



Student's Journal of Health Research Africa

e-ISSN: 2709-9997, p-ISSN: 3006-1059

Vol.6 No. 6 (2025): June 2025 Issue

<https://doi.org/10.51168/sjhrafrica.v6i6.1609>

Original Article

Improving ART adherence among adolescents (10-19 years) living with HIV at Kityerera H/C IV.

Mbeiza Winnie , Jane Frank Nalubega, Edith Akankwasa, Elizabeth Okello, David Kavuma, Haffy Nanserenko
Mildmay Institute of Health Sciences*

Page | 1 **Abstract**

Background

An adolescent is defined as a person aged 10-19 years. Adherence to a drug involves its uptake at the prescribed dose, frequency, and studies have described that it should be at least 95%. ART adherence is defined as the degree to which an individual adheres to taking the prescribed antiretroviral drugs. This project is about improving antiretroviral therapy adherence among adolescents (10-19 years) living with HIV at Kityerera Health Centre IV.

Project design

This project of improving ART adherence among adolescents (10-19 years) living with HIV at Kityerera Health Centre IV was designed following the project management cycle, which included situation analysis, problem tree analysis, gap analysis, and implementation.

Project outcome

According to Kityerera H/C IV (statistics,2022), 40% ALHIV had good ART adherence. By the end of the project in December 2021, 90% of ALHIV should have good ART adherence if the above strategies are implemented. This indicates that the goal of this project is to increase ART adherence among ALHIV in Kityerera H/C IV from 40% in January 2022 to 90% by December 2022. There has been a gradual increase from 40% to 55% by June 2022.

Conclusion

Improving ART adherence among ALHIV is important because it reduces morbidity and mortality among adolescents.

Recommendation

Strategies such as peer support groups, SMS reminders, and the use of CDDPs to deliver drugs should be used in the project. During the implementation stage, monitoring and mid-term evaluation should be done.

Keywords: Improving ART adherence, Adolescents living with HIV, Kityerera HC IV.

Submitted: 2025-01-20 **Accepted:** 2025-05-16 **Published:** 2025-06-30

Corresponding Author: Jane Frank Nalubega

Email: janecll.nalubega@gmail.com

Mildmay Institute of Health Sciences

Background

Globally, 62.3% of % adolescents' population were classified as adherent to ART (Kim et al., 2017). However, a study in nine African countries found that 50% of adolescents were able to achieve perfect ART adherence (Hudelson and Cluver, 2015). In Kenya, a study conducted found that only 41% of adolescents (aged 10-19 years) on ART reported good adherence (Montalto et al.,2017). But in Uganda, 40% of adolescents reached clinically meaningful levels of ART adherence (MacCarthy et al., 2018).

According to Carvalho et al. (2019), adherence to a drug involves its uptake at the prescribed dose, frequency, and studies have described that it should be at least 95%. In a similar way, taking ART doses as prescribed throughout treatment and an optimal level is above or equal to 95% (Haberer et al., 2017). Alternatively, ART adherence is defined as the degree to which an individual adheres to taking the prescribed antiretroviral drugs (Nabunya et al.,2020). In Kityerera H/C IV, ART adherence is defined as taking ART doses as prescribed throughout treatment, and the optimal level is above or equal to 95%. But only 40%



ALHIV have an ART adherence level which is above or equal to 95% so there is a problem at the facility. Kityerera Health Centre IV, located in Mayuge district in Bunya South constituency, started improving antiretroviral therapy adherence among ALHIV in 2010. However, 60% adolescents living with HIV still have poor ART adherence. So, this remains a problem that needs to be addressed; therefore, strategies used in the project will be written down in this report. This project is about improving antiretroviral therapy adherence among adolescents (10-19 years) living with HIV at Kityerera Health Centre IV.

Project review

The project report was reviewed by the manager of RHITES-EC, controlling all HIV programs in East Central, where Kityerera H/c IV, Mayuge district, is located. A copy was sent to the academic register, Mild May Institute of Health Science, Uganda, as a requirement for the award of BSc (Hons) in Health and Social Systems Management.

Project goal

The project goal is to improve ART adherence among adolescents living with HIV in Kityerera H/C IV from 40% in January 2022 to 90% by the end of December 2022.

Project objectives

To increase ART knowledge through engaging ALHIV in peer support groups at Kityerera H/C IV from 22% in January 2022 to 90% by December 2022.

To ensure that all ALHIV in Kityerera H/C IV are reminded of their daily pills from 0% in January 2022 to 60% by December 2022.

To ensure that stable ALHIV receive ART refill in community drug distribution points from 0% January 2022 to 90% in December 2022 at Kityerera H/C IV.

Project scope

Improving adherence to antiretroviral therapy among ALHIV project is undertaken by Kityerera H/C IV as a treatment package found in the consolidated guideline for prevention and treatment of HIV in Uganda 2020. The project primarily focuses on improving ART adherence among ALHIV in Kityerera H/C IV in Mayuge district. The project constraint is on the source of funds, which is primary health care funds, and this sometimes delays being deposited

into the facility account, thus interfering with the project implementation activities.

Project implementation

This involves project design, development tool, and implementation process. All will be explained below in detail how they were used in improving ART among ALHIV.

Project design

This project of improving ART adherence among adolescents (10-19 years) living with HIV at Kityerera Health Centre IV was designed following the project management cycle, which included situation analysis, problem tree analysis, gap analysis, and implementation.

Situation analysis

Researchers reported that, in situation analysis, people come together to identify common interests, build trust, develop and implement shared solutions (Murphy and Page, 2019). Whereas in the situation analysis, a key stakeholders meeting was conducted to identify the problem (Maryanti et al., 2020). Additionally, situation analysis is a tool for the evaluation of internal and external environments of companies and as a necessary input for the formulation of their strategies (Straková, 2016). Therefore, an EBNA was done in Kityerera Health Centre IV, then a three-day key stakeholders meeting was conducted to identify the problem of poor adherence among ALHIV and formulate strategies. Secondly, the overall purpose of conducting situation analysis was to gain a more holistic understanding of the situation, identify involved parties, key issues, assess the prospects for collaboration, and design a plan for next steps (Murphy and Page, 2019). Similarly, in situation analysis, there is a setting of new goals and thinking through steps to achieve them (Masalimova, Usak, and Sideline, 2016). Also, situation analysis puts everybody in agreement about what needs to be done to solve a problem. (Truschke, 2018). In Kityerera Health Centre IV, a situation analysis was done to gain a more holistic understanding of the situation, identify involved parties, and determine what needs to be done to solve the problem of poor adherence among ALHIV.

