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SANITIZATION, A GROUNDED APPROACH OF VIRAL INFECTIONS AVOIDANCE FOR HUMAN HEALTH: COVID-19, A STIMULUS OF PUBLIC HEALTH POLICY MODERATION ON COMMUNICABLE DISEASES IN UGANDAN COMMUNITIES. A DESCRIPTIVE, CROSS-SECTIONAL AND CORRELATIONAL STUDY.

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Abstract.

Background

This study established how sanitization for viral infections avoidance stimulates public health policy moderation on communicable diseases, specifically examining existing health policy on viral infections avoidance an short falls; establishing how sanitization stimulates policy moderation; how sanitization and policy moderation impact viral infections avoidance for human health in Ugandan communities.

Methods

The study targeted a population of 1645 based on levels of vulnerability and managing prophylaxis function. A positivistic approach engaged a cross sectional survey design. Data analysis took descriptive statistics, correlational and regression analysis. Purposive, simple random sampling were used.

Results

Existing policies influencing viral infections avoidance performed below 20%, inappropriate, promote creations of remedy extracts, soap solutions, detergents, boiled herbal mixtures steaming with acceptance and compliancy revealed at 13.4%, negatively impacting viral infections avoidance by 4.5%, implementation by 46.5%. Policy exhibited low positive correlations with awareness and mindset change contributing 27.1% and 36.7% respectively, impacting sanitization by 13.7%. Sanitization significantly impacted policy by 29.7% twice as much. Eminent change in coefficients of determination 0.352 model (1) to 0.113 model (2) and 0.025 model (3) suggested regressing existing main policy to a generically decomposed accommodating inclusion modalities supporting efficacy and efficiency.

Conclusions.

Awareness on viral infections was significantly low. Existing policies don't suggest representative contingency methods, enforcement, implementations and realistic techniques of viral infections and pathogens avoidance. Sanitization glossily moderates policy grounding it inclusive in enforcing avoidance of candidate viral infections by 29.7% and positively influences viral infections avoidance cumulatively by 48.4%,

Recommendations

MoH should dedicate sensitization programmes for people lacking knowledge of transmission of communicable diseases, provide alternative policy to healthcare livelihood and service delivery instead of locking down areas of high human concentrations, issue guidelines and standards ensuring sustainable health security for self-provided gargets and remedies to avoid further infection and reinfection due misuse. Sanitization be element of CDM model for primary healthcare.

Key words: Sanitization, Viral Infections Avoidance, Public Health Policy, Communicable Diseases, COVID – 19, Policy Moderation
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1.0 INTRODUCTION

Public health policy reconciliation is conceived to refer to policy change mechanisms that are designed to harmonize standards of operations in health sector intended to improve management of uncommunicable and or / infectious communicable diseases such as viral infections using interjected approaches and tools such as sanitization in order to cause a positive trajectory of management of infections and diseases. Viral infection is principled on viral counts as air borne and or / indiscriminate contagious transmission that require a fluidy media for transmission to evoke actual infection for example, sneezing, tears from the eyes, cough (blowing) and other fluids that can be oozed from the different body points. These body points and their surroundings or contacts may

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warrant eminent cleansing using alcohol and soapy stearate solutions as sanitizers. Sanitization is a piecemeal process of ensuring sanitation by explicitly making cleaner equipment(s), parts of human body by spraying, and or / washing hands using reagents called sanitizers such as alcohols based solutions, detergents, soapy stearate and others as cleansers for good and or / a raised level of hygiene with a purpose of avoiding infection and transmission.

Bearing to live positively with viral infections such as COVID-19 pandemic and Ebola epidemic variants in Uganda, avoidance strategy adoption of sanitization was perceived as cardinal Standard Operating Procedure (SOP) among others in management of viral infections in communities [16]. Various method and interventions of combating the spread of viral pandemics and epidemics were instituted by both the MoH and government with the aim of reducing severity of the diseases in communities, country and region at large. These interventions are a strategic range of approaches patenting from medical approaches such as testing, treatment, prevention, monitoring and evaluation, training and care, sanitizing (wash hands with and clean surfaces with detergents), using masks, avoiding touching of soft parts of the body, maintaining a social distance, spraying suspected infectious places) to administrative (prophylaxis) strategies such as encouraging people to stay home, keeping social distance, closing porous or entry points of the country and closing social concentration points) were taken to reduce infection, transmission and mortality through a total lockdown that extended from week to months and to years.

The Uganda's government policy on public health, of recent, has ascended its attention to the very quick and fast spreading diseases which are catalyzed by causative and pathogenic vector agents such as bacteria, viruses, parasites or fungi whose diseases can be spread, directly or indirectly, from one person to another than it was before the pandemic to epidemics [18]. The delay seem to have amplified the damage viral infections have caused to highly vulnerable grouped of people including death and vulnerability of even health workers who would be coined as "defenders or infections and disease hunters.

It is indeed known that many of the viral infections have been classified as zoonotic in nature i.e. infections caused by vectors which homage in animals and transmit disease to humans which inevitably cause quick and fast death suggesting that the environments of human health is subdued, is the reason for intervening sanitization conceptualization of awareness and application in the main stream framework of the public health model for resonating approaches to manage infection and outbreaks (Fig.1).

An evaluation of communicable and NCD suggest that although the latter kill many patients, it is assumed that patients will struggle with it for some good time and if well managed, can be reversed from claiming many lives of the people [1] as may not be the case with highly infectious viral diseases and within a short time cause unbelievable death tolls as evidenced by the pandemic COVID-19 and Ebola and other similar infections. COVID-19 a disease caused by a corona virus whose shape is similar to that of the corona of the sun, composed of a membrane of lipids / fat around it, appears like a crown and belongs to genera /group of common cold of haemorphilus influenza, originated in Wuhan city of China in 2019 [15] in a school teacher. It exhibited symptoms such as headache, high body temperature well above 38^0C, dry cough, running nose, lung inflammation and sneezing. However, these symptoms are as well manifested by other viral infections ectopia. This disease displays pneumonic characteristics and attacks lungs like the subsidiaries Severe Acute Respiratory Syndrome Corona Virus 2 (SARS-COV2) and Middle East Respiratory Syndrome *(*MERS) do [12], highly infectious and spreads very fast.

2.0 BACKGROUND

Sanitization as an action and or / practice of ensuring sanitation for good hygiene, is a critical intervention required to improve living conditions by preventing and or/ reducing infections especially among children and elderly people whose immunity dwindles and baffles below that of the active age groups of the youth and adults below the age of 60 years [8]. The supportive policies to guide planning and implementing sanitation process are significant tools for sustainable implementation and management [5] of viral infections for good health among communities [6], [27], and COVID - 19, as stimulus of sanitization in Ugandan communities pins public health policy moderation on communicable diseases as a means to sanitation, providing centricity of enthusiasm to harmonize and relapse policies that had skewed positively to NCD in terms of Laws and regulations, economic measures, information and education programmes and assignment of rights and responsibilities for providing services as policy implementation instruments [7]. Corona related diseases as rapid severe communicable species of viruses that cause infections to humans, birds, bats, camels and cattle (229E) [11] blesses their generic origin in a corona virus subsidiary group called MERS (Middle East Respiratory Syndrome*)* [14] which occurred in China in 2003 rapidly spread to twenty nine (29) countries and infected well over 8090 people [28], whose species of NL63 and NH31 affected the bronchi of lungs and dangerously inhibited breath and were more dangerous than the 229E. The intermittent species are linked to bats caused a lot of death, later spread through camels and wet markets i.e. sale of meat, foods, fish and similar flesh, but later the COV infections were seen to spread through cows [3]. Severe Acute Respiratory Syndrome described as (SARS), COV2 were seen to spread through cattle vendors implying that these virus species were communicable to human. Hence SARS and COV2 combined to form the present COVID-19 variant which locked the globe causing the highest number of the infected and death world over [14].

