguindanao.

Research Locale

The research study was conducted in Kabuntalan, Maguindanao. It has 17 Barangays with a total population of 20,311. Based on the data given by IPHO Maguindanao, Kabuntalan is one of the remaining Municipalities that is not yet a certified ZOD municipality. The study utilized the random sampling technique in determining the factors affecting the achievement of ZOD Program.

Data Gathering Procedure

The researchers conducted series of activities throughout the research study. Survey and interview were conducted as method of data gathering

The first step was seeking approval in the conduct of the study. Letters of permission were made and given to the barangay chairman of every barangay in the Municipality of Kabuntalan upon the approval of the adviser and the Dean of the college of Midwifery.

Data Gathering Tools

The study used a survey questionnaire. The instrument was researchers made and subjected to validity and approval. The first part deals on the socio-demographic profile of the respondents while the second part deals on the factors affecting the achievement of ZOD Program.

Statistical Tools

The results of the study were collected, tallied and tabulated. Frequency distribution and percentage were used for the analysis of the profile, mean and standard deviation for the factors affecting the achievement of Zero Open Defecation (ZOD) program and Pearson-r for the relationship between the demographic profile of the respondents and the factors affecting the achievement of Zero Open Defecation (ZOD) program while ANOVA was used for the difference between the factors affecting the Zero Open Defecation program and the problems encountered by the respondents.

3. RESULTS

Profile of the Participants

The profile of the participants includes the age, sex, educational attainment, occupation and household size of the selected residents in the 16 Barangays of Kabuntalan Maguindanao. These profile characteristics were included in the study to distinguish the participants and support the result of the study.

Table 1: Frequency and Percentage Distribution of the Profile of the Participants

| Profile of the Participants | F | % |
|--|------------|---------------|
| Age | | |
| 10 – 20 years old | 13 | 4.06 |
| 21 – 30 years old | 67 | 20.94 |
| 31 – 40 years old | 102 | 31.88 |
| 41 – 50 years old | 82 | 25.63 |
| 51 – 60 years old | 41 | 12.81 |
| 61 years old and above | 15 | 4.69 |
| Mean Age: 39.1 or 39 years old | | |
| Sex | | |
| Female | 178 | 55.62 |
| Male | 142 | 44.38 |
| Educational Attainment | | |
| Elementary Level | 63 | 19.69 |
| Elementary Graduate | 80 | 25.00 |
| High School Level | 74 | 23.13 |
| High School Graduate | 41 | 12.81 |
| College Level | 31 | 9.69 |
| College Graduate | 12 | 3.75 |
| None | 19 | 5.94 |
| Occupation | | |
| Government Employee | 35 | 10.94 |
| Driver | 52 | 16.25 |
| Farmer | 91 | 28.44 |
| Private | 1 | 0.31 |
| Fisherman | 33 | 10.31 |
| Vendor | 26 | 8.13 |
| Carpenter | 6 | 1.88 |
| Housekeeper | 33 | 10.31 |
| None | 43 | 13.44 |
| Household Size | | |
| 1 | 6 | 1.88 |
| 2 | 28 | 8.75 |
| 3 | 50 | 15.63 |
| 4 | 59 | 18.44 |
| 5 | 64 | 20.00 |
| 6 | 45 | 14.06 |
| 7 | 33 | 10.31 |
| 8 and above | 35 | 10.94 |
| Mean Household Size: 4.95 or 5 members | | |
| Total | 320 | 100.00 |

Table 1 shows that from a total of 320 selected residents in the 16 barangays of Kabuntalan, Maguindanao, many (31.88%) of them are between the ages 31 – 40 years old followed by those who are between 41 – 50 years old at 25.63% and 21 – 30 years old at 20.94% while others are in the age bracket of 51 – 60 years old at 12.81%, 61 years old above at 4.69% and 10 – 20 years old at 4.09%. Their mean age is 39.1 or 39 years old.

Majority (55.62%) of the residents are female while the rest or 44.38% of them are male.

Many (25%) of them are elementary graduates followed by residents who attained high school level education at 23.13%, an elementary level of education at 19.69%, are high school graduates at 12.81%, attained college level education at 9.69% while others have no formal education at 5.94% and a few are college graduates at 3.75%.

Many (28.44%) are working as farmers followed by who are working as drivers at 16.25%, government employees at 10.94%, fisherman and housekeepers (both at 10.31%) and a few are vendors at 8.13%, carpenters at 1.88% and private employees at 0.31% while there were also some who does not have any occupation at 13.44%.

