

STUDY ON HEALTH STATUS AND SOLID WASTE MANAGEMENT PERCEPTION ATTITUDES

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ABSTRACT

Solid waste management has become an overwhelming errand for metropolitan and area specialists who appear to do not have the capacity and coordinations to manage the raising waste circumstance. This paper inspected inhabitants' perceptions and attitudes towards metropolitan solid waste management in the Berekum Municipality. Utilizing an overview poll and top to bottom meeting guide, data was accumulated from haphazardly chose family respondents and three purposively chose key foundations. The Theory of Planned Behavior which gives a system to studying human conduct guided the study. The study found that inhabitants perceived solid waste management as a significant issue. It was likewise uncovered that occupants don't right now pay for waste management administrations delivered to them. Procedures to address solid waste issue should think about satisfactory flexibly of holders, escalated public training and presentation of client expenses for waste management administrations.

1. INTRODUCTION

Environmental issues have pulled in the consideration everywhere on the world. Individuals are getting progressively aware of assortment of issues like an unnatural weather change, air, water and land contamination. The greater part of the environmental issues could be brought about by artificial contamination which harms normal assets, yet in addition its impact is likewise perilous. Human exercises make waste, and it is the manner in which these waste are dealt with, put away, gathered and discarded which can present dangers to the environment and public health. Waste removal is a quick and basic issue for the network now and insufficient or flippant removal of solid waste dirties the environment and posture health danger to public. Waste management advancements like land filling and cremation are not a total answer for this issue. Nobody needs a waste management site in their neighborhood. It is typical information that waste is only helpful material at wrong spot. There is no material in this world, which isn't

helpful in single direction or the other. Additionally there is no material, which is made from nothing. It is man's obliviousness that he thinks about specific things as waste and certain other thing as helpful. Similarly as kinds of wastes are changing, so should the demeanor of individuals towards waste must change. Individuals must understand that the arrangement lies in utilizing waste as an asset instead of to be annihilated.

The World Bank (1992) distinguished solid waste as one of the three significant environmental issues looked by most districts in Malaysia. The measure of waste produced keeps on expanding because of developing populace and expanding utilization. The measure of solid waste produced went up from 17,000 tons every day in 2002 to 19,100 tons in 2005, a normal of 0.8 kilogram per capita every day. In Kuala Lumpur waste age is around 3,000 tons per day and estimates show that this will increment further in coming years. Present day way of life has prompted more intense waste issues, accommodation items by and large require additionally bundling, reckless propensities related with more prominent fortune lead to more noteworthy amounts of waste, as shown by disposed of coverings from the unavoidable inexpensive food outlet, and the advanced waste contains a higher extent of non-degradable materials, for example, plastics. The waste comprises of 45% food waste, 24% plastic, 7% paper and 6% iron. Around 95-97% of waste gathered is taken to landfill for removals. The staying waste is sent to little burning plants, redirected to recyclers/re-processors or is unloaded unlawfully.

Waste age has become a common circumstance in the lives of each human being. Wastes have a bunch of definitions, there are characterized as things we don't have use for and should be disposed of. It very well may be characterized as materials that may have no financial worth or any item or materials that the proprietor no longer considers of adequate incentive to hold. Some of the time waste is things we have that the law expects us to dispose of on the grounds that they can get destructive. Waste management for the most part identifies with a wide range of arranged exercises worried about the correct taking care of and removal of waste from the purpose of age to the point of conclusive removal. Waste can be created during the extraction of crude materials, the preparing of crude materials into halfway and completed items, the utilization of definite items, or other human exercises including city (private, foundation, business, agrarian, and unique (health care, family risky waste, sewage ooze).

Mentality then again has to do with individuals' mien or response to circumstance, occasion or individual, demeanor could be portrayed as negative or positive, tepid or warming, fortunate or unfortunate, inviting or repelling. The way the occupant's metropolitan focuses see the waste they produce during their business, institutional or homegrown exercises leaves more to be

wanted. Human health has to do with the consequence of the communication among humans and the waste stored on the environment and how these will in general impact their prosperity. Studies have indicated that there are immediate association between human health and waste removal, most network sickness and ailments are credited to the nature of environment man lives. Illness conditions like intestinal sickness, looseness of the bowels, diarrhea, typhoid, cholera among others are viewed as being brought about by the environmental conditions where man gets himself. Since wholistic health is upheld by World Health Organization (WHO), sterile strategy for waste removal is significant in tending to physical, natural, concoction and socio-social variables in the environment that may unfavorably affect on the health status of inhabitant of Calabar South Local Government Area just as it environment.