3.0 MOTIVATION

Viral infections transmission is based on two premises: 1, direct contact referred to as indiscriminate direct contagious transmission (DCT), this occurs where there is a direct contact between the fluidy part of the body with the eminent source of transmission such as nosal mucus, tears, cough (blowing *or breath*), semens, blood and so on. 2, air to human, referred to as air borne transmission. Unfortunately, both forms of transmission, treasure the same approaches of management which include prevention, testing, treatment, surveillance, evaluation and reporting [18], [19]. In the case of prevention, chemotherapeutic (vaccination) and prophylaxis (administrative, isolation-quarantining, zoning, masking, social distancing, sanitization and staying at home) interventions are adopted depending on the case, however, the speed of transmission and level of fatality during transmission is different in both modes, therefore a need for policy to separate, prioritize and optimize the two to guide proper management of the infections. Studies suggest viruses as causative for dangerous infections and diseases such as Ebola, Marburg, whooping cough, heamorphilus influenza, covid-19 and others ground sanitization as a major non chemotherapeutic preventive mechanism (prophylaxis) for infection management in human health on top of vaccination and treatment [13], [9], [24]. The subsidiary of SARS COV 2 called COVID-19 classified as a viral disease embeds its prevention majorly on non-chemotherapeutic (prophylaxis) approaches such as sanitization, social distancing (Tonseberera), masking the soft parts of the body and isolation quarantining of infected people and improving body immunity of the infected patients including limitations on movements guaranteed by security mounted strategy called curfew. These are therefore perceived as the best administrative tools for

COVID-19 infection's management, however cannot rule out use of antibiotics as supplements and good nutrition in order to boost body immunity. Uganda used these strategies to toll down the impact of the pandemic whose effect reflected about 1% death of the total infections of those who tested positive (430000 patients). These prophylaxis interventions to a large extent saved many lives of Ugandans and the region and are benchmarked therefore as proven grounded positive approaches to fight communicable viral infections like COVID 19 transmittable through pollution of inhalable (cough and sneezing) air and touching soft parts of the body.

4.0 STATEMENT OF THE PROBLEM

Sanitization as a critical intervention needed to improve living conditions by preventing and or/ reducing infections caused by germs especially among children and the elderly. The absence of pertinence in supportive clear policies to provide the basis for planning and implementation of sanitation programmes is a serious draw back to improving coverage at a large scale for good health [6]. 63.4% of rural communities lack access to adequate and sustainable sanitation, where disposition of wastes is done in unimproved and unsanitary ways, thus become victims of ill health, poverty, and an overall poor quality of life [7]. Uganda government formulated sanitation policies that address national needs while taking into account both the constraints and the resources of the national economy, policies for sanitation for health and water and environment, were developed and rendered considerable political and governmental support, but the original levels of enthusiasm and support have declined in the last few years [26], [6]. Implementation programmes have not matched the initial enthusiasm for these policies and sanitation services, small towns, rural communities where the big un-elite population lives have received little attention in terms of implementation and awareness [10]. The emphasis however, is put on water supply projects, and funding allocations which favour urban over rural areas. Sanitation is not considered as a separate programme area, either in funding or project development terms on top of individual households where sanitation needs are greatest, generally receive no support to maintain sustainable sanitation rolled towards avoidance of infectious diseases through promotional and technical guidance at household level [23]. Whereas yet no cure for viral disease infections than stimulating and improving body immunities sanctioned by good nutritional practices, is also not affordable to majority of the population. Uganda lacks chemotherapeutic solution on viral infections whereas engulfed by numerous porous, unsecure and even unknown boarder entry points between the surrounding states in the region whose people infringe limitations on inter-state movements that are key to transmission of viral infections, it is also not clear and or / known whether security forces can sufficiently manage commuting populations across the interstate boarder points which make the administrative enforcement difficult [4]. Population failing to accept naturally the occurrence of viral infections, are endowed with panic preserved by unsustainable whirls of behaviour intended to forge a way forward to remain at work to sustain families even when prevalence of epidemics and pandemics are visible. They become susceptible to vulnerability, misinformation and very expensive undertaking and loss of life. This pauses a very big risk to the people whereas some interventions are simple and don't need high profile intelligencia to implement.

Public health policy on viral infection as communicable diseases doesn't suggest sanitization as aptitude method specific among

others in providing sure remedy in avoidance of the infections, therefore, this study aims at establishing how COVID-19 stimulates effective national sanitation policies to local action by including local initiatives and establishing extents how the popular sanitization prophylaxis can provide a long lasting solution to infections avoidance of potential acute viral disease in communities of Uganda.

5.0 OBJECTIVES

5.1 Main objective

To establish how sanitization stimulates public health policy moderation and grounding viral infections avoidance for human health on communicable diseases in Ugandan communities.

5.2 Specific objective

i) To examine the existing public policy on viral infections avoidance and its short falls for human health on communicable diseases in Ugandan communities.
ii) To establish extents how sanitization for COVID 19 stimulates policy moderation on viral infections avoidance for human health as communicable diseases in Ugandan communities.
iii) To establish the impact of sanitization and policy moderation on communicable viral infections avoidance for human health in Ugandan communities.

5.3 Research questions

i) What are the existing public policies and their short falls on viral infections avoidance for human health on communicable diseases in Ugandan communities?
ii) What is the extent of sanitization for COVID 19 and policy moderation stimulus on viral infections avoidance on communicable diseases in Ugandan communities?
iii) What is the impact of sanitization and policy reconciliation on communicable diseases viral infections avoidance in Ugandan communities be validated?

6.0 METHODOLOGY

The study was conducted after the opening up of the economy for the second lockdown of November 2021 in Uganda, engaged a positivistic approach representing a mixed methods on a cross sectional survey design upon population of 1645 which was confirmed illegible and selected for the study because of the direct bearing hinged on the anticipated level of vulnerability while others based on the vested roles and authority to direct, control and supervision of the prophylaxis function and or/ processes. Interviews were engaged to the medical professionals, some sectors of medical policy makers and food and non-food market vendors, the elderly and children above seven years.

Questionnaires were used onto the elite social groups including members of task force and managers of COVID-19 at districts and national levels. A sample size of 1023 was calculated basing on the individual sub-populations and groups of heterogeneous respondents using Solvin's formula. Data analysis took a correlational and descriptive statistics on the response of the informants based on the purposive approaches, simple random sampling (SRS) techniques.

7.0 SCOPE

The study rotated around the medical fraternity dealing with infectious disease (communicable diseases), medical policy makers, some sectors of the population which hold big social concentration, elite and non-elite social groups such as markets for food and non-food items, the elderly and children above seven years of age, members of task force at district and national levels in the central districts of Uganda.

This study was driven by the Integrated Behavioral Model for Water, Sanitation and Hygiene (IBM-WASH) Model [22].

It postulates its operationalization in social structures, community, interpersonal and inter household, individual and habitual levels in coining contextual, psychosocial and technological factors. Its choice was based on the fact that it blends and addresses factors assumed to have influence in management of viral infections at different levels

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including communities, the policies and rules governing the behavior and habits of the populations in consideration of inherent technologies engagements to achieve goals and purpose.

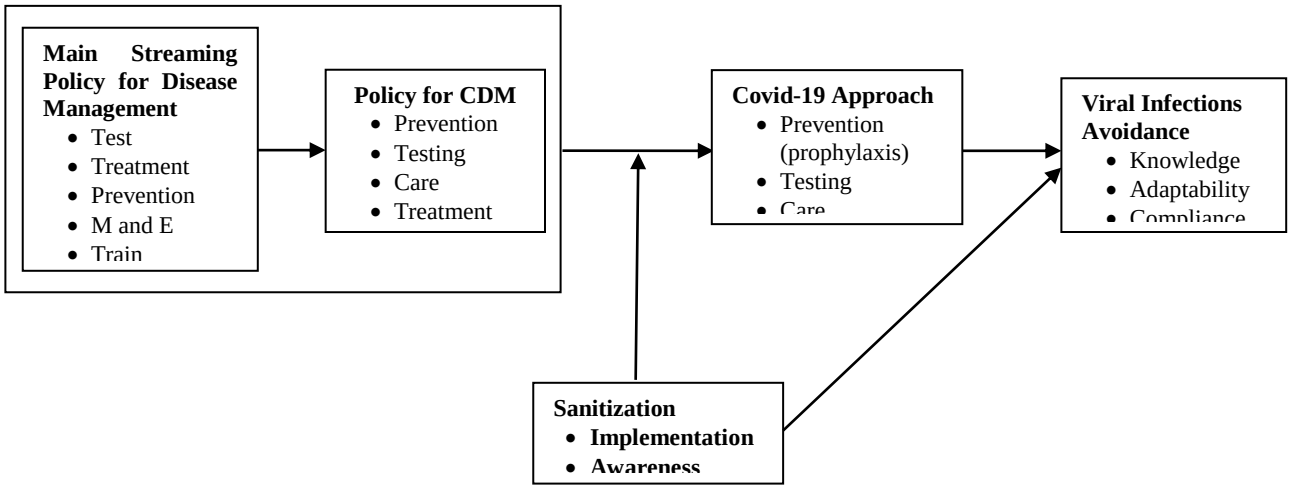

Fig 1: The Conceptual Framework for Sanitization Grounded Viral Infections Avoidance in Human Health

8.0 RESULTS

8.1 Public policy on viral infections avoidance and its short falls for human health on communicable diseases in Ugandan communities.

