



THE CRITICAL ROLE OF A HYGIENIC ENVIRONMENT IN PROMOTING ZIM-ASSET GOALS IN ZIMBABWE BEYOND 2018: THE CASE OF HARARE URBAN

Makoni, EK¹, Mutswanga, P² & Chivasa, N³

¹ Medical Student, Department of Medicine, Kursk Medical State University, Kursk, Russia.

² Lecturer, Department of Disability Studies and Special Zimbabwe Open University (ZOU), Harare, Zimbabwe.

³ Department of Peace, Leadership and Conflict Resolution at Zimbabwe Open University, Harare, Zimbabwe.

ABSTRACT

The purpose of this study is to identify the negative impacts of littering and its associated health risks imposed on the Zimbabwean community. The hypothesis of the research is based on the hands of the human being which are both constructive and destructive. The same hands that keep us health and clean are the same hands that throw litter all over and fail to pick it up. A health environment is best achieved at primary level, that is the community rather than at tertiary level, that includes health professionals, environmentalists and various government ministries. This study reveals how minor hygienic practices of the community which are often overlooked play a greater role towards attaining efficient sanitation and proper waste management which are the initial steps to prevent the spread of pathogens, a usual source of deadly communicable diseases and others in the community at large. This qualitative research was carried out with a view to find out how best people of Harare could contribute to Zim-Asset goals of development through a litter-free environment. Point of saturation determined the study sample and in-depth interviews were employed to collect data from street individuals who were interested in taking part in the study. The study recommended that community/village health workers should play an active role in making people desist from littering practices and the government was urged to develop policies that sanction severe penalties to people who breached littering laws. City Fathers were also to avail well labelled bin for the trash and recycled wastes. The study noted that families and schools seemed to not to active socialise children into hygienic practices as proposed by the principles of African indigenous practices. Thus, schools were urged to revisit their hygienic education and practices with a view to promote Zimbabwe achieve its development plans.

KEYWORDS: Hygienic Environmental Practices, Critical Role, Promote Zim-Asset Goals, Zimbabwe



BACKGROUND TO THE STUDY

In both rural and urban areas in Zimbabwe, there is a marked malpractice of personal and domestic hygiene which has predisposed the community to a high risk of acquiring various diseases, both communicable and non-communicable. The majority of the litter-associated diseases affecting the Zimbabwean community are infectious and/or communicable. The main methods of transmission are via direct (person to person) contact and indirect contact through insect vectors, food contamination and many other means which are not the focus of this study.

Since independence, the Zimbabwean government has advocated for the rural household sanitation and primary water source management. The strategy was effective till the point the country was hit by an inevitable economic crisis. In recent years various organisations such as UNICEF, WASH (Water, Sanitation and Hygiene), NAC (National Action Committee), PPHE (Participatory Health and Hygiene education), MoHCW (Ministry of Health and Child welfare) have all advocated for maintenance of proper sanitation and hygiene. Most of the awareness programs have been more generalised on the importance of safe drinking water, building and use of toilets in rural areas to prevent open defecation, washing of hands with soap after use of the toilet and before food consumption. A lot of information has been disseminated pertaining the effects of human excreta, associated pathogens and excreta-related infections. While on the other hand, less emphasis and awareness has been channeled towards the impacts of improper management of solid waste/litter and the major role of the human being in litter disposal. As cited by many health advocates education plays a greater role in achieving proper sanitation and hygiene management and yet with a literacy rate of approximately 90% in Zimbabwe, we still find litter all over the places, especially in large cities where the majority of the well-educated and civilized people reside.

Currently the Zimbabwean government has implemented Zim-Asset so as to avert the economic crisis and empower the community in all aspects of life. In a way Zim-Asset advocates for indigenisation and productive use of time which can only be effectively achieved with a health community. Thus health is important for Zim-Asset to achieve its goals.

Hygiene forms the primary basis of health maintenance. Hence in the event of hygienic malpractices, we will have a community of unhealthy people resulting in zero production and a drastic decline of indigenisation which involves the key participation of the community through hand to hand work requiring a healthy body and mind for positive results. Therefore unhygienic practices which directly affect the health of the community also indirectly cause negative impacts on the level of productivity in the country, which in-turn can accelerate an uncontrollable economic downturn.

RESEARCH QUESTIONS

- 1) Which types of litter are commonly found on most environments in Zimbabwe?
- 2) Why do people throw litter all over the places?
- 3) How does litter impact on people and their environments?
- 4) What is the critical role of a hygienic environment in promoting Zim-Asset goals in Zimbabwe beyond 2018?
- 5) What could be done to control throwing and dumping of litter anywhere?