1.1 SOLID WASTE MANAGEMENT

Expanding populace, urbanization, industrialization and changing utilization designs in a creating world are bringing about the age of expanding measures of solid waste and expansion of the sorts of the solid waste produced. Solid waste is the most obvious environmental issue among numerous metropolitan territories. Expanded solid waste age makes more environmental issues, the same number of urban communities can't oversee it because of institutional, administrative, budgetary, specialized, and public investment deficiencies. There is a need to rehearse coordinated solid waste management approach, for example, Incorporation of more environmental and monetary benevolent ideas of source partition; recuperation of waste; legitimization of the casual frameworks; fractional privatization and public support. Albeit a few governments have detailed strategies for environmental insurance, they were just executed in the public capital urban communities. In numerous metropolitan territories, open unloading is as yet thought about the most well known strategy for solid waste removal.

1.1.1 Impact of Solid Wastes

Unfavorable environmental effects from ill-advised solid waste management are established in lacking assortment, recuperation of recyclable and removal of wastes. These effects are likewise because of unseemly area, plan, activity, or support of dumps and landfills. Ill-advised waste management exercises are related with the accompanying environmental effects:

1.1.2 Threats to Public Health

Spoiling natural materials present incredible public health dangers and fill in as favorable places for ailment vectors. Waste handlers and waste pickers are the most weak individuals. They might

be presented to vectors which send maladies when human or creature excreta or clinical wastes are in the waste stream. In ghetto territories where dumpsite is arranged or a landfill is wrongly worked, avalanches or fires ordinarily crush homes and harm occupants. The collection of waste along roads may introduce physical perils, stop up channels and cause limited flooding.

2. ISSUES ON WASTE MANAGEMENT

This part of the paper talks about the reasonable issues engaged with solid waste management, covering issues, for example, perceptions, attitudes and waste management; ability to-pay for waste management and; calculated system that educated the study.

2.1 PERCEPTIONS, ATTITUDES AND WASTE MANAGEMENT

Discernment is the essential cycle by which human creatures acquire information on the world. It includes the activities of our sense organs (sight, hearing, contact, taste and smell) in reacting to outside incitement. Perceptions are impacted by our insight, assets, convictions, qualities and standards however can be made without understanding and information on the article or individual. Ajzen and Fishbein (1980), portray disposition toward an idea as an overall sentiment of favourableness or unfavourableness for the idea by an individual or gathering of people. Schultz and Zelezny (2000), characterize disposition by considering environmental concerns. They depict it as the profound established idea in an individual's self with a view of the level of holding among self and the environment. Disposition goes about as a significant forerunner to the conduct aim which is depicted as the level of great or ominous assessment of the conduct under study. Warner (2006) fights that there is no correct mentality aside from inside a specific social setting. However, even inside a similar culture, our conduct can be affected by various components and these create after some time. Consequently, an individual ready to show a particular conduct may embrace the money saving advantage investigation as a result of the activity attempted. Ajzen (1991) accentuated that uplifting mentality towards a specific conduct reinforces the goal to play out that conduct.

Demeanor has been discovered to be a significant indicator in clarifying expectation or conduct towards solid waste management and the relationship are noteworthy. Attitudes might be emphatically affected through mindfulness building efforts and training about the negative parts of insufficient waste assortment concerning public health and environmental conditions. Such instruction ought to likewise advise individuals regarding their duty as waste generators and of their privileges as residents to satisfactory solid waste management administrations. Vicente and Reis (2008) has uncovered that mentality towards waste reusing has positive impact on the

interest of family units. Goh, Tong and Ahmed (2013) additionally gave experimental proof that attitudes were found to have directing impact on expectation to reuse waste in Malaysia. In this way, the plan and usage of civil solid waste management framework require an investigation of existing conduct of key partners, including their attitudes, perceptions, and qualities. The hidden attitudes of the metropolitan populace are themselves affected by the social and social settings. Projects to scatter information and abilities or to improve standards of conduct and attitudes with respect to waste management depend on sound comprehension of the social and social attributes of the individuals.

2.2 WILLINGNESS-TO-PAY FOR WASTE MANAGEMENT

City solid waste management is a basic aspect of the wide metropolitan and environmental management of a city. To boost the productivity and viability of interests in this sub-division, the full scope of solid waste activities and the related environmental, institutional, and monetary issues must be tended to (Bernstein, 2004). Willingness-to-pay (WTP) for waste management administrations or offices is essential to the accomplishment of the private area's interest in the civil solid waste management program. The eagerness to pay or not to pay could have direct effect (positive or negative) on the adequacy of any solid waste management system. The inquiry thusly has to do with the financial matters of family waste management, particularly, in a creating economy like Ghana. Various models have been proposed on this issue. One of the models was proposed by Linderhof, Kooreman, Allers and Wiersman (2001) who put together family waste assortment accuses of respect to weight-based evaluating in Oostzaan, Holland, where the ideal charges for family waste assortment was equivalent to the immediate asset costs in addition to outside environmental expenses. Such a valuing can't be utilized in creating nations where the real volume of family unit waste emerging isn't known.