The cross tabulation of the categories of vulnerable communities revealed that 83.6% of both medical and non-medical respondents understand very well what communicable diseases are of which 72.7% make the non-medical category represents a good gesture for which avoidance hinges as compared to 7.4% representing all those who have no idea at all of the same. Although these categories exhibit a relatively high significant contingency coefficient of 31.1%, those who reliably understand how these diseases are transmitted constitute 82.1% of which 20.5% are health professionals. This suggests that the communities are well sensitized about the danger of CD. Although 60% of both medical and non-medical groups of people acknowledge that communicable diseases adversely affect all categories of age groups, they agree that 36.1% of the age groups between 1-10, 11-20 years and the elderly are more prone than any other group. These findings agree with the knowledge inferred by [5] in such where they clearly reveal to the notion that people with great risk and highly vulnerable to infectious diseases include those with suppressed and compromised body immunity broken down by especially NCD such as cancer patients and are on treatment, those living with HIV, younger children, pregnant mothers and the elderly especially beyond the age of 60 years and above including those individuals who are unvaccinated. As a role of health workers to categorize CD and determine the rate of infection, 28.7% of the respondents in both medical and non-medical categories superintend to the question of prevention of such diseases that is insufficiently done at all levels of the age groups in the communities (contingency coefficient 0.101, sig. value 0.745). It is also revealed that testing of such diseases within the communities is rare by 70.0% representing a deviation (3.21) from the expected. Healthcare monitoring and evaluation of infection levels within patients is rate to be affected by 68.4% as treatment is contingently (0.134) revealed at 31.6%.

The level at which CD is understood seem to significantly be dependent on the locations factors of residence of the population among others. It reveled therefore that rural areas are rates at 13.7%, peri-urban at 27.4% while urban at 42.6%, therefore observably linked to the knowledge of transmission reduces as we transit from Urban to rural through peri-urban areas. This suggests that a lot more of dedicated awareness plans should be conducted because a reasonable magnitude of the population is devoided of the knowledge of transmission of CDs and this impact negatively efforts of fighting viral infections in Uganda. The **levels** of infection reveals that the young age groups are adversely affected where rural areas are calculated at 7.4%, 11.6% in peri-urban while urban at 37.8%. These trends explain why areas of high concentrations of people should have special and dedicated policies to infections than would be the case in areas of less concentrations. Whereas the knowledge of the rates of infection in the communities in the central region of Uganda suggest differed magnitudes, lower in rural areas correspondingly and lightly increasing to urban, creates a very big variation and challenge in terms of disease management. Peri-urban and urban areas have high concentration of people hence promote rapid, high and massive rates of infection, thus government and the MoH require an adjusted policy framework improvement that moderate and cater for the special situations of vulnerability in terms of special / emergency policy alignment, budgetary concerns and allocations implementation, deployment and redeployment involvement and logistics, training, hybrid healthcare retention / reserve policy, awareness policy, discrete sanitization policy than the generic sanitation policy in order to manage effectively the viral infections..

The *prevention mechanism of CD are* respected and favour urban by 36.3% to 12.1% in rural communities. It is observed further that, urban communities receive better services, thus benefit more in the policy framework for healthcare implementation as compared to the other communities. Therefore the observable 75% prevention benefit and advantage urban communities as compared to the rural. This would rather suggest implications that community specific policy should be formulated to empower partinet management of the viral infections that unpredictably cause death among the members of the populations so as to have suitable and sustainable healthcare service delivery in terms of viral infections avoidance. [25] Superintends that there is currently no vaccine to treat viral infection such as Coronavirus, Marburg, Ebola and others, but it is presupposes that the best way to prevent infections is learning to avoid exposure to the viruses and or / those intrinsically infected with the virus [17]. Whereas [21] is agreeable to the same notion, he presupposes that creating awareness by sensitizing the population regularly on the testing and vaccination which are all provided free of charge keeps numbers of infected people low. This therefore explains why there is need for the policy in caption because the cost implication inflicted to the ordinary person on the testing services, vaccination and sensitization is unaffordable to ordinary masses in the communities. Therefore the role should be taken on by the MoH and or/ government for its implementation. This affordably provides a remedy to the computed 13.2% of the population revealed more vulnerable to highly infectious viral load due to lack of access to the proper healthcare education and awareness, healthcare service delivery among others. Testing services are more skewed to urban population rating at 53.7% and least in the rural residents where 16.3% don't receive at all, including the insignificant monitoring and evaluation of infection levels rated very low at 4.74%.

This qualifies and gives an edge to rural communities have a special consideration for policy specific in the fight against infections for

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CD in the country. Out of the 31.6% treatment planned schedules across the region, results reveal that only 6.4% caters for rural communities challenging good practice.

Although viral infections hardly have absolute treatment regimes, support services to improve body and system immunity too take bigger role in healthcare services provision to avert hyper viral effects, thus stabilizing body systems for effective recovery [8]. All of the populations are agreeable to the supported and improved immunity of the body which is made medically and or / locally through use of herbal extracts and improved nutritional approaches.

The overall level knowledge distribution *about CD in terms of age bracket* is significantly rated at 58% where the youth (63.2%) undertake to understand CD more than any other age bracket where their linkage and indentedliness measures relatively high to 36.8%, in terms of how its transmitted (64.7%), those who can be adversely affected (50.5%), rates of infection (65.3%), availability of prevention and control (60%), having accessed to testing services (62.1%) although those who never access testing services are constitute 22.1%, awareness of healthcare monitoring and evaluation of infection levels to patients (59.5%) while those who are not aware make 24.2% and those who receive treatment make 61.6%, Understanding CD based on the gender among whom 44.2% are male and 48.4% female informs the levels reliability of the knowledge among them as shown in the table.1

Table 1. Reliability of knowledge about CD by gender, significance and levels of contingence.

	Variable	**Reliably**		**Un Reliably**		**Level of significance**	**Degree of Contingency**
	Gender	Male (%)	Female (%)	Male (%)	Female (%)		
i	How CD are reliably transmitted	40.0	42.1	5.3	5.3	Highly Not significance (0.721)	very low (0.104)
ii	Knowledge of the age group adversely affected	25.3	34.7	3.7	1.1	Not significant (0.602)	very low (0.104)
iii	Rate of infection levels	49.5	50.5	-	-	Very Significant (0.01)	High (0.256)
iv	Testing service	38.4	39.5	11.1	1.1	Not very significance (0.748)	very low (0.100)
v	Monitoring and evaluation of infection levels in patients	37.4	38.4	12.1	12.1	Not significance (0.485)	Low (0.134)
vi	Treatment	33.7	31.6	15.8	18.9	Not significance (0.118)	Low (0.193)

A relatively linked (contingency coefficient = 0.40) element assumed to significantly (sig value = 0.02) factor interpretation of experiences resulting into the knowledge of explaining the levels at which endemic population with the viral infections is assumed to contribute to how viral infections can be avoided in the management of communicable diseases is the status, i.e. who the person is**,** in the community. It is observed that, 56.8% of community members understand such diseases well as opposed to those who don't (13.2%) realistically above the total number of the medical personnel who participated in the survey as 11.6%, the policy makers and the implementers each factor 6.8% than legislators at 1.8%, however, the generic understanding of the transmission of viral infections in Ugandan communities revealed at 82.2% in comparison to 17.8% of those who are not well acquainted with it, transmission is revealed to affect all members of the community by 60% regardless of the status, community members by 42.6% where the medical personnel make 8.9%. Covid 19 and Ebola the incontestable examples of diseases caused by viruses stimulates the notion of highly infectious CD among community members by 45.3%. Highly infectious diseases are known to have unwavering and glaring effects on human life such as pneumonia, AIDS, and meningitis

and others in the category are lethal while other can cause cancer e.g. papillomavirus is linked to cervical cancer, COVID-19, norovirus causes stomach flu, herpes simplex virus causes cold sores among others [2]. This causes an appreciable level of reception of sanitization, underscored by everybody as practice to enforce viral infections avoidance awareness among communities thus provided a grounded and appreciable status of a primary healthcare regime and requirement for sanitation through SANITIZATION as a tool of implementation (coefficient of contingency = 0.33) for avoidance. Prevention was therefore rated at 74.2% in general while specifically in communities at 52.1% as the highest as compared to 13.1% where it is not at all done. This bring another school of thought that whereas routine prevention of viral infections is inadequate, a big population does not even access this service and therefore requires to roll out a programme to stimulate awareness for both authorities and community members in order to embrace the vice. Testing in the same manner is generally revealed high at 67.9% at all social levels (Policy Maker, Medical Personnel, Legislator, Policy Implementer and community Member) quite above at community level as at 47.9% while those who missed at 16.3%. Healthcare service of monitoring and evaluation lacked by 36.3% at all levels and treatment of CD is lacking by 34.7%.