Many (20%) of the residents have household size of 5 members followed by those who have 4 at 18.44%, 3 members at 15.63%, 6 at 14.06%, 8 members and above at 10.94%, 7 at 10.31% while only a few have a small household size with 2 members at 8.75% and 1 at 1.88%. Their mean household size is 4.95 or 5 members.

Factors Affecting the Achievement of Zero Open Defecation (ZOD) Program

The factors affecting the achievement of Zero Open Defecation (ZOD) program in the 16 barangays of Kabuntalan, Maguindanao were subdivided into three domains: financial aspect, availability of resources and waste disposal. These were done to determine the insights of the residents with regards to whether financial means, a lack of resources and hygiene practices can contribute to the outcome of the ZOD program in their barangay.

| Scale | Range | Description |
|-------|-------------|-------------------|
| 4 | 3.50 – 4.00 | Strongly Agree |
| 3 | 2.50 – 3.49 | Agree |
| 2 | 1.50 – 2.49 | Disagree |
| 1 | 1.00 – 1.49 | Strongly Disagree |

Table 2.a: Factors Affecting the Achievement of Zero Open Defecation (ZOD) Program in terms of Financial Aspect

| Factors Affecting the Achievement of ZOD Program in terms of Financial Aspect | Mean | SD | Interpretation |
|--|-------------|--------------|-------------------|
| 1. The household has an income of 5000 or more monthly. | 2.07 | 0.153 | Disagree |
| 2. The household has no income from any sources other than farming | 1.84 | 0.122 | Disagree |
| 3. The household has savings in preparation for constructing sanitary toilet. | 1.19 | 0.216 | Strongly Disagree |
| 4. The household has financial difficulties in regards with providing needed material for construction of sanitary toilet. | 3.81 | 0.123 | Strongly Agree |
| 5. Installation of toilets is affordable for the household. | 1.08 | 0.172 | Strongly Disagree |
| 6. The household are aware how much would it cost to construct a sanitary toilet. | 2.32 | 0.243 | Disagree |
| 7. There is a financial support from government agencies. | 1.88 | 0.142 | Disagree |
| 8. Every member of the household has an income monthly. | 1.35 | 0.129 | Strongly Disagree |
| 9. Every member of the household has work. | 2.30 | 0.127 | Disagree |
| 10. The household has competing priorities and credit issues. | 3.04 | 0.241 | Agree |
| Overall Mean | 2.09 | 0.167 | Disagree |

Table 2.a presents the factors affecting the achievement of Zero Open Defecation (ZOD) program in terms of financial aspect.

Majority of the residents strongly agreed that the households in their barangay have financial difficulties in regards with providing needed material for construction of sanitary toilet (highest mean at 3.81).

They also agreed that the household has competing priorities and credit issues (mean of 3.04)

On the other hand, they disagreed on statements that says about the

household being aware of how much would it cost to construct a sanitary toilet (mean at 2.32), that every member of the household has work (mean of 2.30), are having an income of 5000 or more monthly (mean at 2.07), that there is a financial support from government (mean of 1.88) and that the household has no income from any sources other than farming (mean of 1.84).

They also strongly disagreed on the notion that the every member of the household has an income monthly (mean at 1.35), that the household has savings in preparation for constructing sanitary toilet (mean of 1.19) and that installation of toilets is affordable for the household (lowest mean of 1.08).

Table 2.b: Factors Affecting the Achievement of Zero Open Defecation (ZOD) Program in terms of Availability of Resources

| Factors Affecting the Achievement of ZOD Program in terms of Availability of Resources | Mean | SD | Interpretation |
|--|-------------|--------------|-------------------|
| 1. There is a lack of labour force in constructing sanitary toilet. | 2.28 | 0.136 | Disagree |
| 2. The household has limited lot area in the barangay. | 1.58 | 0.280 | Disagree |
| 3. The household does not own the lot. | 1.26 | 0.144 | Strongly Disagree |
| 4. Materials needed in constructing toilet are not available in the area. | 3.92 | 0.138 | Strongly Agree |
| 5. Person to be contacted to access sanitation goods and services is known by the household. | 3.07 | 0.217 | Agree |
| 6. Sanitation goods and services preferred by the household are not available. | 3.92 | 0.135 | Strongly Agree |
| 7. The soil condition target for constructing sanitary toilet is not stable. | 1.31 | 0.127 | Strongly Disagree |
| 8. Materials needed in constructing toilet are hard to transport from its supplier. | 3.93 | 0.132 | Strongly Agree |
| 9. There is no one in the household are able to construct the sanitary toilet. | 2.23 | 0.157 | Disagree |
| 10. The household has tenancy issues making it a hindrance to construct sanitary toilet. | 1.14 | 0.214 | Strongly Disagree |
| Overall Mean | 2.46 | 0.168 | Disagree |