SIGNIFICANT OF THE STUDY

The study aims to make people revisit their living and hygienic habits or behaviours with view to reinforce behaviours that encourage placement of litter in bins, appropriate recycle bags, and the habit of picking up or courage of reprimanding others to place their litter in bins. To make policy makers revisit their environmental and hygienic habits deliberately revise exciting policies using informed findings from current ongoing studies.

RELATED LITERATURE REVIEW

Conceptual framework:-

Indigenous knowledge systems (IKS) is the knowledge used by local people to make a living in a Particular environment (Warren, 1991). It can also be defined as a body of knowledge built up by a group of people through a generations of living in close contact with nature (Johnson, 1992).

Generally such knowledge evolves in the local environment where it is specifically adapted to the requirements and conditions of the local people. The knowledge is creative and constantly experimental. It may in some instances incorporate outside influences and inside innovations to meet new conditions. Literature forwarns us that it is a

mistake to think of indigenous knowledge systems as old fashioned, backward, static or unchanging. Indigenous people are the original inhabitants of a particular geographic location who have a culture and belief system or knowledge possessed by any group of people living in an area for a long period. It is important to learn how people view and interact with the environment in order that their knowledge can be mobilized. It includes the social, political, economic and spiritual aspects and way of life of a group.

IK is embedded in a dynamic system in which spiritually, kinship, local politics and other factors are tied together and influence one another. Researchers should be prepared to examine any other aspects of a culture that may play an important role in shaping the IK in question. There are two basic reasons why it is important for research to consider IK when carrying out research projects. First and foremost incorporating IK into research projects can contribute to local empowerment and development increasing self sufficiency and strengthening self determination (Thrupp,1989). Utilizing IK in research projects and management plans gives legitimacy and credibility in the eyes of both local people and outside societies, increasing cultural pride and the motivation to solve local problems with local ingenuity and resources promotes local capacity.

Zim-Asset Goals:-

In pursuit of the a new trajectory of accelerated economic growth and wealth creation where every person is expected to contribute whether disabled or not disabled, the government of Zimbabwe formulated a new plan known as the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (Zim Asset). The goals are proposed to be anchored by indigenization, empowerment and employment creation which is to be proffered by the judicious exploitation of Zimbabwe's human and natural resources. This agenda is built around 4 strategic clusters namely:

- ✧ Food Security and Nutrition
- ✧ Social Services and Poverty Eradication
- ✧ Infrastructure and Utilities and
- ✧ Value addition and Beneficiation.

Zimbabwe, according to Government of Zimbabwe (2013) experienced a deteriorating economic and social environment since 2000 caused by illegal economic sanctions imposed by the Western countries.

To buttress the aforementioned clusters this study is guided by the principles of African Indigenous Knowledge Systems (IKS). The term *indigenous* refers to phenomena not generally found in African cultures but also in Western cultures. Thus IKS are a product of traditions and cultures of African or Western background but it is a misnomer to consider IKS to only make references Africans (Berry, Poortinga, Segall and Dasen, 1996). All knowledge has some background information from which it is developed thus this study is guided by the African IKS

The Study locality:-

This study was carried out in Harare which happens to be the capital city of Zimbabwe. The name Harare was derived from the name of one of the colonial township which was nicknamed *Harari* (one who does not sleep) which has now come to be popularly known as *Mbare Township* (Makwarimba, 1994, p.40). Zimbabwe has 10 administrative provinces as shown on the map below. Of these 10 provinces, Harare province was chosen because almost all forms of social transition of Shona life have been experienced there since the 1890s.

The capital city, Harare, formerly Fort Salisbury was found on 12 September 1890 by Cecil John Rhodes, who named the country (Rhodesia) after his name. Fort Salisbury obtained its urban status in 1907 (p.6, 13) See map 1 below). After independence, Harare province (map 1 below) was divided into four census districts which are Harare rural, Chitungwiza, Epworth and Harare urban according to the 2002 census report. The population for each district is as shown on map 1 below. Harare urban has the largest population with (1435 784) 76%, Chitungwiza has (323 260) 17%, Epworth (114 067) 6% and Harare rural 23 023 (1.0%) (UNICEF, 2004, p.6)