Problem tree analysis

The problem tree is a diagram showing the cause-and-effect relationships between problem conditions in a defined context (Ammani, Auta, and Aliyu 2010). In the same way,



the problem tree represents a scheme of problem causes and effects (Ngabirano et al.,2021). In Kityerera Health Centre IV, the problem tree is a diagram showing the cause-and-effect relationships between poor ART adherence among ALHIV.

In addition to the above, problem tree analysis helps to find solutions by mapping out the anatomy of cause and effect around an issue (Ammami, Auta, and Aliyu, 2010). Also, problem tree analysis is an effective tool in supporting project planners to identify clear and manageable goals and in the identification of strategies on how to achieve them (Li and Lee, 2011). However, problem tree analysis is expensive because it requires analysts, clients, and problem stakeholders to take part in mapping out the variety of opinions (Ngabirano et al.,2021). In Kityerera Health Centre IV, problem tree analysis was used to find solutions by mapping out the anatomy of cause and effect around poor ART adherence among ALHIV. This led to a gap analysis in project implementation.

Gap analysis

Gap analysis provides valuable data, opportunities for competency development were identified, and strategies were created jointly with the practice partner (Fater, 2013). Likewise, gap analysis aids business organizations and work groups to bridge the performance gap (Kwofie, Botchway, and Amos-Abanyie,2018). In Kityerera Health Centre IV, gap analysis helped project and work groups to bridge the performance gap.

Logical framework

A logical framework is an effective strategic planning and implementation project management tool that has been applied widely (Buttigieg, Dey, and Cassar, 2016). Similarly, a logical framework approach is a tool for designing, monitoring, and evaluating projects (Myrick,2013). Alternatively, a logical framework is an extensive, participatory, and integral method that delivers a well-structured plan with clearly measurable objectives and well-defined, relevant activities and indicators (Örtengren, 2016). In Kityerera Health Centre IV, the logical framework is an effective strategic planning and implementation management tool that has been applied in improving ART adherence among ALHIV.

Furthermore, a logical framework facilitates the planning, monitoring, and management of change processes so that they can achieve positive and sustainable results (Örtengren, 2016). Conversely, a logical framework is objectives-oriented and can be used for planning, designing, implementing, and evaluating projects, building stakeholder team commitment (Buttigieg, Dey, and Cassar,2016). Similarly, the logical framework matrix identifies the components required to ensure that the stated results and objectives are achieved and specific indicators to be used to measure actual performance (Myrick,2013). Therefore, the logical framework matrix identifies the components required to ensure that the stated results and objectives are achieved in improving ART adherence among ALHIV at Kityerera Health Centre IV. Improving ART adherence among ALHIV used different tools to develop its logical framework.

Logical framework matrix

GOAL	Objectives	Indicators	Means of verification	Risk Assumptions



	Improving ART adherence among adolescents (10-19 yrs) living with HIV in kityerera H/C IV Mayuge district Uganda.	Number of ALHIV in peer support group from 22% in January 2022 to 90% by December 2022 Number of ALHIV receiving SMS reminder from 0% in January 2022 to 60% by December 2022 Number of ALHIV who get ART refills CDDPs from 0% in January 2022 to 90% by December 2022	District health information system 2 (DHIS-2) -Weekly reports	No updates on DHIS-2
	Purpose			
	To increase the proportion adolescents (10-19 years) living with HIV in kityerera H/C IV Mayuge district Uganda.	Number of ALHIV who increase from 40% January 2022 to 90% by December 2022	District health information system 2 (DHIS-2) -Weekly reports Quartly performance review meetings	Lack of transport refunds
	Out puts			
	ALHIV engaged in peer support groups	At least all ALHIV in peer support group.	Monthly written reports	Limited resource
1	Peer support group strategy	Number of ALHIV engaged in peer support group strategy by December 2022	Monthly written reports and performance review meetings	Follow up on action plan.



2	Reminder strategy	Number of ALHIV receiving SMS reminder by December 2022 Number of ALHIV using pillboxes by December 2022	Monthly written reports and performance review meetings	All the stakeholders to implement strategy
3	CDDP strategy	Number of ALHIV who get ART refills their ARV refill at community level by December 2022	Monthly written reports and performance review meetings	All the stakeholders to implement strategy
4				

Project development tool

The tools that are used in the project to construct a logical framework include SWOT (strengths, weaknesses, Opportunities, and Threats), PESTEL, and force field analysis. These will be discussed in more detail.

SWOT Analysis is a tool used for strategic planning and strategic management in organizations (GURL, 2017). Conversely, SWOT analysis is one of many tools that can be used in an organization's strategic planning process (Phadermrod, Crowder, and Wills, 2019). SWOT analysis is a fundamental tool for organizations to evaluate their position in the market during times of indecision (Benzaghta et al., 2021). In Kityerera Health Centre IV, SWOT Analysis is one of the tools used in the project's strategic planning process.

Strengths and weaknesses are in the internal elements of an organization, while Opportunities and Threats are in external aspects that help an organization (Benzaghta et

al., 2021). Likewise, internal dimension includes organizational factors, also strengths and weaknesses, external dimension includes environmental factors, also opportunities and threats (GURL, 2017). In the same way, Strengths and Weaknesses are internal (controllable) and Opportunities and Threats are the external (uncontrollable) factors (Phadermrod, Crowder, and Wills, 2019). In Kityerera Health Centre IV, Strengths and Weaknesses are internal (controllable) and Opportunities and Threats are the external (uncontrollable) factors in improving ART adherence among ALHIV.

Strengths facilitate reaching its goals, while weaknesses are those that interfere with organizational success. Opportunities help an organization reach its goals, and Threats are aspects of the organization's barriers (Benzaghta et al., 2021). In a similar fashion, Strengths and Weaknesses are factors that support and obstruct organizations from achieving their mission, whereas Opportunities and Threats



are factors that enable and disable organizations from accomplishing their mission (Phadermrod, Crowder, and Wills, 2019). So, strengths such as trained health care providers facilitate improving ART adherence, while the absence of mobile phones among ALHIV will interfere. The presence of PHC funds helps to reach project goals, and inadequate resources, such as human resources, are barriers to improving ART adherence at Kityerera Health Centre IV. It helps organizations to gain a better insight into their internal and external business environment when making strategic plans and decisions by analyzing and positioning an organization's resources and environmental aspects (Phadermrod, Crowder, and Wills, 2019). The SWOT analysis can also be used for different purposes, such as benefit and risk analysis, planning, and effectiveness (Benzaghta et al, 2021). However, SWOT Analysis has a general perspective as an approach and presents general solutions, not a valid technique in today's world based on change and competition (GURL, 2017). Therefore, SWOT analysis helped Kityerera Health Centre IV to gain a better insight into their internal and external environment when making strategic plans and decisions on how to improve ART adherence among ALHIV.