The experience of 83.7% by community members on viral infections as communicable explains understanding of what it means to live amidst in all circumstances of livelihood where categories of experience 0-5, 6-11 and 15 years represent a good gesture. This could probably be as a result of the recurrent endemicity of Ebola and Covid-19 which took the epic prevalence that force everyone draw own conceptualizations and conclusions especially in the young age populations, although the population with viral infections experience of between 0-5 years presents a drop of 10.5% in the understanding of the same diseases, suggests a lesser experience which draws its roots more in the young people who need a substantial period of time to align what they experience with what they believe in reality of the effect caused by such diseases.

Knowledge derived from experiences of all categories draws the fact that 60% of all groups of people are adversely affected by the CD in the context of viral based diseases, although 12.1% still suggest that it is skews more between the age group between 1-10 and 11-20 years of age. This is trending into those with viral infections experience of 0-5 years. A scientific deduction of this supposition could be attributed to the fact that the immunological stature of such age groups is highly doubtable in withstanding the perversions (sig value = 0.933) in the body in addition to the ability to support themselves to sustainably afford the nutritional requirement that can boost and help in toning down the effects of the viruses of the infection. Much as the majority of the categories of viral infections experience are agreeable to the fact that CD are infectious, 13.7% assent to a lower level of the infection as skewed to those having experience of 1-5 years of viral infections by 6.3%. Prevention as a mode to avert infection in the communities, is intermittently conceived at 61.6% whereas 7.4% don't access it at all, the communities that exhibit viral experience of 1-5 years follow subject by 6.3% with high contingency value of 0.306. Testing, healthcare service monitoring and evaluation and treatment exhibit similar trends as testified by the inscribed variables tested. It is therefore important to note that the contingency coefficients in this study, as an operational definition, was used to represent Phi (ϕ or r) coefficient which was coined to estimate the extent or measure of relative strength of the relationship between the profile characteristics of the respondent and the information on the existing public policy for communicable

diseases including the inherent shortfalls for viral infections avoidance approaches in the communities.

8.2 Existing of Policy

The current policies on communicable diseases are inclined and infused in its implementation models to emphasize PTeCT as compared to the Main Streaming Policy for Disease Management (TeTPM&ETra) in Uganda. The assessment of the two models reveals that the former exonerates M&E-Tra while the one which dominated management of Covid-19 reflected PprTeC. Reference is made to the meaning of terms provided in the bracket (P→ Prevention, Te→-Testing, C→ Care, T→Treatment, M&E →Monitoring and Evaluation, Tra→ Training, Ppr →Prevention-prophylaxis). Members of the communities at all levels were highly and positively skewed (0.92) and agreeable (69.5%) to the fact that there are sanitation policies and guidelines in place which are clear (58.9%) guiding on how to avoid infection within the community, however, the most known ones that are popular and not provided for are those that emphasize washing hands with soapy / stearate solutions and alcohol based sanitizers (88.9%, skewness = 0.778) which are flexible and averagely (mean = 2.35, skewness = 0.653) support creativity and innovations for sustainable management of communicable diseases like Covid-19 and Ebola. They allow use of resources and content easily available around communities (60.5%) in enforcing compliancy (83.2%) in fighting infection. Although it is revealed that these guidelines and regulations are not followed by all groups of people in the communities (58.9%, mean = 2.86, skewness = - 0.28), they have not been in use (under implementation) for a long time (60.5%) because the utilities to ensure compliancy especially in public place have been lacking most especially in human concentration areas (78.98%). The revamption of washing hands and use of sanitizers as a better and cost effective method of ensuring cleanliness and or / sanitation, the logic and its essence was realized after strict enforcement by governments during the lockdown seasons of the pandemic Covid 19 and Ebola sessions especially in Uganda.

8.3 Policy Implementation.

The awareness of the appropriate sanitization / hygienic practices have always been communicate to the communities majorly through media (27.9%) followed by local councils /authorities (26.8%) and where the politicians appeared took only 10% (mean = 3.08, Median = 3.00, Mode = 4.0, skewness = 9.93). The medium of communication in this case may warrant to cause awareness not emphasized, otherwise it would have given a clear gesture of whether there was a common understanding. Nevertheless most media platforms such as electronic platforms use English which may not effectively translate to the very local person who is heavily affected by lack of knowledge in terms of how to avoid infections at that level. The village media station span short spaces and their frequency coverage is not adequate hence a challenge that infringes awareness in addition to poor power sources, connectivity and signal disruptions caused by poor network connectivity, poverty levels and politics. If there are reminders to be made by government for adherence to rules / guidelines for example, media and local councils are key in this approach which method consolidates and concentrates the already existing constraint experienced before. Therefore the residents in the communities are seen to provide themselves with utilities (mean = 2.08, skewness = 0.860) required for use to avoid infections (50%), medical teams (14.7%) and NGOs (5.8%) are constrained. MoH should come up with guidelines and standards to be followed by communities during sensitization and training in ensuring health security in the event of populations using the self-provided gargets and content to avoid further infection and reinfection caused by re-use and misuse.

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The model output of the existing policy as predictors of communicable diseases for awareness on the viral infection avoidance, suggests that the coefficient of determination (R^2 Adjusted) measuring the amount of variation of the dependent variables which is in this case referable to the awareness on the viral infections is observably positive and significantly (sig value = 0.01) low (Adjusted R^2 = 0.15) and its relationship is weak and lies far away from the of line best fit (SE = 5.12). This suggests therefore that the existing policies about communicable diseases don't suggest well representative contingency methods and alignment of enforcement, implementations, and practice techniques of viral infections and pathogens avoidance in communities. Sanitization as a practice to guard against infections by pathogens (bacteria and viruses) should be prioritized and included on the CDM model of the MoH and enforced by VHTs and health official at all levels as preamble practice to ensure sanitation as primary healthcare method of ensuring good health in our communities.

Table 2: Summary of Coefficients of Magnitudes and Influence of Policy elements and their levels of Significance to Viral Infections Avoidance

	Unstandardized Coefficients		Standardized Coefficients		
	B	SE	Beta (β)	t	Sig.
There are sanitation policies / guidelines in place to be followed within our communities in order to avoid infection,	0.392	0.407	0.077	0.961	0.338
The policies are clear to all member of the community for avoiding infections.	-0.057	0.410	-0.011	-0.139	0.890
Policies support easy ways of avoiding infections such as using soapy solutions and sanitizers	0.376	0.385	0.071	0.976	0.331
The policies support creativity and innovations in communities for sustainable management of communicable diseases.	0.999	0.450	0.175	2.219	0.028
The policies allow use of resources and content around community to fight infection	-0.251	0.402	-0.045	-0.626	0.532
The policies are well accepted by the people in the community to avoid infections (compliancy).	0.707	0.409	0.134	1.729	0.045
The policies are properly followed by all groups of people in the community.	-0.150	0.373	-0.034	-0.403	0.687
The policies have been in use by members of the community for a long time.	0.500	0.354	0.116	1.414	0.159
Our community is always made aware of the appropriate sanitization / hygienic practices.	0.040	0.120	0.023	0.329	0.743
People are always reminded by authorities to adhere to the rules / guidelines (implementation).	-0.148	0.318	-0.034	-0.465	0.643
The utilities required to avoid infections in our community are provided.	-0.083	0.298	-0.020	-0.278	0.781
The utilities are adequate and available to the members of the community.	0.502	0.303	0.127	1.657	0.099

The existence of the policies that govern the management of communicable diseases have not made very significant contribution, the impact and or / influence on the assumed rates of avoidance of viral communicable diseases are revealed below 20% (Beta $\beta < 0.20$) and not close to the model line (SE is below 0.5) suggesting that they are not appropriate for handling such infections. They significantly allow creating simple sustainable solutions as a creation (B = 0.999, sig. value = 0.028) by the community members such as extracts from leaves, mixing soap and detergents in water for sanitizing and steaming themselves with boiled herbal mixtures whose acceptance levels and compliancy levels are reasonably high by 13.4%. The general observation reveals that policies are not very clear, eminent use of local resources and content (remedies) negatively impact viral infections avoidance by 4.5%, are not followed them and thus negatively impacting implementation by 46.5%.