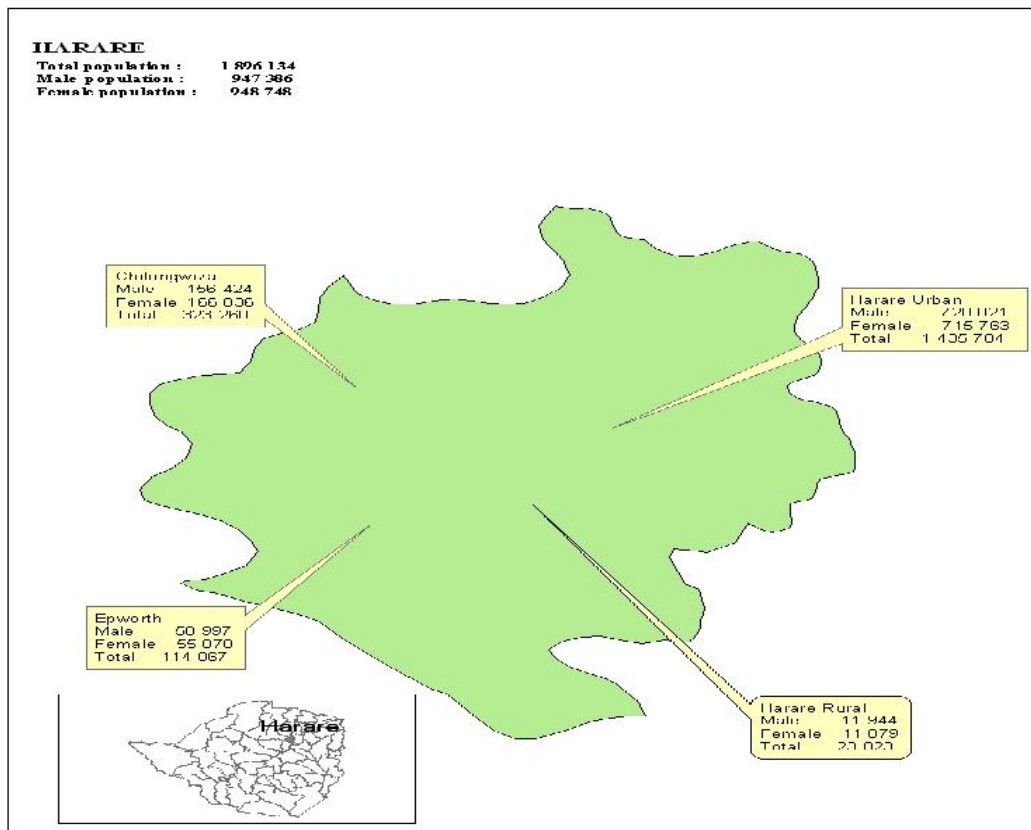
Social problems commonly identified in the city of Harare include but not limited to urban poverty, unemployment, rapid and uncontrolled growth of the informal sector (*musika mutema*) and street kids. Rubington and Weinberg (2003, p.4) define a social problem as "an alleged situation that is incompatible with the values of a significant number of people who are agree that action is needed to alter the situation." Kendall (2001, p.4) describe a social problem as "a social condition or pattern of behavior that people believe warrants public concern and collective action to bring about change." Going by the above propositions, it can be safely argued

that a social problem can be any behavior or social condition considered as undesirable by a group of people. Littering can also be classified under this label.

Historically, social problems in the city of Harare have been associated with rapid population growth, rural to urban migration and the perceived employment opportunities. Thus the city of Harare, like any other city in the world, is home for social vices such as prostitution, gambling, drug abuse and

gang violence. Littering and wastes have conventionally not been perceived as social vices having negative social, economic and political effects on development. For instance, WHO) in collaboration with UNICEF and WSSCC (undated) observed that poor sanitation breeds infectious diseases such as cholera, typhoid among other diseases? In 2009, more than 3000 people died due to cholera. This is symptomatic of existing social problems in Harare.

Map 1: Harare province-census districts



Source: UNICEF (2004, p.i).

The site was chosen based on the following criteria; firstly, Harare urban is one of the first urban communities to be established in the early 1900s, and it appears to replicates the various forms of sanitary practices by the generality of people living there. According to the 2002 census, about 98 % are Africans of which Mozambique and Malawi constitute 20 and 26 % respectively while 1 % constitutes residents from other countries (UNICEF, 2004, p.3). For that reason, studying sanitary practices of this city can potentially provide insight on the various sanitary practices by Africans. Second and final, Harare used to be called the 'Sunshine city' which

leaves us with the question: what has befallen the sunshine city? The World Health Organisation (WHO) in collaboration with UNICEF and WSSCC (undated) observed that where humans gather their wastes also accumulate. Since Harare has the largest population in comparison with other cities in Zimbabwe, this paper is interested in finding out discharging practices and management of wastes materials and the risks of exposure to sanitation related diseases. As observed by WHO each city needs to work out mechanisms to effectively improve health through the improvement of a sound waste management.