Regularly, charges for family waste assortment by government depend on direct charges of family. The sum to be paid by family units for their own waste expulsion did not depend on the volume of the waste produced but instead on the area and kind of family unit. In a study on family units' WTP for improved solid waste management benefits by Mariwah, et al (2010), the greater part (57%) of the respondents in the Shama-Ahanta-East Metropolitan Area of Ghana were not ready to pay for waste management administrations. Reasons given by the respondents included poor existing administrations and installment of charges. A comparable study by Ojok, Koech, Tole and OkotOkumu (2012) found that not exactly half (48%) of families in Kampala were WTP for improved solid waste management administrations. Wang, He and Kamata (2011)

led financial investigation of civil solid waste management in Eryuan, situated in Yunnan Province, China.

Their examination demonstrated that the most unfortunate families in Eryuan, as a rule, are not just ready to pay more than the rich families. In a study on metropolitan families' WTP for improved solid waste removal administrations in Kumasi Metropolis, Ghana, Dadson, Shaibu and Godfred (2013) found that 57 percent of occupants were eager to pay for improved administrations. Reasons progressed by these who were reluctant to pay incorporated the nonattendance of waste management specialist organizations in the territory and the way that is the duty of the legislature to pay for waste management. At the point when it is seen that waste management is the obligation of the administration individuals won't be WTP for waste management administrations delivered to them. It, hence, profits specialists to give sharp consideration to issues emerging from the management of solid waste and set up measures to address such issues.

2.3 SURFACE AND GROUNDWATER POLLUTION

Metropolitan solid waste streams can debase ground and surface water with harmful material, substantial metals and pathogenic life forms through leachate. Leachate is the fluid release of dumps and landfills, made out of spoiled natural waste, fluid wastes, invaded water and concentrates of solvent materials. When it arrives at the base of the dumpsite or an impermeable layer inside the landfill, drain ate either makes a trip along the side to a point where it releases to the ground's surface as a leak.

2.4 AIR AND ATMOSPHERIC POLLUTION

At the point when natural waste is arranged off in open dumps, they go through anaerobic debasement and become critical wellsprings of methane, a gas with multiple times the impact of carbon dioxide in catching warmth in the climate. Consuming of trash makes thick smoke that contains carbon monoxide, sediment and nitrogen oxides, which are all unsafe to human health and corrupt metropolitan air quality. Ignition of polyvinyl chlorides (PVCs) and emanation of Volatile Organic Compounds (VOCs) creates profoundly cancer-causing dioxins and might build malignant growth dangers to nearby networks.

2.5 ECOSYSTEMS DAMAGE

At the point when solid waste is unloaded into waterways or water streams it can change sea-going territories and mischief local plants and creatures. The high supplement content in natural wastes can drain the broke up oxygen in water bodies, denying oxygen to fish and other amphibian living thing. Solids can cause sedimentation and change stream and base environments. Current waste management rehearses in creating nations of finding dumps in touchy environments may wreck or altogether harm these important common assets and the administrations they give.

3. SOLID WASTE MANAGEMENT AND OCCUPATIONAL HEALTH

The effect of poverty and all the more explicitly, wide salary holes inside metropolitan bases on the world has been unquestionably one of the significant difficulties looked by governments at neighborhood levels. Populace development has exacerbated these difficulties, yet has additionally prompted unfavorable increments in waste creation. There are expected dangers to environment and health from inappropriate treatment of solid wastes. Direct health hazards concern for the most part the workers in this field, who should be secured, beyond what many would consider possible, from contact with wastes. There are likewise explicit dangers in dealing with wastes from medical clinics and centers. For the overall population, the principle dangers to health are aberrant and emerge from the rearing of infection vectors, principally flies and rodents.

The most evident environmental harm brought about by civil solid wastes is tasteful, the grotesqueness of road litter and corruption of the metropolitan environment and excellence of the city. More genuine, notwithstanding, and regularly unrecognized, is the exchange of contamination to water, ground water. Air contamination can be caused from the wasteful consuming of wastes, either in outside, or in plants that need compelling treatment offices from the vaporous effluents.

Uncontrolled risky wastes from ventures stirring up with city wastes make expected dangers to human health. Car crashes can result from poisonous spilled wastes. There is explicit peril of convergence of hefty metals in the evolved way of life, a difficult that delineates the connection between city solid wastes and fluid mechanical effluents containing substantial metals released to a seepage/sewerage framework and/or open unloading destinations of city solid wastes and the wastes released in this manner keeps up an endless loop. City Solid Waste Management System includes different exercises like stockpiling, assortment, transportation, removal and so forth.