Table 2.b shows the factors affecting the achievement of Zero Open Defecation (ZOD) program in terms of availability of resources.

Most of the residents in Kabuntalan, Maguindanao strongly agreed that materials needed in constructing toilet are hard to transport from its supplier (highest mean at 3.93) and also that materials needed in constructing toilet are not available in their area as well as sanitation goods and services preferred by the household are not available (both with the highest mean at 3.92)

They have also agreed that the person to be contacted to access sanitation goods and services is known by the household (mean of 3.07).

On the other hand, they disagreed on statements that says that there is a lack of labour force in constructing sanitary toilet (mean at 2.28), that there is no one in the household able to construct the sanitary toilet (mean of 2.23) and that the household has limited lot area in the barangay (mean of 1.58)

They also strongly disagreed on the notion that the soil condition target for constructing sanitary toilet is not stable (mean at 1.31), that the household does not own the lot (mean of 1.26) and that the household has tenancy issues making it a hindrance to construct sanitary toilet (lowest mean at 1.14).

Table 2.c: Factors Affecting the Achievement of Zero Open Defecation (ZOD) Program in terms of Waste Disposal

| Factors Affecting the Achievement of ZOD Program in terms of Waste Disposal | Mean | SD | Interpretation |
|--|-------------|--------------|-------------------|
| 1. There is an active sanitation group in the area. | 1.00 | 0.125 | Strongly Disagree |
| 2. The household wastes are disposed in the river. | 1.83 | 0.132 | Disagree |
| 3. The household has no awareness towards the effect of open defecation to their health. | 1.85 | 0.138 | Disagree |
| 4. The household has a solid waste disposal practices. | 2.83 | 0.132 | Agree |
| 5. The household dumps waste within 10 feet perimeter of the house. | 2.83 | 0.239 | Agree |
| 6. The household preferred to use bush/rivers than a sanitary toilet. | 2.24 | 0.125 | Disagree |
| 7. The household believes that having sanitary toilet will make barangay better because they will not pollute the environment. | 3.19 | 0.126 | Agree |
| 8. The household has improved water supply coverage for the maintenance of cleanliness of sanitary toilet. | 2.09 | 0.129 | Disagree |
| 9. The household has awareness about the barangay resolution for proper waste disposal. | 3.48 | 0.126 | Agree |
| 10. The diapers of the children inside the household are buried in a landfill. | 2.83 | 0.421 | Agree |
| Overall Mean | 2.42 | 0.169 | Disagree |

Table 2.c shows the factors affecting the achievement of Zero Open Defecation (ZOD) program in terms of waste disposal.

Majority of the respondents have agreed that the household has awareness about the barangay resolution for proper waste disposal (highest mean at 3.48), believes that having sanitary toilet will make barangay better because they will not pollute the environment (mean of 3.19), has a solid waste disposal practices and dumps waste within 10 feet perimeter of the house as well as having the diapers of the children inside the household buried in a landfill (all with a mean of 2.83).

On the other hand, they disagreed on statements saying that the household preferred to use bush/rivers than a sanitary toilet (mean at 2.24), has improved water supply coverage for the maintenance of cleanliness of sanitary toilet (mean of 2.09), has no awareness towards the effect of open defecation to their health (mean at 1.85) and that the household wastes are disposed in the river (mean of 1.83).

Most of them also strongly disagreed on the perception that there is an active sanitation group in the area (lowest mean at 1.00).

Table 3: Problems Encountered by the Respondents towards Achievement of Zero Open Defecation (ZOD) Program

| Problems Encountered by the Respondents towards Achievement of Zero Open Defecation (ZOD) Program | f |
|---|------------|
| 1. Flood | 149 |
| 2. Safety Issues | 14 |
| 3. Transportation Problems | 39 |
| 4. Not enough funding | 46 |
| 5. No Income | 43 |
| 6. Lack Manpower | 29 |
| Total Responses | 320 |

This table reveals that problems encountered by the respondents towards achievement of ZOD program.