Conceptualizing sanitation and hygienic practices:-

UN Water (2008) (cited in Spiker, 2009:3) defines sanitation involves “the management of human excreta, environment cleanliness, and clean living.” Central to sanitation is a blue-print and administering of human excreta so that a polluted free environment is achieved at any given geographical location inhabited by people. The World Health Organisation (WHO) in collaboration with UNICEF and WSSCC (undated) describes sanitation in terms of

- ✓ Safe collection; treatment and disposal/ re-use/recycling of human excreta;
- ✓ Management/re-use/recycling of solid wastes;
- ✓ Drainage of storm water; treatment and disposal
- ✓ Collection and management of waste products;

METHODOLOGY

This paper is based on observations and review of related literature on sanitation; littering and wastes. It is guided by the following research questions: What is the role of sanitation in promoting development? What are the reasons and consequences of littering and wastes on development? (How does littering impact on development?) What steps can be taken to mitigate littering and wastes in Zimbabwe with a view to promote Zim-Asset goals? A qualitative approach which collected data through in-depth interviews was employed. Point of saturation determined the number of participants. Participants’ informed consent was sought before involving them in the study. Semi-structured interview questions were pre-planned. During interview sessions participants explained any misunderstood views through probes.

Data was analysed as in-depth interviews were carried out. Side notes helped to match and link corresponding responses. Emerging themes and patterns were generated. Although the generated data could be criticized for unrepresentative sample the depth of the findings makes the data dependable, credible and trustworthy and verbatim responses supported the research questions.

FINDINGS

High prevalence of litter in cities:-

The majority of participants acknowledged that litter is a big problem in most towns of Zimbabwe but they reported highest prevalence in the capital city, that is, Harare. This is exemplified by the following excerpts:

Cities are no-longer pleasant to visit because of litter that is thrown all over the streets and pavements. The sight is not good. Villages are cleaner as compared to towns and Harare is more littered than other towns [Case, 3].

I am a farmer. I came here to Harare to sell my tobacco. I was surprised early morning when we drove past the city centre to see littered streets and road sideways. What surprised me was the cleanliness of the city people who hurriedly walked about in the streets without being disturbed by the litter. Some were even chewing food while others sold their goods and foodstuff in these littered places. Oh! It is horrible. Our rural homes are much smarter as compared to how city people are looking after Harare, the Sun-shine city. I think it should be called the littered city. Harare is a Sun-shine city no-more [Case, 1].

I am worried by how generations of today are looking after the legacy, the Sun-shine city of Harare, ancestors given gift where Mbuya neHanda [ancestral medium] was tortured on behalf of us to enjoy the beauty and nature of the city centre. I urge people to respect their cities and even their village homes by keeping them and their surroundings smart so that smartness is considered as a norm from one generation to the other [Case, 8].

You do not only see rubbish and cigarette butts but sputum is all over the place yet we have been groomed to always carry handkerchiefs with us wherever we are. We were socialised that it is taboo to spit all over the place because devils would come and lick your sputum and that would result

in sore-throat diseases or unstoppable chest infections. Even when my children went for their boarding school education, 12 handkerchiefs were one of the key issue on the school checklist requirements [Case, 5].

I do not know what has caused people today to be filthy and keep their environments littered and they even defecate and urinate in streets yet during our old days it was taboo to urinate or defecate all over the place. I remember my mother always asked us to refrain from such action through a story about a person who had defecated in a sacred place and his faeces followed him singing and sang in Shona “Kunguru kunguru ndotovera tenzi wangu” in English, “I am rolling to follow my owner” despite the fact that the person stoned and scattered the faeces but they re-gathered and followed him up to his home. Though some people criticised such teaching stories suggesting that they instilled fear in children but they helped us in those old days not to defecate, urine, throw litter or throw a baby soiled clothes or pampers all over as people are doing nowadays. Such stories helped us keep the environment as litter-free as much as possible [Case, 2].

I sell on streets and always have litter surrounding my table. I have made effort to sweep and pick up litter but now am tired of doing so because pedestrians, vehicle drivers and winds always mess the place so much that I end up not doing the vending business I came into the streets for. Thus, it does not mean that I am not aware of the litter surrounding my table but the public seem not to mind the consequences of throwing litter all over the streets. So I suggest that it should be mandatory that every motorist should have a bin in his/her car, colourful and attractive bins should be placed after every few metres and also government should come up with heavy penalties for any litter offenders [Case, 7].

The study revealed a high prevalence of littering in the cities of Harare as compared to other cities. It therefore calls on the City Fathers of Harare to timely intervene into littering actions before it

ingrains into mindset of the people. The findings forewarn Zimbabweans that they may fail to undertake their Zim-Asset goals due to litter-driven diseases. So action on controlling littering is called upon.