8.4 Shortfalls

Policy, **a**lthough it is revealed that these guidelines and regulations are not followed by

all groups of people in the communities (58.9%, mean = 2.86, skewness = - 0.28), they have not been in use (under implementation) for a long time (60.5%) because the utilities to ensure compliancy especially in public place have been lacking most especially in human concentration areas (78.98%). The policies are not very clear, while eminent use of local resources and content (remedies) negatively impact viral infections avoidance by 4.5%, they consistently not followed and thus negatively impacting implementation by 46.5%. Prevention of communicable viral diseases is insufficiently done at all levels of the age groups in the communities (contingency coefficient 0.101, sig. value 0.745). Healthcare monitoring and evaluation of infection levels in patients is affected by 68.4% at a contingency and significance level of level of 20.1% and 0.092 respectively. Testing exercises and implementation were observed unwaveringly affected by the unpreparedness of health works in terms of capacity (51.5%), lack of gears and equipment for the frontlines health workers (61.1%), the unfavourable cost of testing to the average / ordinary person (79.3%), un fair welfare of the health workers (50.9% skewed to 0 .937) positively contributed to the low levels of its implementation in villages, thus suffered a gloss setback by 37.4% (skewness index of 0.689) as a method of confirming the presence and magnitude of the infection. hence treatment revealed at 31.6%

9.0 COVID - 19 DOMAIN APPROACHES AND PREVENTION MODEL

The dominant approaches enforced by government through the MoH to guide and factor prevention of Covid-19 were more of administrative prophylaxis than the employable re-known traditional therapeutic methods used by health workers in health facility environments. Nevertheless, the same dominant approaches have been seen to rifest the prevalent control mechanism of the eminent recurrent horrendous Ebola viral species in Uganda and Marburg in Tanzania. These domain approaches and preventive methods included use of face masks, keeping social distance, use of sanitizer solutions, scheduling and implementing of curfew at night by armed forces. It therefore revealed that 78.9% of the responses confirm that prevention this approach was an effective mechanism in managing the infection than treating it. Dissemination of Information in enforcing awareness for prevention of Covid-19 in the communities was revealed to have been the function of media through community radios by 36.8% (mean = 2.61, skewness = 0.445 as the highest), followed by TVs (20%) and social media and community health workers (VHT) by 17.9% respectively.

9.1 Use of Face Masks

Face Mask is described as polypropylene fiber or cotton fabric material designed to cover especially the nose and mouth as part of a comprehensive strategy of measures to suppress / reduce transmission and or / spread of infectious pathogens such as viruses or bacteria by providing an adequate level of protection so as save lives.

Although using masks to prevent transmission of infections was such a rare and unpopular practice in our communities and rural health facilities, masks covering the nose and mouth was positively (skewness = 1.053) adopted by all the people (78.4%) as a practice to avoid Covid-19. This could have been attributed to the awareness campaigns through media sensitization and local authorities (74.6% mean = 2.11, skewness = 1.036) on how to use them to avoid the infection. The government of Uganda supplied mask to the local residents late to guard against covid19 during the lockdown (mean = 2.22), 29.9% never received due to inadequacies sited as one of the factors that caused recurrent transmission and re-infection especially in the event that the lifestyle is a care free style among majority of residents. It implied therefore that 74.1% of population bought their own (skewness = 1.313) quickly to keep safe because they were averagely (50.1%, mean = 2.16) affordable

although the quality was questionable (43.1%). People gradually responded to putting them on every time they would be attending functions, travelling or moving around within our community (mean = 2.07, skewness = 0.937), behaviour change towards adoption rated at 75.2%. This explains the reduction in transmission eminently informing the staggered style of recovery towards doing business in all sectors and pillars of the economy.

9.2 Social Distance

Social distance described as the perceived or desired degree of physical separation, gap and or distance maintained between individuals or member of one social group and members of another, in order to avoid contracting transmission of infectious disease. Majority of the people in Uganda and elsewhere interfaced with a new and serious phenomenon of discerning nearness, relationships and physical interaction between people factored on transmission to each other through holding hands, hugging each other, sleeping in groups, attending functions and many other civic, cultural, religious and political functions, social distance between the people meant a lot in terms of achieve designated objectives as a community. Although decreasing collaborative and interactive distance between them faced surrogate challenge in fostering success in ensuring reality, people in communities maintained social distance with the purpose of fighting Covid-19 amongst the population constrained by 33.2% (skewness = 0.788), 63.2% believe and understood why it was important to maintain it. However, social distance performed at 55.2% (mean = 2.59, skewness = 0.424) at all levels social interactions as compared to use face masks which made well above 70%, but believed as a less sustainable method (42.8%, skewness 0.486) in the fight against communicable diseases in community because of the level of awareness and sensitization by not putting aside the life style.

9.3 Curfew

This is a militarized practice operationalized by leaders of government through giving orders effected within specific periodic schedules as assumed relevant to regulate, enforce and restrict movement of people from place to another under chieftaincy of armed and policing forces in a country. It is always conducted from evenings through the night to mornings for a specific period of time. During the period of Covid 19 lockdown, curfew would start at 9:00 PM and end at early hour of the morning for all movements which exonerated only the trucks that transported goods across boarders. 65.3% of the responses suggested that curfew is a good strategy for combating transmission of highly communicable infections such as Covid-19 believed as a method tagged to reducing transmission by 64.3% through limiting movements (skewness = 0.700) as an implied security strategy for stopping viral communicable infections at night in communities. Therefore should be always mounted and maintained in times of highly infectious viral outbreak in the country.

9.4 Sanitization

Sanitization as the cleansing or decontamination of aspects to enforce sanitation, cleanliness or hygiene in order to avoid risks of contracting infections in our community is the knowledge expressed in the communities (95.3%) as a significant tool and or / asset to use in avoiding highly infectious and communicable diseases. By washing hands with soapy solutions after shaking or touching surfaces shareable by many people (75.8%) is quite an appreciable level of mind set change that support the awareness campaigns and sensitization in the same struggle for good health livelihood. However, those who never received reminder information about use of sanitizers (17.3%) also trust that the information about usage originate from the right source and it can work for them. Although, the information is received mostly through radios (42.6%) and health works (23.7%), it is

described as clear, adequate and complete (82.1%) and can easily be shared (90%) among members of the community. The information required by the users is always available every time they use their phones to call known centers and or browse the Internet through the smart surfaces (40.5%), at local councils (40.5%) and from resident health workers known as VHTs (13.2%). In either of the sources, availability (mean = 2.43, skewness = 0.812) is guaranteed at all times. In terms of attitude analysis towards use of sanitizers, responses suggest that people prefer using those manufactured in either in the country or imported (70.5%) than using just a mixture of soap and water or detergents because each of the solutions is described as purpose specific. Designated solutions work better for the purpose they are manufactured, cheap and affordable (57.9%, mean = 2.94, mode = 3.00) than using soap, Quality controls and compliancy and complacence tests are confirmed and enriched with significantly minimum side effects, however 42.2% prefer using their own managed soapy solutions attributed to the user needs and affordability including locations of the areas of residence.