These exercises regardless of whether appropriately controlled and with legitimate careful steps embraced, may have antagonistic effect ashore, water and air environment, human and environmental health, style and personal satisfaction.

3.1HEALTH IMPACT ASSESSMENT AMONG CLEANING WORKERS

Epidemiological examinations have indicated that a high level of workers who handle deny, and of people who live close or on removal destinations, are contaminated with gastrointestinal parasites, worms and related living beings. Tainting of this sort is likely at all focuses where waste is dealt with. Despite the fact that it is realized that vector creepy crawlies and rodents can send different pathogenic specialists (amoebic and bacillary loose bowels, typhoid fever, salmonellosis, different parasites, cholera, yellow fever, plague and others), it is regularly hard to follow the impacts of such transmission to a particular populace.

During the most recent decade of the nineteenth century just as during the five beginning long stretches of twentieth century, a large number of individuals passed on because of Bubonic Plague in India, which had linkages to helpless management of Solid Waste. All the more as of late a study by the US Public Health Service has exhibited the relationship of 22 human illnesses to ill-advised solid waste management. The natural portion of Municipal Solid Waste is a significant segment, not just in light of the fact that it comprises a sizable division of the solid waste stream, yet additionally due to its possibly unfavorable effect upon public health and environmental quality. A significant unfriendly effect is because of its fascination of rodents and vector bugs for which it gives food and safe house. Effect on environmental quality appears as foul scents, unattractiveness, land, water, air and commotion contamination. These effects are not limited just to the removal site. Actually, they infest the territory encompassing the site and any place the wastes are created, spread or amassed.

Except if a natural waste is suitably dealt with, its unfavorable effect will proceed until it has completely deteriorated or in any case balanced out. Uncontrolled or inadequately oversaw halfway decay items can taint air, water and soil assets. Most advancement exercises are required to beneficially affect human health by expanding the assets accessible for food, training, business, water flexibly, disinfection and health administrations. Appropriate management of metropolitan solid waste ought to effectsly affect environment and health impacts.

3.2 ENVIRONMENTAL AND HEALTH IMPACT ASSESSMENT

The noteworthiness of Environment and Health Impact Assessment is pointed toward improving the data uphold for legitimate management of civil solid waste. Inconsistent assortment and quick decay of wastes give an appealing taking care of and rearing site for flies, rodents and different foragers. Human and creature waste or emergency clinic wastes are frequently blended in with the deny and 'vectors and microbes' increase in a positive environment. Homegrown and every so often mechanical, solid wastes are discarded in open spaces inside neighborhoods.

Assortment and removal of reject can expend up to 50 percent of a city working financial plan. In numerous generally great frameworks, just 50-70 percent of the decline is routinely gathered. The issue is authoritative as opposed to specialized. Reject removal is regularly a non-benefit making business and hence is treated as an undesirable symptom of advancement. Consideration ought to be paid to capacity, assortment, transport, and moderate exchange to mass vehicle and last removal.

In numerous spots waste recuperation is a significant disorderly private industry utilizing a huge number of scroungers who may live or deal with deny dumps. They are alluded to as human scroungers or waste pickers and are oftentimes disregarded in metropolitan task plans despite the fact that their exercises might be indispensable to the life of the city. Many comprise of surrendered kids and dejected families. They live and work under broad health hazards, which are generally not archived, and endure extreme misuse and hardship. Conceivable health perils incorporate raised degrees of baby mortality, hand and leg wounds, intestinal and respiratory diseases, eye contaminations, lower back agony, hunger, skin issues and introduction to risky waste. Water flexibly, for drinking and washing, and sterilization offices are generally poor at dumpsites. Health and government assistance offices are required. Waste authorities may make a considerable commitment to metropolitan waste management. Eyewitnesses concur that the issue of waste gatherers can't be dodged. Their positive part in the management of metropolitan solid waste ought to be perceived and their parcel improved.

4. CONCLUSION

The study inspected the information, attitudes, mindfulness status and conduct and work on concerning solid waste management (SWM) among first year understudies. The study indicated that the respondents' conduct and practice they take part in waste management is on the grounds that they esteem cleanliness and they need to moderate the conceivable illness events. Nonetheless, it is clear that there is the need to build up understudy's attitudes and readiness to

lessen issues identified with SWM. Respondents perceived that accomplishing a reasonable waste management is a joint duty of the legislature and its locale individuals. The significant proposals of the study are the necessities to invest more energy into raising understudies' mindfulness by mindfulness crusades that can achieve impressive changes in the demeanor and view of them towards SWM.

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