SWOT analysis was used alongside PESTEL analysis, which analyzes the macro-environment of the organization. This will be explained below, and how it helped the project.

PESTEL analysis

PESTEL analysis means Political, Economic, Social, Technological, Environmental, and Legal, which analyzes the macro-environment of the organization (Song, Sun, and Jin, 2017). In line with the above, PESTEL analysis deals with the environment through the analysis of political, economic, social, technological, ecological, and legal/legislative factors (Matovic, 2020). Alternatively, PESTEL analysis means Political, Economic, Socio-cultural, Technological, Environmental, and Legal (Yüksel, 2012). In Kityerera Health Centre IV, PESTEL analysis means Political, Economic, Social, Technological, Environmental, and Legal, which analyzes the macro-environment of the organization. This is because improving ART adherence among ALHIV had turned out to be political; it required funds, with some misconceptions, but Technological, Environmental, and Legal were not used.

PESTEL analysis is used to identify and overcome these obstacles, but it also provides data and information that will enable the company to predict situations and circumstances that it might encounter in the future (Song, Sun, and Jin,

2017). Likewise, PESTEL analysis allows identifying factors relevant to the business environment and provides data and information that allow organizations within the analyzed environment to predict the situation in order to adapt to new situations and develop competitiveness (Matovic, 2020). One of the limitations of PESTEL analysis is that it does not adopt a quantitative approach in the measurement and evaluation dimension (Yüksel, 2012). So in Kityerera Health Centre IV, PESTEL analysis is used to identify barriers that hinder good ART adherence among ALHIV, and it provides data plus information on how to overcome them in the future.

Force field analysis

According to Ramos et al. (2021), Force field analysis is the driving and restraining factors in an organization. Conversely, Force field analysis is where an organization is held in balance by the interaction of two opposing sets of forces, driving forces and restraining forces (Capatina et al., 2017). However, Force field analysis is a systemic method aimed at enhancing the management of change by generating a tactical approach (Mak and Chang, 2019). Therefore, Force field analysis in Kityerera Health Centre IV, is the driving and restraining factors involved in improving ART adherence among ALHIV.

Implementation process

According to Gido and Clements (2014), project management includes scope, time, cost, quality, human resources, communication, risk, procurement, and stakeholders. Similarly, scope management, schedule, human resource management, Cost, Stakeholder management, and Control Stakeholder Management are important in project management (Heagney, 2016). So, in Kityerera Health Centre IV, scope, time, cost, quality, human resources, communication, risk, procurement, and stakeholders are all included in project management.

In line with the above, specific managerial actions, organizational conditions, and work processes are suggested for fostering a project environment among all stakeholders (Thamhain, 2013). Gido and Clements (2014) agree with the above and reported that a project action plan is made by the manager for the proper implementation process. In Kityerera Health Centre IV, a project action plan was made by the manager for the proper implementation process.

Project action plan and budget



Change management process

Once individuals have the motivation to do something different, the whole world can begin to change (Cameron and Green, 2019). Whereas Hiatt and Creasey (2012) reported that change has only truly occurred when individuals in the organization begin working in new ways: displaying new behaviors, using new tools, adhering to new processes, and adopting new values. So, when health providers in Kityerera H/C IV started displaying new behaviors, using new tools, adhering to new processes, and adopting new values, then change is truly occurring.

Kotter's change management model

Kotter's eight-step model derives from analysis of his consulting practice with 100 different organizations going through change, and it highlights eight key lessons (Cameron and Green, 2019). Likewise, Kotter describes that the same process of change is achieved by going through the eight steps that people need to do to work and otherwise (Sarayreh, Khudair, and Barakat, 2013). Additionally, the change process goes through a set of 8 phases, and it transforms organizations (Rajan and Ganesan, 2017). In improving ART adherence at Kityerera H/C IV, Kotter's eight-step model describes that the same process of change is achieved by going through the eight steps that people need to follow to work.

Step one in Kotter's model is creating a sense of urgency, as change will be emergent due to several factors (Tang, 2019). Also, identify areas of improvement through needs assessment (Haas et al.,2020).

In step two, create a Powerful Guiding Coalition, in order to engage stakeholders, recruit specific individuals, representing well-respected educators and residents, most vocally expressing the desire for change. (Haas et al.,2020). Step 3 pertains to developing a clear change vision, and the vision should answer the question of how the future differs from the past. (Tang, 2019).

Step 4: Communicate the change vision. Communication is a critical element of the organizational change process as it can reduce uncertainty (Appelbaum et al.,2012). Haas et al. (2020) communicated the vision to speakers who signed up to deliver lectures, providing guidance for content to cover and announcements, plus faculty meetings were conducted (Haas et al.,2020). In improving ART adherence among ALHIV, step four was to communicate the change vision to the team.

Step five is to empower broad-based actions. This step requires getting rid of as many barriers as possible and

unleashing the full potential of the people in the organization to do their best (Kotter,2012). Laig and Abocejo (2021) also report that in step five is to empower broad-based actions, which requires getting rid of as many barriers as possible and unleashing the full potential of the people in the organization to do their best. It requires constant empowerment of staff through regular meetings, staff fears about the failure to maintain jobs due to the failure

The failure to achieve targets was discussed in Kityerera H/C IV.

Step six is to plan for and create short-term wins, acknowledge success in the form of national abstracts and presentations (Haas et al.,2020).

Consolidate more improvement and produce more change, provide feedback loops to presenters, and identify areas of improvement in the presentation in step seven (Haas et al.,2020). In Kityerera H/C IV, a 30-minute session is conducted, general themes are reviewed, and the implementation of lessons learned from others by members developing future presentations.

Lastly, Kotter's (2012) step 8 is about making the new culture stick. The new culture happens in the last step of change, and a new culture is created by anchoring the new approaches for sustained change. But also, the project used an adoption mode.