Awareness and impact of litter:-

The study pointed out a high need for awareness. Participants proposed some of the impact of littering as:

Even though I pass through littered places without picking the litter, I do not like it because I know its consequences but there is nothing I can do as an individual to stop people from throwing litter all over. I know diseases can be spread through this and also many drainage systems have been blocked causing water floods on streets and pavements. Walking in such dirty water can cause several spread of diseases. I feel a nation exposed to such environments is prone to suffer frequent disease attacks and that is likely to affect our Zim-Asset goals because people will spend more time attending to their health problems than on production and even infected school children are likely to miss their classes resulting in lower pass rates. Thus production is likely to be reduced [Case, 10].

I feel God loves Zimbabwean because littered streets in all towns are a matter of cause. God is giving us chances to improve but if we fail to grab these chances I foresee a future with many health threatening diseases where all business shall be heavily affected. An unhealthy nation is likely not to be productive and that is likely to compromise the Zim-Assets goals. So it means you and me should start thinking of how best we can reverse the litter-haunted mindset to a litter-free mindset [Case, 4].

I am a visitor from Bulawayo the City of Kings. I passed through the City of Progress on my way to the Sun-shine City of Harare. I presume every city has its visionary view as portrayed by cities I mentioned. Litter seems to haunt every city but I was surprised to see a worse off situation in the Sun-shine City. Do Kings like to be associated with

littered city environments? How can Zimbabweans progress in health hazard cities? While rural areas contribute to development by the agricultural produce which they sell to city markets and industries who will process the produce when diseases caused by litter spread like veld fires to both rural and urban areas. Traditionally, we used to maintain clean environments. I do not know why people are no longer conscious of the importance of maintaining their clean self and environmental habits. I therefore suggest that we consult our indigenous knowledge systems for wisdom on how best we can control the mindset of Zimbabweans to maintain litter-free environments [Case, 9].

The study highlights awareness as key to promoting citizens of the city of Harare to keep their city free from litter. This is likely to breed responsible and conscious citizens.

Mechanisms that can control the spread of littering habits:-

Many mechanisms emerged from the collected. The most interesting ones were:

I think if we all treat the matter of litter with one voice nobody will intentionally through litter all over the ground. Zimbabweans consider themselves proudly well educated and informed on life issues, so they should be models in Africa if not the whole world. Thus, my brothers and sisters through this interview I encourage you all to contribute and help in changing the mindsets of your families, friends and neighbours on maintaining clean environments wherever we are, even when we visit other countries lets us be models and maintain the quality of our education [Case, 6].

If everybody avoids putting litter all over the place and feels responsible and picks any litter one sees, then, we can maintain a clean environment with responsible citizens. That in-turn is likely to reduce the prevalence of diseases and also reduce diseases that contribute to disabilities [Case, 3].

Government needs to educate people on impact of litter. I feel there is need for government to design deliberate policy which mandates transporters to always travel with rubbish bins, municipality councils to place bins after determined close distances of metres from each bin but the bins should be attractive and have reminding messages on consequences of litter [Case, 8].

The above excerpts encourages that a healthy and hygienic family is likely to beget a family which practices litter-free habits.

DISCUSSIONS

This section addresses research questions. The emerging findings are discussed in relation to how they support or argue against the questions.

Types of litter are commonly found on most environments in Zimbabwe:—

The majority of study participants revealed that once litter accumulated in some places within the community or along roads/streets people have a tendency of legalising the place as garbage dumping place despite its proximity to people, foodstuff or people's homes. It is therefore the major aim of this study to conscientise every Zimbabwean that in order to achieve all set goals including Zim-Asset goals society should be health, drinking clean water and living in clean environments. The study noted that people in Zimbabwe, especially in the Sun-shine city of Harare are worsening in contributing to littered environments with all types of wastes namely; cigarette butts, plastic bags, papers, sputum, faeces, urine and old car parts. In support, Keep America Beautiful (KAB) (2007) and Sibley and Liu (2003) plus many other recent studies from 1993 to 2006 proposed the top 10 most frequently littered items as; food take-away packages, snack wrappers, papers, plastic papers, vehicle debris, beverage containers, napkin or pampers, metal and glass, construction debris and cigarette butts.

Why do people throw litter all over the places?

The study showed that the majority of people in the street of Harare threw litter on the ground because of they saw other trash on the ground thus conscience of the impact and that it was immoral were compromised by the mere fact that another person had thrown litter all over the person, these people equally saw no reason of being responsible. Thus Case, 5 reported:

Even though I know that it is bad to throw litter all over the place but my conscience will just say why bother about where I place my litter when everyone else throws litter all over [Case, 5].