The notion of freedom to use sanitizers was not respected well because access to some public places are restricted, therefore 69.5% (skewness = 0.851) are forced to either wash their hands, sanitize and have masks and sometimes must have been tested in the previous twelve hours if your to meet government officials like the president and cabinet some cabinet ministers. This was an enforcement through the security engagements and personnel entrusted with this responsibility. 31.1% reveal that one would even be penalized whenever identified having not agreed with the rules put in public places to fight Covid-19 (mean = 2.26, skewness = 0.843) and this was seriously enforced to the communities. Nevertheless, it is agreeable that (76.3%) there would exist free sanitization points in every encounter to access public resources but the inherent resistant behaviour and practices of the people by nature and character into which one swing delimited compliancy to such conditions. In terms of motivating the public, results show that 53.2% would receive incentives (mean = 2.71) whenever they would freely use the facilities for sanitization upon accessing public places such as receiving free bottles of sanitizers, cards to re-access the premises, contacts of official in case one would like to make consultations and so on. This helped in generating assent to the knowledge about how to avoid contracting communicable diseases like Covid-19 in our communities (86.8%). This lead to improvingly change mind set for adapting the vice of washing hands easily, sanitizing and or / avoiding un-call for hand shaking hands with other people, hugging and putting masks as a practice (mean = 2.21, skewness = 0.775), thus reducing enforcement by 78.9% as a common good (mean = 2.43, skewness = 0.725).

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Table 3. Correlation and impact of prevention approaches to communicable viral infections, existing policy and use of preventive operands as per Cross Product deviations and Covariance's of Pearson's Correlations

		EP	UM	KSD	PREV	CU	SA	SI	MDSC	VAC
EP	Pearson Correlation	1								
UM	Pearson Correlation	.248**	1							
	Sig. value	.001								
KSD	Pearson Correlation	.232**	.516**	1						
	Sig. value	.001	.000							
PREV	Pearson Correlation	.330**	.374**	.428**	1					
	Sig. value	.000	.000	.000						
CU	Pearson Correlation	.214**	.321**	.361**	.243**	1				
	Sig. value	.003	.000	.000	.001					
SA	Pearson Correlation	.274**	.393**	.388**	.260**	.451**	1			
	Sig. value	.000	.000	.000	.000	.000				
SI	Pearson Correlation	.298**	.531**	.543**	.505**	.444**	.461**	1		
	Sig. value	.000	.000	.000	.000	.000	.000			
MDSC	Pearson Correlation	.269**	.292**	.412**	.320**	.263**	.428**	.513**	1	
	Sig. value	.000	.000	.000	.000	.000	.000	.000		
VAC	Pearson Correlation	.060	.243**	.228**	.220**	.269**	.242**	.333**	.227**	1
	Sig. value	.411	.001	.002	.002	.000	.001	.000	.002	

Table 4. Correlation and regression models for preventive approaches of communicable viral infections.

Prevention Approach	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Beta (β)	Sig. Value
					R Square Change	t-value	Pearson Correlation	B	SE		
Available policies and Use of Masks	.248[a]	.062	.057	3.56067	.062	3.501	.248	.168	.048	.248	.001
Actual use of Masks	.374[a]	.140	.135	2.22825	.140	5.510	.374	.244	.044	.374	.000
Keeping Social Dista11nce	.428[a]	.183	.179	2.17416	.183	6.461	.428	.322	.050	.428	.000
Healthcare Services	.438[a]	.192	.188	2.15455	.192	6.681	.438	.551	.082	.438	.000
Curfew	.243[a]	.059	.054	2.33094	.059	3.428	.243	.173	.051	.243	.001
Awareness	.260[a]	.067	.062	2.31457	.067	6.124	.260	.211	.057	.260	.000
Sanitization	.505[a]	.255	.251	2.06842	.255	8.026	.505	.262	.033	.505	.000
Mindset	.320[a]	.130	.098	2.27050	.103	4.635	.320	.323	.070	.320	.000
Vaccination	.220[a]	.048	.043	2.33825	.048	3.085	.220	.151	.049	.220	.002

Subscript [a] →represents the predictor value of the level of significant

10.0 VIRAL INFECTIONS AVOIDANCE

Viral infections as a form communicable diseases manifested its lethal infectiousness in

Uganda through HIV / AIDS, Ebola and Covid-19 as the most memorable diseases and or / infections that locked communities in pulls of eminent lethal conditions than any other forms of infections, especially when not managed well. The tested approaches grounded as mechanisms and strategies to reduce and or / avoid these infections include, *use of face masks, sanitization, keeping social distance, consolidating curfew operations, testing and vaccination.* Total compliance to the rules or policies of the game, procedure and guidelines are vested in the whole awareness process that dudes into knowledge to foster adaptability and compliance.

10.1 Testing

It is found out that testing people with a purpose of understanding the levels of infection and transmission suffered a setback of 37.4% as represented (skewness index of 0.689). As a method of confirming the presence and magnitude of the infection, it was done at a level of 62.6% but occurred more in the health facilities than in the communities where the discovery rate of victims and or/ patients was rated at 71.6%, suggesting that it is a very essential epidemiological practice that furnish controls of CD in human health. Some of the factors that contributed to the low levels of implementation of testing in villages included, unpreparedness of health works in terms of capacity (51.5%), lack of protection contraptions and equipment for the frontlines health workers (61.1%), the unfavourable cost of testing to the average / ordinary person (79.3%), welfare of the health workers was un fair (50.9%) (Skewness = 0 .931) which positively affected the exercise.

10.2 Healthcare Services

Healthcare services that were provides in order to enforce appropriate recovery of the victims was observed at 85.8% in the gazette places of Covid 19 patients, intended to facilitate health workers easily make up close follow up a mechanism that reduces transmission, feeding patients on diet which could boost body immunity, routine monitoring and evaluation of the patient and proving counseling services that drive emotional content and satisfaction for quick recovery for the viral infected patient, were key ingredients in the management of the disease. Providing healthcare such as psychotherapy in form of cognitive behavioral therapy (CBT), was the most common psychotherapeutic approach used on the individual, group, or family level to address unhealthy thoughts and behaviors by replacing them with realistic self-talk and constructive behaviors [20]. After the patients had been released for their destinations, monitoring was done through telephone calls (34.1%) which were not done routinely to those whose contacts were established by the health workers, but instructions like "stay home, drink a lot and have enough rest" were significantly (sign value = 0.002) aired through radios, TVs and social media (61.7%) platforms to those who were connected to the networks.

10.3 Vaccination

Results suggest that 82.1% received vaccination atleast two dose during the lockdown in the fight against Covid-19 in communities whereas 17.9% didn't. The highly positive response to vaccination is based on the fact that people experienced a lot of fear and panic because the pandemic was a very new communicable disease in experience within the lives of the majority of the people, thus took time for some members of the communities to adapt to the vaccines (71.3%). Sensitization about the dangers of Covid-19 was mainly through electronic media where leading TVs were followed by radios and lastly by social media. Health workers (14.2% and local councils (13.2%) also provide dedicated information to the communities (mean = 3.20 and skewness index of 0.780) where the implied electronic media playing a very important role in delivering awareness to the public in all spheres which need effective communication. Results further reveal that

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proximity of the health facilities to people in the communities act as a key factor in motivating them to get vaccination doses (85.8%), however, those who were directly and indirectly forced to vaccinate constitute 38.9% (representative mean and mode of 3.22 and 4.00 respectively) were negatively skewed by -0.487 and intimidation was by 57.9%. On the other hand 86.6% show that to receive vaccination, one had to sanitize first, have a mask first and at a reasonable physical distance in a line / queue in the centers where vaccination took place which was conceived as a torturous mechanism in the communities, however, acting as a sign and means of representing, inducing knowledge and guide to compliancy. This showed the unpreparedness of our communities, lack of knowledge of preventing disease and non-resilience caused by contentment based on inability to estimate the danger of upcoming trouble caused by the disease.

11.0 THE EXTENTS HOW SANITIZATION FOR COVID 19 STIMULATES POLICY MODERATION ON VIRAL INFECTIONS AVOIDANCE FOR HUMAN HEALTH AS COMMUNICABLE DISEASES IN UGANDAN COMMUNITIES.

Table 5. Extents of sanitization stimulus and policy moderation on viral infections avoidance for human health.