Majority of them have experienced flood or problem with the drainage (f = 149), has difficulties acquiring funds for the construction of the toilet (f = 46), have no income (f = 43), problems with transportation of needed materials for construction (f = 39), lack of manpower (f = 29) and also some safety issues (f = 14).

Table 4: Significant Relationship between the Demographic Profile of the Respondents and the Factors Affecting the Achievement of Zero Open Defecation (ZOD) Program

| Demographic Profile of the Respondents | Financial Aspect | | Availability of Resources | | Waste Disposal | |
|--|------------------|--------------|---------------------------|--------------|----------------|--------------|
| | p-value | Significance | p-value | Significance | p-value | Significance |
| Age | .002 | Significant | .001 | Significant | .003 | Significant |
| Sex | .003 | Significant | .021 | Significant | .002 | Significant |
| Educational Attainment | .001 | Significant | .001 | Significant | .007 | Significant |
| Occupation | .000 | Significant | .012 | Significant | .003 | Significant |
| Household Size | .004 | Significant | .004 | Significant | .006 | Significant |

Table 4 presents the relationship between the demographic profile of the respondents and factors affecting the achievement of Zero Open Defecation Program. To determine the correlation between the demographic profile of the respondents in terms of age, sex, educational achievement, occupation and household size and factors affecting the achievement of Zero Open Defecation Program in terms of financial aspect, availability of resources and waste disposal, Pearson-r was used at .05 level of significance.

Since all the p-values between the profile of the respondents in terms of age, sex, educational achievement, occupation and household size and factors affecting the achievement of Zero Open Defecation Program in terms of financial aspect, availability of resources and waste disposal are less than .05, then the null hypothesis that there is no significant relationship between the demographic profile of the respondents in terms of age, sex, educational achievement, occupation and household size and the factors affecting the achievement of Zero Open Defecation Program in terms of financial aspect, availability of resources and waste disposal is rejected and the alternative hypothesis that there is a significant relationship between the demographic profile of the respondents in terms of age, sex, educational achievement, occupation and household size and the factors affecting the achievement of Zero Open Defecation Program in terms of financial aspect, availability of resources and waste disposal is accepted.

Therefore, there is a significant relationship between the demographic profile of the respondents in terms of age, sex, educational achievement, occupation and household size and the factors affecting the achievement of Zero Open Defecation Program in terms of financial aspect, availability of resources and waste disposal.

Table 5: Significant Difference between the Factors Affecting the Zero Open Defecation Program and the Problems Encountered by the Respondents

| Factors Affecting the Zero Open Defecation Program | Problems Encountered by the Respondents | |
|--|---|--------------|
| | F-value | Significance |
| Financial Aspect | 22.31 | Significant |
| Availability of Resources | 24.28 | Significant |
| Waste Disposal | 27.44 | Significant |

Computed value: 18.24

Table 5 presents the significant difference between the factors affecting the Zero Open Defecation program in terms of financial aspect, availability of resources and waste disposal and the problems encountered by the respondents. To determine their significance, Analysis of Variance (ANOVA) was used.

Since all the F-values between the between the factors affecting the Zero Open Defecation program in terms of financial aspect, availability of resources and waste disposal and the problems encountered by the respondents are greater than the computed value of 18.24, then the null hypothesis that there is no significant difference between the factors affecting the Zero Open Defecation program in terms of financial aspect, availability of resources and waste disposal and the problems encountered by the respondents is rejected and the alternative hypothesis that there is a significant difference between the

factors affecting the Zero Open Defecation program in terms of financial aspect, availability of resources and waste disposal and the problems encountered by the respondents is accepted.

Therefore, there is a significant difference between the factors affecting the Zero Open Defecation program in terms of financial aspect, availability of resources and waste disposal and the problems encountered by the respondents.

4. DISCUSSION

Profile of the Respondents

In terms of profile of the respondents, many of the selected residents in the 16 barangays of Kabuntalan, Maguindanao, are between the ages 31 – 40 years old with a mean age of 39 years old, female, attained high school level of education, working as farmers and have a mean household size of 5 members.