Concerns-Based Adoption Model (CBAM)

CBAM is a theoretical framework not only to describe but also to predict librarian adoption of innovative technology (Kang, 2016). CBAM is a theoretical framework that focuses on how people respond to change (Khoboli and O'toole, 2012). Currently, CBAM is a theoretical framework that focuses on how health care providers respond to change at Kityerera H/C IV.

The model provides a view of the development of people's concern towards an innovation, which usually occurs when changes happen (Khoboli and O'toole, 2012). In a similar way, CBAM was used to supervise, measure, and provide information about changes in the education system (Nasri,2018).

Literature shows that CBAM identifies seven levels through which individuals could be involved as they adapt and collaborate in the implementation of innovations, and these include awareness, information, personal concerns, management, consequences, collaboration, and refocusing. (Khoboli and O'toole,2012).



Awareness is the initial stage, which centers on concern for understanding the innovation and why it is being proposed. Are aware of an innovation but with no interest in its implementation (Khiboli and O'toole,2012). Similarly, unconcerned, formerly called awareness, individuals are not concerned about the innovation or involvement (Kang, 2016). In Kityerera H/C IV, during the awareness stage, health care providers had no interest in project implementation

Stage one encounters opportunities to learn about the implementation of an innovation (Min,2017). Likewise, the Information stage involves getting to know the innovation and reaching an initial decision as to its efficacy (Khiboli and O'toole,2012). In Kityerera H/C IV, during stage one, health care providers are getting to know the innovation and reaching an initial decision as to its efficacy

Stage 2 (personal), and want to know more about the innovation and to discover any changes that the innovation might bring (Kang, 2016). Stage two personnel are primarily concerned with the personal ramifications of an innovation once implemented (Min,2017). In Kityerera H/C IV, stage 2 is primarily concerned with knowing more about improving ART and discovering any changes that the innovation might bring.

Stage 3 In management, individuals consider how to implement the innovation efficiently and how to make the best use of information and resources (Kang, 2016). In management, concerns mainly entail managing the implementation of an innovation and may encounter practical problems and attempt to devise solutions (Min, 2017). In Kityerera H/C IV stage 3, concerns mainly entail improving ART adherence and how to make the best use of information and resources.

Furthermore, Consequences (Stage 4) Concerns shift from the personal to the organizational level, with a focus on effective improvement (Min, 2017). Users enter another period of change evaluation in the consequences stage (Khiboli and O'toole,2012). Health care providers' Concerns shift from the personal to the organizational level, with a focus on effective improvement.

This is followed by Collaboration and refocusing (Stage 6), where health care providers consider the consequences of an innovation's implementation, discuss it, and suggest improvements.

Lastly, new leaders will be identified within this project at the facility and encouraged to become more involved in content creation, promoting sustainability and institutionalization of the curricular change. Kotter's change

management model was possible because of the leadership style employed by the change agent throughout the project implementation.

Appropriate leadership styles

There are various leadership styles and none of them is better than the other, but employing a style in the right situation makes a good fit (Kruse, 2013). In Kityerera H/C IV, where the goal is to improve ART adherence, a leadership style that allows involvement of the health providers will manage the change successfully.

Democratic leadership style

The democratic leadership boosts motivation, allows for using subordinates' knowledge and experience in the decision-making process, creates loyalty to the team's goals, and ensures mutual communication (Terzi and Derin, 2016). Similarly, the democratic leadership is also known to motivate the employees to perform better, as their views and opinions are valued (Al Khajeh, 2018). However, the biggest problem with democratic leadership is its underlying assumption that everyone has an equal stake in an outcome as well as shared levels of expertise with regard to decisions (Ojokuku, Odetayo, and Sajuyigbe,2012). Therefore, democratic leadership is used, and it motivates the health providers to perform better, as their views and opinions are valued, thus improving ART adherence.

Transformational leadership style

The managers who focus on transformational leadership focus particularly on developing the overall value system of the employees, development of moralities, skills, and their motivation level (Al Khajeh, 2018). In line with the above, the transformational leader motivates colleagues and followers to look beyond their interests towards interests that will benefit the group (Long et al., 2014). However, transformational leadership style is often defined in terms of its effects and followers rather than in terms of specific behaviours that give rise to those effects (Hunt and Fitzgerald, 2018). In Kityerera H/C IV, transformational leadership style is used because it develops moralities, skills, and motivation of health providers, thus improving ART adherence.

Lastly, democratic leadership is better than other leadership styles used in projects because it motivates the health providers to perform better, as their views and opinions are valued, thus improving ART adherence. Still, a negative



staff attitude towards work is associated with counterproductive behavior, regarded as resistance to change.

Resistance to change

Page | 9

According to Jost (2015), how human beings are prone to privilege custom and tradition over progress and social change brings about resistance to change. Likewise, resistance to change is something within the individual's psychological disposition, in the social context, and between change creators and acceptors (Shimoni,2017). Also, resistance to change can be defined as the degree to which those within the organization oppose the idea of anything new (Caruth and Caruth, 2013). In Kityerera H/C IV, resistance to change can also be defined as the degree to which those within the organization oppose the idea of improving ART adherence among ALHIV.

Furthermore, significant change always involves uncertainty about how it will affect people, and this uncertainty can lead to fear as people imagine real or perceived threats to their job status or security, which then leads to resistance to change (Umble and Umble, 2014). But also, resistance to change consists of both overt and covert actions that are employed to prevent, interrupt, or damage the successful implementation of change (Caruth and Caruth,2013). Shimoni (2017) reported that experience indicates that resistance to change comes in waves or layers, each of which must be overcome sequentially. So, in Kityerera H/C IV, improving ART adherence involves uncertainty about how health providers will be affected who do not implement change, and this uncertainty led to fear as people imagine that they will lose their jobs, thus leading to resistance to change.

So, managing resistance to change is important for the project to achieve its goal of improved ART adherence among ALHIV.

Managing resistance to change

Change is inevitable, but with resistance, organizations must understand the nature and causes of resistance to change, and then deal effectively with it to implement change successfully (Caruth and Caruth,2013). So, Kityerera H/C IV must understand the nature and causes of resistance to change, and then deal effectively with it; improving ART among ALHIV will be implemented successfully.

Literature points out that incentives to actual or potential change resisters in the organizations are offered in negotiation and agreement methods (Yılmaz and

Kılıçoğlu,2013). Additionally, facilitation and support with the goal of helping to deal with resistance by emotional and material help will enable people to change (Caruth and Caruth,2013). Currently, in Kityerera H/C IV, incentives are offered in the negotiation and agreement method, which has helped the organization to overcome resistance to change.