When policy is IV and Sanitization DV		**Pearson Correlation**	**Sig. value**	**R Square**	**Adjusted R^2**	**R Square Change**	**B**	**SE**	**Beta**	**t**	**Sig. value**
.593[a] Model	Awareness	.461	.000				.423	.104	.271	4.087	.000
	Mindset Change	.513	.000				.706	.128	.363	5.493	.000
	Policy	.297	.000	.352	.342	.352	.109	.049	.137	2.206	.029
[a] predictor of Policy, Mindset Change and Awareness											
When Sanitization is IV and policy DV											
.297[a] Model	Sanitization Implementation	.297	.000	.088	.083	.113	.371	.087	.297	4.262	.000
.336[b] Model	Sanitization Implementation	.297	.000	.113	.099	.025	.234	.106	.187	2.206	.029
	Awareness	.257	.000				.250	.157	.128	1.592	.113
	Mindset Change	.250	.000				.241	.202	.099	1.193	.234
[a] Predictor of Sanitization implementation, [b] Predictor of sanitization implementation, Awareness and Mindset change.											

In explaining the magnitude generated as a measure of the contribution of sanitization in communicable viral infections avoidance, a reverse-angulation technique was engaged where policy and sanitization bivariate were reversibly contended as independent and dependent in a reverse order respectively. In first model where the correlation 0.297 was significant as predicted by 0.593, the correlation between policy and sanitization where policy was the independent was perfectly (observable variable B = 0.109) low (adjusted R^2 = 0.352) and at the same time producing significant positive relationships with awareness about sanitization that invoked a resultant positive mindset change among the members of the communities to adapt sanitization in avoiding viral infections, thus caused a substantial contribution of 27.1% and 36.7% on awareness and mindset change towards sanitization respectively, policy impacted sanitization by 13.7%. In second model where the correlation 0.297 was significantly predicted by .297a, the correlation between sanitization and policy where sanitization then is the independent variable, was positively (B = 0.371) classified low (coefficient of determination R2 = 0.083) but significantly impacting policy by 29.7%, thus, deductively clear sanitization influences the policy by more than twice, hence a key driver of policy change. In third model where sanitization implementation is still the

independent variable predicted by .336a, the correlation with policy was still very significant (p Value < 0.05) as it influences it by 18.7%, though insignificantly influencing awareness and mindset change by 12.8% and 9.9% respectively. A change in coefficients of determination (Adjusted R^2) from 0.352 in model one to 0.113 in model two and 0.025 in model three can be coined to represent a reduction of a high gradient policy to a lower one which generically reveal an assumed stature of decomposition of the main stream policy on communicable disease to accommodate easy inclusion modalities and mechanisms that are friendly in the management of such diseases without compromising efficacy and efficiency. Therefore sanitization as a practice for avoiding communicable viral infections in Ugandan communities, in totality moderates greatly policy with a cumulative impact of 48.4%, hence, grounding sanitization an inclusive practices to enforce sanitation as stimulated by Covid-19 in the avoidance of all candidate viral infections communicable diseases. Therefore, the generic model for Viral Infections Avoidance (VIA) state that,

via = 8.620 + 0.047 EP + 0.107 SA + 0.186 SI + 0.063
MDSC…….....1

12.0 THE IMPACT OF SANITIZATION AND POLICY MODERATION ON COMMUNICABLE VIRAL INFECTIONS AVOIDANCE FOR HUMAN HEALTH IN UGANDAN COMMUNITIES.

Sanitization moderates well public policy by 29.7% and positively influences viral infections avoidance by 48.4%, whose predicted positive correlation of 0.111 reveals a direct and positive impact on viral infections avoidance of 33.3% using .333 a as a predictor value.

Generally it was assumed that a number of confounding variables would distribute effects on the study variables and affect the outcome. The assumption was restricted on awareness, mindset, policy implementation, enforcement and methods of pathogen and infection avoidance. However, the age bracket of the respondents and their experience of viral infections, status of the respondent in the community, gender, attitudes, behavioral issues and practices including norms based on the area of residence itself, levels of education and leadership styles of those to execute the prophylaxis function could not be avoided. Thus matching and restricting variables items guided by the randomization approach during the regression analysis was benchmarked to control bias and confounding effect.

13.0 CONCLUSIONS

The model output of the existing policy as predictors of communicable diseases for awareness on the viral infection avoidance, suggests that the coefficient of determination (R^2 Adjusted) measuring the amount of variation of the dependent variables which is in this case referable to the awareness on the viral infections is observably positive and significantly (sig value = 0.01) low (Adjusted R^2 = 0.15) and its relationship is weak and lies far away from the of line best fit (SE = 5.12). This suggests therefore that the existing policies about communicable diseases don't suggest well representative contingency methods and alignment of enforcement, implementations, and practice techniques of viral infections and pathogens avoidance in communities.

The existence of the policies that govern the management of communicable diseases have not made significant contribution, the impact and or / influence on the assumed rates of avoidance of viral communicable diseases are revealed below 20% (Beta $\beta < 0.20$) and not close to the model line (SE is below 0.5) suggesting that they are not appropriate for handling such infections. They significantly allow creating simple sustainable solutions as a creation (B = 0.999, sig. value = 0.028) by the community members such as extracts from leaves, mixing soap and detergents in water for sanitizing and steaming themselves with boiled herbal mixtures whose acceptance levels and compliancy levels are

reasonably high by 13.4%. The general observation reveals that policies are not very clear, while eminent use of local resources and content (remedies) negatively impact viral infections avoidance by 4.5%, they consistently not followed and thus negatively impacting implementation by 46.5%.

In explaining the magnitude generated as a measure of the contribution of sanitization in communicable viral infections avoidance adopting a reverse-angulation technique, policy and sanitization bivariate were reversibly contended as independent and dependent in a reverse order respectively. In first model where the correlation (0.297) was significant as predicted by 0.593, the correlation between policy and sanitization where policy was the independent was perfectly (observable variable B = 0.109) low (adjusted R^2 = 0.352) resultantly producing significant positive relationships with awareness and mindset change among the members of the communities to adapt sanitization in avoiding viral infections, thus caused a substantial contribution of 27.1% and 36.7% on awareness and mindset change respectively, thus policy impacting sanitization by 13.7%. In second model where the correlation (0.297) was significantly predicted by .297a, the correlation between sanitization and policy where sanitization then was the independent variable, was positively (B = 0.371) classified low (coefficient of determination R2 = 0.083) but significantly impacting policy by 29.7%, thus, deductively clear sanitization influences the policy by more than twice, hence a key driver of policy change. In third model where sanitization implementation is still the independent variable predicted by .336a, the correlation with policy was still very significant (p Value < 0.05) as it influences it by 18.7%, though insignificantly influencing awareness and mindset change by 12.8% and 9.9% respectively.

A change in coefficients of determination (Adjusted R2) from 0.352 in model one to 0.113 in model two and 0.025 in model three can be coined to represent a reduction of a high gradient policy to a lower one which generically reveal an assumed stature of decomposition of the main stream policy on communicable disease to accommodate easy inclusion modalities and mechanisms that are friendly in the management of such diseases without compromising efficacy and efficiency. Therefore sanitization as a practice for avoiding communicable viral infections in Ugandan communities, in totality moderates greatly policy with a cumulative impact of 48.4%, hence, grounding sanitization an inclusive practices to enforce sanitation as stimulated by Covid-19 in the avoidance of all candidate viral infections communicable diseases. Sanitization moderates well public policy by 29.7% and positively influences viral infections avoidance by 48.4%, whose predicted positive correlation of 0.111 reveals a direct and positive impact on viral infections avoidance of 33.3% using .333 a as a predictor value.

14.0 RECOMMENDATIONS

The MoH and government put in place dedicated awareness programmes to sensitize a reasonable magnitude of the population which lacks the knowledge of transmission of Communicable Diseases (CDs) that impact negatively efforts of fighting viral infections in Uganda. Areas of high concentrations of people such as urban, peri-urban, academic institutions and training centers should have specific and dedicated community policies formulated to empower partinet management of the viral infections that unpredictably cause death among the members of the populations so as to have suitable and sustainable healthcare livelihood and right service delivery in terms of avoiding viral infections.

MoH should come up with guidelines and standards to be followed by communities during sensitization and training in ensuring health security in the event of populations using the self-provided gargets and content and or/ remedies to avoid further infection and reinfection caused by misuse.

The public policy governing management of communicable viral diseases in Uganda should ground sanitization as key inclusive practice to

enforce sanitation in guarding against all candidate infections by pathogen bacteria and viruses, prioritized and included on the CDM model of the MoH and enforced by VHTs and health official at all levels as preamble practice of primary healthcare method for ensuring good health in our communities.