Thus, it can be deduced from the collected data that some people are influenced by the status of things to exhibit certain habits or behaviours while others do it out of laziness. The other emerging reasons were that some did it intentionally for no reasons while it was unintentionally for other people. For example, one motorist suggested that when driving while windows are open winds sometimes accidentally carry out of the car windows some papers or food take-away packages and even from open trucks. In view to that KAB (2007) proposes that winds, weather, traffic and animals move litter all over the place. The article further reports that, debris maybe carried by storms and rains causing blockage of drainages and contaminating drinking water. This was equally reported in this study where they blamed the city council drainage systems without being away how much they also contributed by throwing litter all over shore which was latter on carried away by rains into drainage systems. Sibley and Liu (2003) in further support posits that it easier for lazy people to leave their rubbish on the ground or throw it on the floor than walk towards a bin and on the other hand they think by throwing litter all over the place they are creating jobs for people who do the work. Such sentiments were shared by the majority of participants in this study. This is enough indication that people need education on the topic and it is a sign of irresponsibility and a lack of respect for the environment and for other people.

Sense of ownership was highlighted as one the major reason why people in Harare threw litter all over the place.

Reasons of inappropriate hygienic practices in Zimbabwe:-

- 1 Lack of education and understanding of the effects of littering on health, environment and community (In general most of the people view littering as part of normal daily insignificant mistakes in the society that nearly everyone has committed before and thus associated effects are often overlooked.)

- 2 Poverty-lack of essential and adequate resources for waste disposal .In most developing country cities ,solid waste management is given low priority in poor and peri-urban settlement in Zambia, Zimbabwe and even South Africa (Martin Mulenga et al 2004).
- 3 Behaviour-(negligence and laziness)-people are lazy to walk a few metres to the dump litter in waste bins in urban areas, despite their level of education, exposure and civilization

How litter impacts on people and their environments:-

The study reported littering in the city of Harare to be a big problem with very high negative impacts on people's health and their production output. Participants suggested that it was by God's grace that the city and its people were surviving the influx of litter related diseases and impaired conditions. The findings also revealed that litter devalues a place, the people and even the standard and value of goods. KAB (2007) supports this by suggesting the presence of litter in a community takes a toll on quality of life, property value and housing prices. In other words litter has negative costs on things besides environmental consequences.

What are the impacts of inappropriate hygienic practices in Zimbabwe?

As people gather occasionally or live together as a group, waste will accumulate and if it is not properly disposed ,it compromises the health of the community and the environmental status. A major challenge is generally observed in peri-urban areas and growth points in Zimbabwe where there currently do not have municipality services in place such as collection of household refuse. As a result, inhabitants of such areas are forced to use refuse-pits or discard domestic waste randomly. Children have a tendency to defecate in refuse-pits thereby exposing the community to human excreta. This promotes transmission of diarrheal diseases which are transmitted via fecal-oral route. Human excreta in refuse-pits contaminates soil which in turn pollutes unprotected water drinking sources such as wells especially during the rainy season. The common Diarrheal diseases in Zimbabwe such as cholera,typhoid,dysentery and parasitic intestinal infections are also a global burden attributable to poor hygiene.

Devastating epidemics and pandemics of most of the diarrheal diseases overstrains the country's economic system and reduces work capacity which declines productivity of the country.

Lack of anti-litter awareness campaigns

In large cities, municipality services are available but poor especially in high density suburbs where domestic waste is not collected for weeks or even a month. Under such circumstances the residents are forced to dump waste in nearby water drains which can lead to pollution of small rivers and major water supplying sources especially during the rainy season. Burning of the litter will also lead to air pollution, which upon repeated exposure can aggravate underlying pulmonary medical conditions such as emphysema or asthma or lead to a variety of alarming respiratory diseases and cancers due to unidentified carcinogenic component of some of the waste products.

Littering is a sign of lack of industrialization and evidence that we do not recycle any reusable materials discarded as litter.

The critical role of a hygienic environment in promoting Zim-Asset goals in Zimbabwe beyond 2018:-

Half the hospital beds in the world serve the victims of the world's silent killer unsafe water (Dabelkko, 2005). Unsafe water is in most cases a result of poor drainage systems. Thus, half of hospital beds in the city of Harare may soon be serving victims of litter diseased citizens if people in Harare do not change their health habits and maintenance of the streets and pavements. The study revealed that a litter-free environment is likely to attract experienced and intellectual human resources into its systems

My brothers and sisters remember Western countries did not carry your brains with them neither did they take away your good and powerful hands nor the energy from you. As intact people with the knowledge and skills let's begin plans of our Zim-Asset goals by reminding each other to keep our Beautiful Environment of Zimbabwe free from litter. By throwing litter all over we are overstressing the health budget of our country to extremes where it may not be able to pull-out