Finally, Kotter's change management model, democratic leadership, and the above strategies have helped the project to overcome resistance to change while improving ART adherence among ALHIV. However, all the above steps are monitored while improving ART adherence among ALHIV.

Project monitoring and evaluation.

Monitoring involves comparing actual performance with the planned performance (Jili and Mthethwa,2016). Similarly, monitoring is the ongoing collection and analysis of data that informs project managers if progress toward established goals is being achieved (Waithera and Wanyoike, 2015). Alternatively, monitoring is a continuous process by which stakeholders obtain regular feedback on the progress made concerning achieving their goals and objectives (Ochieng and Tubey, 2013). In Kityerera H/C IV, monitoring is the ongoing collection and analysis of data that informs project managers if progress toward improving ART adherence is achieved.

Jili and Mthethwa (2016) define evaluation as an applied inquiry process for collecting and compiling evidence that highlights the effectiveness, efficiency, and value of an intervention. Conversely, evaluation is a comprehensive appraisal that looks at the long-term impacts of a project and exposes what worked, what did not, and what should be done differently in future projects (Waithera and Wanyoike, 2015). Contrary to the above, evaluation is reported as a rigorous and independent appraisal of either completed or ongoing activities to determine the extent to which they are achieving stated objectives to influence decision-making (Ochieng and Tubey, 2013). So, evaluation in Kityerera H/C IV is a comprehensive appraisal of either completed or ongoing activities to determine the extent to which they are achieving stated objectives to influence decision-making.

Furthermore, evaluation can contribute to the reaching of this goal by assisting democratic institutions to better select, oversee, improve, and understand the context of social programmers and policies (Jili and Mthethwa,2016). Researchers also report that evaluation facilitates the assessment of a project from multiple perspectives (Waithera and Wanyoike, 2015). Currently in Kityerera Health Centre IV, the change will be monitored by use of



monthly feedback meetings, health management information systems, and Performance review meetings, which are done quarterly. These will be discussed below.

Feedback meetings

According to van Werven, Cornelissen, and Bouwmeester (2022), feedback plays an important role in the process of starting a new venture. Whereas feedback is closely associated with the co-regulation of learning, and it results from teacher-student interactions and daily or monthly activities (Agricola et al.,2020). Nonetheless, feedback is an interaction where performance is shared among project stakeholders aimed at achieving its goals (Harrison and Rouse, 2015). Feedback meetings in Kityerera H/C IV are a monthly interaction where performance is shared among project stakeholders, aimed at improving ART adherence among ALHIV.

Teams may decide to make changes after receiving interpersonal feedback from investors, mentors, customers, or peer entrepreneurs (van Werven, Cornelissen, and Bouwmeester,2022). Also, they can accept or act upon it. Argued that when students perceive feedback as useful, they feel competent, and a positive change in interest occurs, which leads to better performances (Agricola et al.,2020). However, if feedback is given appropriately, then it may lead to poor performance in the project (Harrison and Rouse, 2015). As Kityerera H/C IV stakeholders in feedback meetings perceive as useful, they feel competent, and a positive change in interest occurs, then it is used to monitor the progress of a project.

Health management information systems (HMIS)

HMIS are data collection tools established in many low- and middle-income countries for routine collection and management of facility-based data on health care service delivery (Nshimiyiryo et al., 2020). Additionally, HMIS are a crucial source of timely health statistics and have the potential to improve reporting in low-income countries (Arsenault et al.,2021). Differently, HMIS can be a powerful tool to make health care delivery more effective and far more efficient (Omambia, Odhiambo-Otieno, and Mwaura,2016).In Kityerera H/C IV, HMIS are data collection tools for routine collection and management of facility-based data on health care service delivery.

HMIS are to identify areas that need improvement, to evaluate various health interventions, to inform evidence-

based health policies, and to design programs and allocate resources at all levels of the health system (Nshimiyiryo et al.2020). Similarly, HMIS serves to monitor the performance and quality of the health services being provided (Sharma et al.,2016). However, concerns about data quality have hampered their widespread adoption in research and policy decisions (Arsenault et al.,2021). In Kityerera H/C IV, HMIS will monitor and evaluate the performance plus quality of ART adherence in ALHIV.

Performance review meeting

The performance review meeting is the means through which the five primary performance management elements of agreement, measurement, feedback, positive reinforcement, and dialogue can be put to good use (Armstrong, 2021). Aguinis (2019) defines the performance review meeting as a meeting between team members and the supervisor to discuss how they have been working. As Eckardt (2012) says, performance review meetings have classically been viewed as a monitoring and control device. In Kityerera H/C IV, performance review meetings are held, whereby stakeholders meet with the supervisor to discuss how they have been working.

Literature points out that performance review meetings allow managers and individuals to take a positive look together at how performance can become better in the future (Armstrong, 2021). Similarly, performance review meetings involve a discussion of performance during the review period and any changes in compensation depending on the results obtained. (Aguinis, 2019). Alternatively, meetings can also facilitate the identification of capabilities and creation of knowledge because they encourage reflective practice, knowledge sharing, and social interaction among middle managers (Eckardt, 2012). Finally, performance review meetings are used in Kityerera H/C IV to monitor and evaluate a change in ART adherence because they involve a discussion of performance during the review period.

However, during the monitoring process, there are limitations that the project has encountered, and these are explained below. They were identified by stakeholders during the meetings listed above. By the time the report was written, an evaluation had not been conducted due to limited funds.

Project outcome

According to Kityerera H/C IV (statistics,2022), 40% ALHIV had good ART adherence. By the end of this project



in December 2021, 90% of ALHIV should have good ART adherence if the above strategies are implemented.

Therefore, this indicates that the goal of this project is to increase ART adherence among ALHIV in Kityerera H/C IV from 40% in January 2022 to 90% by December 2022. There has been a gradual increase from 40% to 55% by June 2022.

Lessons learnt

An organization will have a problem, but when EBNA is done, that is when it becomes aware of the problem, and it comes up with possible strategies to solve it. Then, effective strategies must have effective activities to be able to achieve the goal. Also, all the stakeholders should actively participate in the implementation. A good leadership style will bring changes during the implementation stage; however, resistance to change should be expected and managed using the Kotter change management model. Limited funds affect the progress of the project, ie, PHC is not on time. Lastly, ALHIV is a key population with a lot of issues, so a project to be successful should give adequate time.