Peri-urban and urban areas have high concentration of people hence promote rapid, high and massive rates of infection, thus government and the MoH should come up with adjustable policy framework and or / improvement that moderate and cater for the special situations of vulnerability such as emergency policy alignment, budgetary concerns and allocations implementation, deployment and redeployment involvement and logistics, training, hybrid healthcare retention / reserve policy, awareness policy, discrete sanitization policy to mention than basing on generic sanitation policy in order to manage effectively the viral infections.

The government should always regularize, sustainably consolidate and maintain curfew operations as a security strategy but also an approach implied to stopping viral communicable infections at night in communities thus combating transmission of highly infectious viral outbreak such as Covid-19 in order to secure the vulnerable by limiting movements in endemic area in the country.

15.0 REFERENCES:

[1]. Ackland. M, Choi B.C.K and Puska C. (2003). Rethinking the terms non-communicable disease and chronic disease, Vol. 57 – 11, Department of Human Services, Level 18, 120 Spencer Street, Melbourne 3000, Australia. http://dx.doi.org/10.1136/jech.57.11.838

[2] Ananya Mandal, MD (2020). Human Diseases Caused by Viruses https://www.news-medical.net/health

[3] Balsubramanian A., (2017). Types of Disasters, Centre for Advanced Studies in Earth Science, University of Mysore, Mysore-6. https://www.researchgate.net/publication/309782796

[4] Carolyn K. (2020). From Bats to Human Lungs: Evolution of Coronavirus, Holland, MD Med. FACEP. (352)-265-5911 UFHealth, Emergency Medicine. College of Medicine, University of Florida

[5] Christopher J. L. Murray, Alan D. Lopez, Colin D. Mathers (2004). The Global Epidemiology of Infectious Diseases, Vol. 4, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland. ISBN 92 4 159230 3. https://apps.who.int/iris/bitstream/handle/10665/43048/9241592303.pdf.

[6] Elledge M. F. (2003). "Guidelines for Assessing National Sanitation Policies, IRC International Water and Sanitation Centre", Thematic Overview Paper, Sanitation Policies

[7] Elledge, M.F. et al. (2002) Guidelines for the Assessment of National Sanitation Policies. Arlington, Virginia, Environmental Health Project. (EHP Strategic Report 2). http://www.ehproject.org/Pubs/Strat_Papers.htm

[8] Encarnacion M. R., Beata B.M., Kenneth D. (2013). Causes, consequences, and reversal of immune system aging, Vol .3, 123(3), American Society for Clinical Investigation. Doi: 10.1172/JCI64096. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3582124/

[9] Fukuda K., Wang R.B. (2015). "Best practices for naming of new human infectious *diseases"* Vallat Science, WHO_HSE_FOS_15.1, vol. 348 no. 6235 p. 643

[10] GHK Research and Training. (2000). Strategic Planning for Municipal Sanitation: A Guide. London, GHK in association with Water, Engineering and Development Centre and Water and Sanitation Programme, South Asia. http://www.ghkint.com/pub_pub2.htm

[11] Ghinai I, McPherson TD, Hunter JC, Kirking HL, Christiansen D, Joshi K, et al. (2020). "First known person-to-person transmission of severe acute respiratory syndrome coronavirus 2", (SARS-CoV-2) in the USA. Lancet. 2020; 395:1137- 44

[12] Khodadadi (2020). Diagnosis and treatment of coronavirus disease 2019 (COVID-19): laboratory, PCR, and chest CT imaging findings", international Journal of Surgery (London, England, DOI 101016/J.IJSU2020.050018

[13] Kurilla M. G. (2014). Containing infectious disease, Pathogens and Disease, National Institutes of Health–National Institute of Allergy and Infectious Diseases, Bethesda, MD, USAE, Volume 71, Issue 2. https://doi.org/10.1111/2049-632X.12196

[14] Liu J, Liao X, Qian S, Yuan J, Wang F, Liu Y, et al. (2020). Community Transmission of Severe Acute Respiratory Syndrome Coronavirus 2, Shenzhen, China, Emergence. Infect Dis. 2020; 26: 1320-3.

[15] Mahase E. (2020). A Conceptual Model for the Coronavirus Disease 19 ©VID 19) Outbreak in Huan, China with Individual reactions and government action, International Journal of Infectious Disease, Vol.93, DOI: 10:1016. http//doi.org/10.1016/ j.ijid.2020.02.058

[16] Majid Hassan Khan and Harekrishna Yadav (2020), Sanitization During and After COVID-19 Pandemic: A Short Review, Transactions of Indian National Academy of Engineering, Vol 5, 5:617–627 https://doi.org/10.1007/s41403-020-00177-9

[17] Manish Patel, Jufu Chen, Sara Kim, Shikha Garg, Brendan Flannery, Zaid Haddadin, Danielle Rankin, Natasha Halasa, H. Keipp Talbot, Carrie Reed, (2020). "Analysis of Market Scan Data for Immunosuppressive Conditions and Hospitalizations for Acute Respiratory Illness," Centers for Disease Control and Prevention, Atlanta, Georgia, USA, www.cdc.gov/eid Vol. 26, No. 8. https://doi.org/10.3201/eid2608.191493

[18] MoH (2020). Corona Virus 2019 Preparedness and Response Plan, https://covid19.gou.go.ug/COVID19_PreparednessResponse_Plan_Signed_Vers_July2020.pdf

[19] Mwebesa Henry G. and MoH (2019). Uganda Guidelines for Prevention, Testing, Care and Treatment of Hepatitis B and C Virus Infection, Ministry of Health, Uganda.

[20] National Alliance on Mental Illness (NAMI). Psychotherapy Report 2016.

[21] Mucunguzi W. (2021). COVID-19 testing and mass vaccination in Kamwenge District, UNICEF Uganda. https://www.unicef.org/uganda

[22] Robert Dreibelbis [1] , Peter J Winch, Elli Leontsini, Kristyna R S Hulland, Pavani K Ram, Leanne Unicomb, Stephen P Luby (2013). The Integrated Behavioural Model for Water, Sanitation, and Hygiene: a systematic review of behavioural models and a framework for designing and evaluating behaviour change interventions in infrastructure-restricted settings**;** BMC Public Health . D**oi: 10.1186/1471-2458-13-1015.**

[23] Rosensweig, F.; Perez, E.; Corvetto J. and Tobias, S. (2002). Improving Sanitation in Small Towns In Latin America and the Caribbean: Practical Methodology for Designing a Sustainable Sanitation Plan. Arlington, Virginia, Environmental Health Project. (EHP Strategic Report 3). http://www.ehproject.org/Pubs/Strat_Papers.htm

[24] Varan, Robson Bruniera-Oliveira, Christopher R. Peter, Maureen Fonseca-Ford, and Stephen H. Waterman, (2015). Multinational Disease Surveillance Programs: Promoting Global Information Exchange for Infectious Diseases, Am J Trop Med Hyge.93 (3): 668–671. doi: 10.4269/ajtmh.15-0097 PMCID: PMC4559715 PMID: 26033019

[25] Wamala, UNICEF Uganda (2021). Coronavirus (COVID-19): What you need to know and

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[26] WHO; UNICEF; WSSCC. (2000). Global Water Supply and Sanitation Assessment 2000 Report. Geneva, World Health Organization. http://www.who.int/water_sanitation_health/Globassessment/GlasspdfTOC.htm

[27] W H O, (2019). Infection Prevention and Control of Epidemic-and Pandemic-prone Acute Respiratory Infections in Health Care. Geneva: https://apps.who.int/iris/bitstream/handle/10665/112656/9789241507134_eng.pdf

[28] Zhou J, Otter J, Price JR, Cimpeanu C, Garcia DM, Kinross J, (2020). Investigating SARS-CoV-2 surface and air contamination in an acute healthcare setting during the peak of the COVID-19 pandemic, London (pre-print). MedRxiv. DOI: 10.1101/2020.05.24.20110346

16.0 ABBREVIATIONS

MoH	Ministry of Health
CD	Communicable Diseases
VHTs	Village Health Teams
TV	Television
CBT	Cognitive Behavioral Therapy
W H O	World Health Organisation
EP	Existing Policies,
UM	Use of Masks
KSD	Keeping Social Distance,
PREV	Prevention
HCS	HealthCare Services,
CU	Curfew
SA	Sanitization Awareness,
SI	Sanitization Implementation
MDSC	Mindset Change,
VAC	Vaccination
VIA	Viral Infections Avoidance