How to control the throwing and dumping of litter everywhere:-

The majority of participants suggested that it was the time for the city of Harare to fully utilise the use of the community/village health workers by asking them to monitor the environments of their communities, asking them to frequently hold meetings with people in their wards on how best they can keep their wards free from litter, diseases and many other development related goals such as Zim-Asset. This is likely to make people responsible for their areas and feel empowered to take control of it. Such a focus hopes to manage to change the perceptions of those who litter and their acts of littering so as to induce a long term behaviour change towards hygienic practices. The study expects to motivate people of Harare and visitors to aim for a cleaner and more beautiful city with healthy and productive citizens. It also hopes people shall develop self-evaluation through discussing litter issues at family, micro and macro-levels they will embrace good habits about their environments and recognise that litter is a health hazard.

This study is guided by the principles of IKS frameworks where tradition had ways of condemning littering. Case, 2 's story was equally narrated by Case, 6 who echoed:

The same hand which keeps the body clean is the same hand which throws litter all over the ground which promoted the development and spread of diseases. For cure it is through the same hand that medication is taken. Unhygienic practices are nowadays high in society unlike long ago where a lot of measures were taken to reinforce hygienic lifestyles. Informal methods such as story telling, poems and songs were used to reinforce some of these practices. I remember my mother telling me a story that it was an anomaly to defecate all over as some sacred places were supposed to be avoided no-matter how one was pressed. The story was about a person who had defecated on a sacred place and the faeces followed him right to his home despite the fact that he took stones to destroy it but it still emerged fresh and rolled towards him and followed him. That made most young people of my age that

period not defect all over as we see faeces today all over on town streets. Thus these days people dump wastes indiscriminately and in rain season that has high possibilities of spreading diseases and even during the dry seasons flies and other insects also spread diseases. Some argue that such stories traumatized and made children stay in fear but that was not the aim of the stories but to make children refrain from unhygienic practices. The stories were a way of reinforcing hygienic messages [Case, 6].

The danger today is that institutions such as families and schools no longer emphasise on people to move about with their handkerchiefs for hygienic purposes such as running noses and to spit sputums to avoid spread of diseases through all over spitting all over the environment. Spitting all over the place spreads diseases. The same mouth that spits is the same mouth through which some viruses get into the body through unhygienic lifestyles or practices. When my children went for boarding school education 12 handkerchiefs was one of the prerequisites that their schools checked and everyday these children were asked to carry 2 handkerchiefs in their pockets and school-bags with a view to maintain the hygienic practices of not spitting all over the environment but on their handkerchiefs [Case, 1].

Schools and societal elders no longer educate their children hygienic practices. It seems no one bother to teach personal hygienic practices to children yet long ago every elderly person was empowered by cultural ethics to reprimand any juniors he/she met to observe personal hygienic practices and anyone seen throwing litter all over was asked by these elders to pick it and place in appropriate places thus alike these days every homestead was required to have rubbish pits including institutions such as schools, clinics and many others. Nowadays the elders who should take a leading role in demonstrating hygienic practices are at the forefront of unhygienic

practices such as urinating all over the place despite the fact that people of the opposite sex are close-by [Case, 10].

We may build more new small shopping malls but without responsible neat and dirty fearing hands the problems of spread of diseases from unhealthy environments will always remain. Let us teach our hands to be more responsible by not throwing litter all over and picking up and putting in litter bins any misplaced litter. Also let our mouths be more responsible by reprimanding anyone seen throwing litter all over the environment [Case.9].

Cialdini, Kallgren and Reno (1991) support this view as they report that, numerous studies have shown that social norms play a powerful role in an individual's decision to litter. The authors further express that survey data suggest that personal norms about littering have changed considerably over the past 50 years. Thus, further go on to suggest that as social sanctions against littering are growing activating norms about littering could substantially increase or decrease. These authors emphasized that, seeing a person or group pile, sweep litter and/or pick litter can all activate norms and mobilise behaviour. Some of these actions may help a person/group feel guilt or ashamed of their actions or otherwise the opposite. However, this study aims that through it people will develop social sanctions against littering. On the other hand the study stressed that city councils could promote the situation through availing separate clearly labelled rubbish tins or bags for trash and for recycling. The emphasis here is that, litter can serve both as a danger to the people, environmental resources and a benefit at the same-time but lack of knowledge about all that fails to save the purposes.