Conclusion

Improving ART adherence among ALHIV is important because it reduces morbidity and mortality among adolescents

Project limitation

One of the limitations of the project is insufficient allocation to the project and PHC funds, which takes longer than the expected time to deliver to the facility, and accounts for implementing some of these activities. Also, the COVID pandemic has affected the project in the delivery of drugs and peer support groups.

Recommendations

Strategies such as peer support groups, SMS reminders, and the use of CDDPs to deliver drugs should be used in the project. During the implementation stage, monitoring and mid-term evaluation should be done. With a democratic leadership style, forces against a change should be identified using force field analysis and overcome by the use of Kotter's 8-step change model, and changes adopted using the concerns-based adoption model. As a result, improving ART adherence among ALHIV will take place.

Abbreviations

AIDS Acquired immune deficiency Syndrome
ALHIV adolescent living with HIV
ART Antiretroviral therapy
ARV Antiretroviral
AYPLHIV Adolescent young people living with HIV
HIV Human immunodeficiency virus
MOH Ministry of Health
PLHIV People living with HIV
WHO world Health organization

Source of funding.

The study was not funded

Conflict of interest.

The author did not declare any conflict of interest.

Availability of data.

Data used in this study are available upon request from the corresponding author.

Author contribution

Jane Frank Nalubega supervised all the stages of the study, including manuscript drafting.
Edith Akankwasa supervised all the stages of the study, including manuscript drafting.
Elizabeth Okello supervised all the stages of the study, including manuscript drafting.
David Kavuma supervised all the stages of the study, including manuscript drafting.

Author biography

Jane Frank Nalubega is a tutor at Mildmay Institute of Health Sciences
Edith Akankwasa is a tutor at Mildmay Institute of Health Sciences
Elizabeth Okello is a tutor at Mildmay Institute of Health Sciences
David Kavuma is a tutor at Mildmay Institute of Health Sciences

References

1. Agricola, B.T., van der Schaaf, M.F., Prins, F.J. and van Tartwijk, J., 2020. Shifting patterns in co-regulation, feedback perception, and motivation during research supervision meetings.



- Scandinavian Journal of Educational Research, 64(7), pp.1030-1051. <https://doi.org/10.1080/00313831.2019.1640283>
2. Aguinis, H., 2019. Performance management for dummies. John Wiley & Sons.
 3. Al Khajeh, E.H., 2018. Impact of leadership styles on organizational performance. Journal of Human Resources Management Research, 2018, pp.1-10. <https://doi.org/10.5171/2018.687849>
 4. Ammani, A.A., Auta, S.J. and Aliyu, J.A., 2010. Sustainability challenges: Applying the problem tree analysis methodology to the ADP system in Nigeria. Journal of Agricultural Extension, 14(2). <https://doi.org/10.4314/jae.v14i2.64122>
 5. Appelbaum, S.H., Habashy, S., Malo, J.L. and Shafiq, H., 2012. Back to the future: revisiting Kotter's 1996 change model. Journal of Management Development. <https://doi.org/10.1108/02621711211253231>
 6. Armstrong, M., 2021. Performance management.
 7. Arsenault, C., Yakob, B., Kassa, M., Dinsa, G. and Verguet, S., 2021. Using health management information system data: case study and verification of institutional deliveries in Ethiopia. BMJ Global Health, 6(8), p.e006216. <https://doi.org/10.1136/bmjgh-2021-006216>
 8. Benzaghta, M.A., Elwalda, A., Mousa, M.M., Erkan, I. and Rahman, M., 2021. SWOT analysis applications: An integrative literature review. Journal of Global Business Insights, 6(1), pp.55-73. <https://doi.org/10.5038/2640-6489.6.1.1148>
 9. Buttigieg, S.C., Dey, P.K., and Cassar, M.R., 2016. Combined quality function deployment and logical framework analysis to improve the quality of emergency care in Malta. International journal of health care quality assurance. <https://doi.org/10.1108/IJHCQA-04-2014-0040>
 10. Cameron, E. and Green, M., 2019. Making sense of change management: A complete guide to the models, tools, and techniques of organizational change. Kogan Page Publishers.
 11. Capatina, A., Bleoju, G., Matos, F. and Vairinhos, V., 2017. Leveraging intellectual capital through Lewin's Force Field Analysis: The case of software development companies. Journal of Innovation & Knowledge, 2(3), pp.125-133. <https://doi.org/10.1016/j.jik.2016.07.001>
 12. Caruth, G.D. and Caruth, D.L., 2013. NOTE FOR EDITOR: Understanding Resistance To Change: A Challenge For Universities. Turkish Online Journal of Distance Education, 14(2), pp.12-21.
 13. Carvalho, P.P., Barroso, S.M., Coelho, H.C. and Penaforte, F.R.D.O., 2019. Factors associated with antiretroviral therapy adherence in adults: an integrative review of literature. Ciencia & saude coletiva, 24, pp.2543-2555. <https://doi.org/10.1590/1413-81232018247.22312017>
 14. Eckardt, R., 2012, July. Middle Managers & Performance Review Meetings: Knowledge Creation & Capability Identification. In Academy of Management Proceedings (Vol. 2012, No. 1, p. 12008). Briarcliff Manor, NY 10510: Academy of Management. <https://doi.org/10.5465/AMBPP.2012.12008abstract>
 15. Fater, K.H., 2013. Gap analysis: A method to assess core competency development in the curriculum. Nursing Education Perspectives, 34(2), pp.101-105. <https://doi.org/10.1097/00024776-201303000-00007>
 16. Gido, J. and Clements, J., 2014. Successful project management. Cengage Learning.
 17. Grama, B. and Todericiu, R., 2016. Change, Resistance to Change, and Organizational Cynicism. Studies in Business & Economics, 11(3). <https://doi.org/10.1515/sbe-2016-0034>
 18. GURL, E., 2017. SWOT analysis: A theoretical review.
 19. Haas, M.R., Munzer, B.W., Santen, S.A., Hopson, L.R., Haas, N.L., Overbeek, D., Peterson, W.J., Cranford, J.A., and Huang, R.D., 2020. #DidacticsRevolution: Applying Kotter's 8-Step Change Management Model to Residency Didactics. Western Journal of Emergency Medicine, 21(1), p.65. <https://doi.org/10.5811/westjem.2019.11.44510>
 20. Haberer, J.E., Sabin, L., Amico, K.R., Orrell, C., Galárraga, O., Tsai, A.C., Vreeman, R.C., Wilson, I., Sam-Agudu, N.A., Blaschke, T.F., and Vrijens, B., 2017. Improving antiretroviral therapy adherence in resource-limited settings at scale: a discussion of interventions and recommendations.