Factors Affecting the Achievement of Zero Open Defecation (ZOD) Program

With regards to the factors affecting the achievement of Zero Open Defecation (ZOD) program in terms of financial aspect, majority of the residents strongly agreed that the households in their barangay have financial difficulties in regards with providing needed material for construction of sanitary toilet. They also agreed that the household has competing priorities and credit issues. On the other hand, they disagreed on statements that says about the household being aware of how much would it cost to construct a sanitary toilet, that every member of the household has work, are having an income of 5000 or more monthly, that there is a financial support from government and that the household has no income from any sources other than farming. They also strongly disagreed on the notion that every member of the household has an income monthly, that they have savings in preparation for constructing sanitary toilet and that installation of toilets is affordable for the household.

In terms of availability of resources, most of the residents in Kabuntalan, Maguindanao strongly agreed that materials needed in constructing toilet are hard to transport from its supplier and that materials needed in constructing toilet are not available in their area as well as sanitation goods and services preferred by the household are not available. They have also agreed that the person to be contacted to access sanitation goods and services is known by the household. On the other hand, they disagreed on statements that say that there is a lack of labor force in constructing sanitary toilet, that there is no one in the household able to construct the sanitary toilet and that the household has limited lot area in the barangay. They also strongly disagreed on the notion that the soil condition target for constructing sanitary toilet is not stable, that the household does not own the lot and that the household has tenancy issues making it a hindrance to construct sanitary toilet.

In terms of waste disposal, majority of the respondents have agreed that the household has awareness about the barangay resolution for proper waste disposal, believes that having sanitary toilet will make barangay better because they will not pollute the environment, has a solid waste disposal practices and dumps waste within 10 feet perimeter of the house as well as having the diapers of the children inside the household buried in a landfill. On the other hand, they disagreed on statements saying that the household preferred to use bush/rivers than a sanitary toilet, has improved water supply coverage for the maintenance of cleanliness of sanitary toilet, has no awareness towards the effect of open defecation to their health and that the household wastes are disposed in the river. Most of them also strongly disagreed on the perception that there is an active sanitation group in the area.

Problems Encountered by the Respondents towards Achievement of ZOD Program

The problems encountered by the respondents towards achievement of ZOD program includes flood or problem with the drainage, difficulties acquiring funds for the construction of the toilet, having no income, problems with transportation of needed materials for construction, lack of manpower and also some safety issues.

Significant Relationship between the Demographic Profile of the Respondents and the Factors Affecting the Zero Open Defecation Program

There is a significant relationship between the demographic profile of the respondents in terms of age, sex, educational attainment, occupation and household size and the factors affecting the achievement of Zero Open Defecation Program in terms of financial aspect, availability of resources and waste disposal.

Significant Difference between the Factors Affecting the Zero Open Defecation Program and the Problems Encountered by the Respondents

There is a significant difference between the factors affecting the Zero Open Defecation Program in terms of financial aspect, availability of resources and waste disposal and the problem encountered by the respondents

This study aims to determine the different factors affecting the achievement of Zero Open Defecation in the 16 Barangays of Kabuntalan Maguindanao. To accomplish this, the study used the quantitative and qualitative research design. The study was conducted in 16 Barangays of Kabuntalan Maguindanao and the researchers selected 320 residents to participate. The study utilized the random sampling technique and that it used a researcher-made survey instrument to gather data that is composed of their demographic profile, factors affecting the achievement of Zero Open Defecation (ZOD) program ZOD as well as an open-ended question regarding the problems encountered by the respondents towards achievement of ZOD program. Frequency distribution and percentage were used for the analysis of the profile, mean and standard deviation for the factors affecting the achievement of Zero Open Defecation (ZOD) program and Pearson-r for the relationship between the demographic profile of the respondents and the factors affecting the achievement of Zero Open Defecation (ZOD) program while ANOVA was used for the difference between the factors affecting the Zero Open Defecation program and the problems encountered by the respondents.

Major Findings of the Study

Based on the data presented, analyzed and interpreted, the following are the major findings of the study:

1. In terms of profile of the respondents, many of the selected residents in the 16 barangays of Kabuntalan, Maguindanao, are between the ages 31 – 40 years old with a mean age of 39 years old, female, attained high school level of education, working as farmers and have a mean household size of 5 members.
2. With regards to the factors affecting the achievement of Zero Open Defecation (ZOD) program in terms of financial aspect, majority of the residents strongly agreed that the households in their barangay have financial difficulties in regards with providing needed material for construction of sanitary toilet. They also agreed that the household has competing priorities and credit issues. On the other hand, they disagreed on statements that says about the household being aware of how much would it cost to construct a sanitary toilet, that every member of the household has work, are having an income of 5000 or more monthly, that there is a financial support from government and that the household has no income from any sources other than farming. They also strongly disagreed on the notion that every member of the household has an income monthly, that they have savings in preparation for constructing sanitary toilet and that installation of toilets is affordable for the household.