CONCLUSION

A person's environmental outlook and upkeep has huge impact on the experience and extent of disability. Health is highly affected by environmental factors such as safe water, sanitation and many other factors. The environment may be changed to improve health conditions and prevent impairments. Such changes can be brought about by legislation policy change capacity building or technical developments leading to analysis of public

health services. Knowledge and attitudes are important environmental factors affecting all areas of service provision and social life. Raising awareness and challenging negative attitudes are often first steps towards creating a more health atmosphere. There is a clear link between the state of the environment and human health and well-being (Wright and Godfrey, 2010). That in-turn affects development. According to World Health Organisation (WHO) An estimated 23% of all deaths in Africa are the result of environmental hazards such contaminated water poor hygiene and inadequate sanitation, poor water resource management, atmosphere pollution and many others. The conclusion drawn from the study showed that litter begot litter which in other words means that litter on a place invites more litter. A nation can only be productive when healthy and living in under clean condition. Thus such practices are likely to promote Zimbabwean achieve their Zim-Asset goals but they are likely to fail under littered environments. Thus, clean environment are likely to breed healthy productive beings with sober constructive minds. Guided by the principles of IKs which in this study are also supported by Cialdini (2003) and Cialdini, Kallgren and Reno (1991)'s principles of normative behaviour. In other words socialization is proposed as a major tool in grooming a society that is litter-free.

RECOMMENDATIONS

Considering the emerging findings the study made the following recommendations:

- ✦ The community/village health workers in Zimbabwe in general should play an active role in educating communities on best practices of sanctioning littering and storing the recycled litter
- ✦ That community/village health workers held several meeting with people in their wards on how to maintain their environment so as to make them accountable and fill empowered in developing litter-free environments
- ✦ There is need for the government to develop deliberate policies which mandate parents, schools, industries and companies to teach their people personal hygienic practices and how to maintain healthy and clean environments

- ✦ There is need to educate the public on the role of a hygienic environment in promoting Zim-Asset goals beyond 2018 in Zimbabwe
- ✦ There is need for the government develop policies that sanction and punish people who contribute to littering and make the severe penalties known by all citizens in Zimbabwe
- ✦ There is need for government to also develop policies which bind city councils to place colourful and well labelled bins within strictly agreed distances from one bin to the other.
- ✦ There is need for motorists to have trash bin in their vehicles and any open trucks should be mandated to tightly tie up their goods together and pay heavy fines for breaching the laws

REFERENCES

1. Berry, J.W., Poortinga, Y. H., Segall, M.H.S. and Dasen, P.R. (1996). *Cross-Cultural Psychology: Research and Applications*. USA: Cambridge University Press.
2. Cialdini, R.B. (2003). *Crafting normative messages to project the environment*. *Curent Directions. Directions in Psychological Science*. 12, pp105-109.
3. Cialdini, R.B., Kallgren, C.A. and Reno, R.R. (1991). *A Focus theory of normative conduct: A theoretical refinement and re-evaluations of the role of norms in human behaviours*. *Advances in Experimental Social Psychology*. 21, pp. 209-234.
4. Dabelkko, G.D. (2005). *Environmental Change and Security Programmes*. Woodrow Centre for Scholars for the House Committee on International Relations. www.wilsoncentre.org/news/docs/testimonyHR1973.doc accessed 01/03/2015.
5. KAB(2007). *KAB's severe primary sources of litter*. www.kab.orgsitePageserver?pagename=litterseveresources accessed 20/02/2015.
6. Kim, U. (1990) *Indigenous Psychology: Science and Applications*. In R. Brislin (Ed), *Applied Cross-cultural Psychology*, 142-160. Newbury Park, CA: Sage.
7. Sibley, C.G. and Liu, J.H. (2003). *Differentiating active and passive littering; A two stage process model of littering behaviour*. *Environment and Behaviour*, 35, 415-433.
9. Spiker, S. (2009). *Eco-sanitation: a method of providing the human right to dignity across the globe*. Western Kentucky University.

10. Sinha, D. (1990) *Interventions for development out of poverty*. In R. Brislim. (Ed), *Applied*
11. *Cross-cultural Psychology*, 77-97. Newbury, CA: Sage.
12. Rubington, E., and Weinberg, M., S. (2003). *The Study of social problems: seven perspectives*. Oxford: Oxford University Press.
13. UNICEF, (2004). *Central Statistics Harare province*. Harare: Central Statistical Office.
14. World Health Organization (n.d) *10 things you need to know about sanitation*. WHO in collaboration with UNICEF and WSSCC.
15. http://www.who.int/water_sanitation_health/dwq/iwachap5.pdf accessed 10/02/2015.
16. http://www.who.int/water_sanitation_health/sanitproblems/en/index2.html accessed 19/02/2015.
17. <http://www.decodedscience.com/possible-illnesses-caused-by-human-waste-at-occupy-wall-street/4123> accessed 20/02/2015.
18. <http://www.ncbi.nlm.nih.gov/pubmed/17451304> accessed 11/02/2015.