- Journal of the International AIDS Society, 20(1), p.21371. <https://doi.org/10.7448/IAS.20.1.21371>
21. Harrison, S.H. and Rouse, E.D., 2015. An inductive study of feedback interactions throughout creative projects. *Academy of Management Journal*, 58(2), pp.375-404. <https://doi.org/10.5465/amj.2012.0737>
22. Heagney, J., 2016. Fundamentals of project management. Amacom.
23. Hiatt, J. and Creasey, T., 2012. Change management. The people side of change, 2.
24. Hudelson, C. and Cluver, L., 2015. Factors associated with adherence to antiretroviral therapy among adolescents living with HIV/AIDS in low- and middle-income countries: a systematic review. *AIDS care*, 27(7), pp.805-816. <https://doi.org/10.1080/09540121.2015.1011073>
25. Hunt, J. and Fitzgerald, M., 2018. Styles of leadership. Leadership: Global and regional perspectives, pp.62-98. <https://doi.org/10.1017/9781108617666.003>
26. Jili, N.N. and Mthethwa, R.M., 2016. Challenges in implementing monitoring and evaluation (M&E): the case of the Mfolozi Municipality.
27. Jost, J.T., 2015. Resistance to change: A social psychological perspective. *Social Research*, 82(3), pp.607-636. <https://doi.org/10.1353/sor.2015.0035>
28. Kim, M.H., Mazenga, A.C., Yu, X., Ahmed, S., Paul, M.E., Kazembe, P.N. and Abrams, E.J., 2017. High self-reported non-adherence to antiretroviral therapy amongst adolescents living with HIV in Malawi: barriers and associated factors. *Journal of the International AIDS Society*, 20(1), p.21437. <https://doi.org/10.7448/IAS.20.1.21437>
29. Kang, J.H., 2016. A Method to Identify How Librarians Adopt a Technology Innovation, CBAM (Concern-Based Adoption Model): Focusing on School Librarians' Concern about Digital Textbooks. *Journal of the Korean Society for Library and Information Science*, 50(3), pp.5-23. <https://doi.org/10.4275/KSLIS.2016.50.3.005>
30. Khoboli, B. and O'toole, J.M., 2012. The concerns-based adoption model: Teachers' participation in action research. *Systemic Practice and Action Research*, 25(2), pp.137-148. <https://doi.org/10.1007/s11213-011-9214-8>
31. Kotter, J.P., 2012. Leading change. Harvard Business Press. <https://doi.org/10.15358/9783800646159>
32. Kruse, K., 2013. What is leadership? Forbes magazine,
33. Kwofie, T.E., Botchway, E.A. and Amos-Abanyie, S., 2018. Examining the performance level of project management competencies of architects in Ghana using a gap analysis approach. *Journal of Construction in Developing Countries*, 23(1), pp.125-147. <https://doi.org/10.21315/jcdc.2018.23.1.8>
34. Long, C.S., Yusof, W.M.M., Kowang, T.O. and Heng, L.H., 2014. The impact of transformational leadership style on job satisfaction. *World Applied Sciences Journal*, 29(1), pp.117-124.
35. MacCarthy, S., Saya, U., Samba, C., Birungi, J., Okoboi, S. and Linnemayr, S., 2018. "How am I going to live?": exploring barriers to ART adherence among adolescents and young adults living with HIV in Uganda. *BMC Public Health*, 18(1), pp.1-11. <https://doi.org/10.1186/s12889-018-6048-7>
36. Mak, A.H. and Chang, R.C., 2019. The driving and restraining forces for environmental strategy adoption in the hotel industry: A force field analysis approach. *Tourism Management*, 73, pp.48-60. <https://doi.org/10.1016/j.tourman.2019.01.012>
37. Maryanti, S., Suci, A., Sudiar, N., and Hardi, H., 2020. Root Cause Analysis for Conducting the University's Community Service to Micro and Small Firms. *Jurnal Manajemen dan Kewirausahaan (Journal of Management and Entrepreneurship)*, 22(2), pp.152-160. <https://doi.org/10.9744/jmk.22.2.152-160>
38. Masalimova, A.R., Usak, M. and Shaidullina, A.R., 2016. Advantages and disadvantages of national and international corporate training techniques in adult education. *Current science*, pp.1480-1485. <https://doi.org/10.18520/cs/v111/i9/1480-1485>
39. Min, M., 2017. Teachers who initiate changes with an ebook-integrated curriculum: Revisiting the developmental assumptions of stages of concerns in the concerns-based adoption model. *Alberta Journal of Educational Research*, 63(1), pp.21-42. <https://doi.org/10.55016/ojs/ajer.v63i1.56146>