In terms of availability of resources, most of the residents in Kabuntalan, Maguindanao strongly agreed that materials needed in constructing toilet are hard to transport from its supplier and that materials needed in constructing toilet are not available in their area as well as sanitation goods and services preferred by the household are not available. They have also agreed that the person to be contacted to access sanitation goods and services is known by the household. On the other hand, they disagreed on statements that say that there is a lack of labor force in constructing sanitary toilet, that there is no one in the household able to construct the sanitary toilet and that the household has limited lot area in the barangay. They also strongly disagreed on the notion that the soil condition target for constructing sanitary toilet is not stable, that the household does not own the lot and that the household has tenancy issues making it a hindrance to construct sanitary toilet.

In terms of waste disposal, majority of the respondents have agreed that the household has awareness about the barangay resolution for proper waste disposal, believes that having sanitary toilet will make barangay better because they will not pollute the environment, has a solid waste disposal practices and dumps waste within 10 feet perimeter of the house as well as having the diapers of the children inside the household buried in a landfill. On the other hand, they disagreed on statements saying that the household preferred to use bush/rivers than a sanitary toilet, has improved water supply coverage for the maintenance of cleanliness of sanitary toilet, has no awareness towards the effect of open defecation to their health and that the household wastes are disposed in the river. Most of them also strongly disagreed on the perception that there is an active sanitation group in the area.

3. The problems encountered by the respondents towards achievement of ZOD program includes flood or problem with the drainage, difficulties acquiring funds for the construction of the toilet, having no income, problems with transportation of needed materials for construction, lack of manpower and also some safety issues.

4. There is a significant relationship between the demographic profile of the respondents in terms of age, sex, educational attainment, occupation and household size and the factors affecting the achievement of Zero Open Defecation Program in terms of financial aspect, availability of resources and waste disposal.
5. There is a significant difference between the factors affecting the Zero Open Defecation program in terms of financial aspect, availability of resources and waste disposal and the problems encountered by the respondents.

5. CONCLUSION

Financial aspects, availability of resources and waste disposal can really affect the achievement of Zero Open Defecation Program in the 16 barangays of the municipality of Kabuntalan especially if majority of the households in a barangay have financial difficulties in regards with providing needed material for construction of sanitary toilet, does not perceive installation of toilets as affordable, have experienced problems with the transportation and accessibility of materials needed for construction toilets as well as not having active sanitation group in the area. Fortunately, the residents in the 16 barangays of Kabuntalan, Maguindanao has an awareness about the barangay resolution for proper waste disposal.

In this condition, problems encountered by the respondents towards achievement of ZOD program also include drainage, safety, transportation, not enough funding and lack of manpower resources.

The study also showed a significant relationship between the demographic profile of the respondents in terms of age, sex, educational attainment, occupation and household size and the factors affecting the achievement of Zero Open Defecation Program in terms of financial aspect, availability of resources and waste disposal and also a significant difference between the factors affecting the Zero Open Defecation program in terms of financial aspect, availability of resources and waste disposal and the problems encountered by the respondents.

6. RECOMMENDATIONS

Based from the findings and conclusion of this study, the following are strongly recommended:

1. Households should have enough savings in preparation for constructing sanitary toilets.
2. Every member of the household, if possible, should have an income monthly to defray household expenses.
3. Cooperatives may be organized for the Installation of toilets to be made more affordable to the households.
4. The government, through the National Housing Authority and PAG-IBIG Fund should help each household able to afford their own house and lot.
5. The Department of Agriculture should also help in soil analysis to determine whether soil condition is stable enough before constructing sanitary toilet.
6. An active sanitation group should be organized in the area for monitoring and quality control.
7. Drainage system should be built with the aid of the Department of Public Works and Highways.
8. For easy access to work and procurement of supplies, public transportation should be made available through the help of the local government units.
9. To beef up the manpower resources, the neighbours should be organized and instill to them the spirit of bayanihan in construction of toilets.

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