40. Montalto, G.J., Sawe, F.K., Miruka, A., Maswai, J., Kiptoo, I., Aoko, A., Oreyo, C., Obiero, E., Korir, S., Bii, S.K. and Song, K.X., 2017. Diagnosis disclosure to adolescents living with HIV in rural Kenya improves antiretroviral therapy adherence and immunologic outcomes: a retrospective cohort study. *PLoS One*, 12(10), p.e0183180. <https://doi.org/10.1371/journal.pone.0183180>
41. Matovic, I.M., 2020. PESTEL analysis of the external environment as a success factor of a startup business. *ConScienS*, p.96.
42. Murphy, A. and Page, C., 2019. A framework for conducting situation assessments.
43. Myrick, D., 2013. A logical framework for monitoring and evaluation: a pragmatic approach to M&E. *Mediterranean Journal of Social Sciences*, 4(14), p.423. <https://doi.org/10.5901/mjss.2013.v4n14p423>
44. Nabunya, P., Bahar, O.S., Chen, B., Dvalishvili, D., Damulira, C. and Ssewamala, F.M., 2020. The role of family factors in antiretroviral therapy (ART) adherence self-efficacy among HIV-infected adolescents in southern Uganda. *BMC Public Health*, 20(1), pp.1-9. <https://doi.org/10.1186/s12889-020-8361-1>
45. Nasri, N.M., 2018. Teachers' Concerns on the Implementation and Practices of i-THINK with Concern-Based Adoption Model (CBAM). *Creative Education*, 9(14), p.2183. <https://doi.org/10.4236/ce.2018.914159>
46. Ngabirano, T., Kigozi, R., Lugemwa, M., Gudoi, S., Tetteh, G., Nabakooza, J., Opigo, J. and Tibenderana, J., 2021. Using the Problem Tree and Results Chain to Improve Uptake of Intermittent Preventive Treatment in Pregnancy Services-Case Study of the Malaria Action Program for Districts in Uganda. <https://doi.org/10.21203/rs.3.rs-957632/v1>
47. Nshimiyiryo, Alphonse, Catherine M. Kirk, Sara M. Sauer, Emmanuel Ntawuyirusha, Andrew Muhire, Felix Sayinzoga, and Bethany Hedt-Gauthier. "Health management information system (HMIS) data verification: a case study in four districts in Rwanda." *PloS one* 15, no. 7 (2020): e0235823. <https://doi.org/10.1371/journal.pone.0235823>
48. Ochieng, M.F. and Tubey, D., 2013. Effectiveness of monitoring and evaluation of CDF Projects in Kenya: A case of Ainamoi Constituency. *International Journal of Arts and Commerce*, 11(1), pp.42-57.
49. Ojokuku, R.M., Odetayo, T.A. and Sajuyigbe, A.S., 2012. Impact of leadership style on organizational performance: a case study of Nigerian banks. *American journal of business and management*, 1(4), pp.202-207. <https://doi.org/10.11634/216796061706212>
50. Omambia, S.M., Odhiambo-Otieno, G.W. and Mwaura, W., 2016. The Design Criteria in Implementation of a Health Management Information System: a Case of Kenyatta National Hospital.
51. Örtengren, K., 2016. A guide to Results-Based Management (RBM), efficient project planning with the aid of the Logical Framework Approach (LFA). Swedish International Development Cooperation Agency (SIDA).
52. Phadermrod, B., Crowder, R.M. and Wills, G.B., 2019. Importance-performance analysis based on SWOT analysis. *International Journal of Information Management*, 44, pp.194-203. <https://doi.org/10.1016/j.ijinfomgt.2016.03.009>
53. Rajan, R. and Ganesan, R., 2017. A critical analysis of John P. Kotter's change management framework. *Asian Journal of Research in Business Economics and Management*, 7(7), pp.181-203. <https://doi.org/10.5958/2249-7307.2017.00106.2>
54. Ramos, Patricia Nicole, Maryl Louise B. Enteria, and Marvin I. Norona. "Readiness Model Development in the Adoption of Internet of Things (IoT) among Philippine Manufacturing SMEs Using Force Field Analysis Approach and Structural Equation Modelling." In *Proceedings of the Second Asia Pacific International Conference on Industrial Engineering and Operations Management*, Surakarta, Indonesia, pp. 14-16. 2021.
55. Sarayreh, B.H., Khudair, H. and Barakat, E.A., 2013. Comparative study: The Kurt Lewin of change management. *International Journal of Computer and Information Technology*, 2(4), pp.626-629.
56. Sharma, A., Rana, S.K., Prinja, S. and Kumar, R., 2016. Quality of health management information



Student's Journal of Health Research Africa

e-ISSN: 2709-9997, p-ISSN: 3006-1059

Vol.6 No. 6 (2025): June 2025 Issue

<https://doi.org/10.51168/sjhrafrica.v6i6.1609>

Original Article

- system for maternal & child health care in Haryana state, India. PLoS One, 11(2), p.e0148449. <https://doi.org/10.1371/journal.pone.0148449>
57. Shimoni, B., 2017. What is resistance to change? A habitus-oriented approach. Academy of Management Perspectives, 31(4), pp.257-270. <https://doi.org/10.5465/amp.2016.0073>
58. Song, J., Sun, Y., and Jin, L., 2017. PESTEL analysis of the development of the waste-to-energy incineration industry in China. Renewable and Sustainable Energy Reviews, 80, pp.276-289. <https://doi.org/10.1016/j.rser.2017.05.066>
59. Straková, J., 2016. Advantages and Limitations of Application of Situation Analysis in the Corporate Sphere.
60. Tang, K.N., 2019. Change management. In Leadership and change management (pp. 47-55). Springer, Singapore. https://doi.org/10.1007/978-981-13-8902-3_5
61. Terzi, A.R. and Derin, R., 2016. The Relation between Democratic Leadership and Organizational Cynicism. Journal of Education and Learning, 5(3), pp.193-204. <https://doi.org/10.5539/jel.v5n3p193>
62. Thamhain, H., 2013. Managing risks in complex projects. Project management journal, 44(2), pp.20-35. <https://doi.org/10.1002/pm.j.21325>
63. Truschke, J.M., 2018. Advantages of a Formal Communication Plan (Doctoral dissertation, Webster University).
64. van Werven, R., Cornelissen, J. and Bouwmeester, O., 2022. The relational dimension of feedback interactions: A study of early feedback meetings between entrepreneurs and potential mentors. British Journal of Management. <https://doi.org/10.1111/1467-8551.12615>
65. Waithera, S.L. and Wanyoike, D.M., 2015. Influence of project monitoring and evaluation on performance of youth-funded agribusiness projects in Bahati Sub-County, Nakuru, Kenya. International Journal of Economics, Commerce and Management, 3(11), p.375.
66. Yılmaz, D. and Kılıçoğlu, G., 2013. Resistance to change and ways of reducing resistance in educational organizations. European journal of education research, 1(1), pp.14-21.
67. Yüksel, I., 2012. Developing a multi-criteria decision-making model for PESTEL analysis. International Journal of Business and Management, 7(24), p.52. <https://doi.org/10.5539/ijbm.v7n24p52>



Student's Journal of Health Research Africa

e-ISSN: 2709-9997, p-ISSN: 3006-1059

Vol.6 No. 6 (2025): June 2025 Issue

<https://doi.org/10.51168/sjhrafrica.v6i6.1609>

Original Article

PUBLISHER DETAILS:

Student's Journal of Health Research (SJHR)

(ISSN 2709-9997) Online

(ISSN 3006-1059) Print

Category: Non-Governmental & Non-profit Organization

Email: studentsjournal2020@gmail.com

WhatsApp: +256 775 434 261

Location: Scholar's Summit Nakigalala, P. O. Box 701432,

Entebbe Uganda, East Africa

