

TheALS-IECTheoryandItsEffectonP ersons Living with HumanImmunodeficiencyVi rus

Original Research Article

ABSTRACT

The visible problems among persons living with human immunodeficiency virus (HIV) are insufficiency of HIV information about the impact it will bring into their lives and non-compliance to treatment due to fear of disclosure. The need to enhance information about the HIV human immunodeficiency virus (HIV) through extensive health teaching and exemplary education modeling may help persons living with HIV (PLHIV) live with dignity and hope as children of God. The purpose of the study is to discover what substantive theory can be used to unearth variables such as active involvement in the society, life change advocacy, life promotion and dignity, one finds oneself, sensitivity to one's knowledge needs, and accountability and commitment to be safe which led to the development of "all loving support-information, education, and counselling theory. A mixed method embedded experimental design was used in testing the theory through a double-blind approach that quantified the

discussion and the quantitative participants were 30 college students living with HIV, 18-24 years old, male, Christian, and currently enrolled in a college or university in the Davao region excluding those who are sick and admitted to the hospital. Pretest findings revealed that the participants were moderately informed about facts on HIV and moderately followed the course of treatment but after a series of tests (post-test after two weeks, after one month, and after two months), reported that they were totally informed about the facts on HIV and will strictly adhere to the therapy. The pretest and post-test scores on the level of awareness and medical compliance showed significant differences after a series of tests. Thus, the application of ALS-IEC theory is effective among persons living with HIV in assessing HIV awareness and drug adherence encompassing bio-psycho-sexual-social-cultural-spiritual domains. Continued use of the personalized health assessment will also offer a learning opportunity (information) through reading (education) and nurse-delivered counselling a sex extended care after HIV screening counselling will address the immediate needs of clients.

Keywords: All loving support; information; education; counseling; persons living with human immunodeficiency virus.

1. INTRODUCTION

The human immunodeficiency virus (HIV) or acquire immunodeficiency syndrome (AIDS) is a worldwide health issue. Around 43.8 million people living with human immunodeficiency virus (PLHIV) from 2017 to 2021, 5.1 million people are not aware that they have the virus, and not all received antiretroviral treatment (ART) [1]. The Philippines is one of the Asian countries that showed an increase in HIV cases among men [2]. HIV attacks the immune system by glycoprotein replication (CD4) in which an individual is prone to acquire opportunistic infections and may experience behavioral disturbances [3]. However, the Reproductive Health and Wellness Center (RHWC) in Davao City, Philippines; emphasized that an increase in PLHIV is more on risky sexual behaviors and urbanization.

Hence, there are varying levels of understanding about the facts of HIV due to ignorance and myths. Generally, most PLHIV felt helpless, sad, and anxious once they knew that they were infected with the virus, even if others had shown support for their health condition. This is a problem to which nurses will be of help through clear information, education, and counseling (IEC) about HIV. Significantly, the researcher presents this as the central part of the theory being carried out in the nursing practice. To this end, a survey was conducted among twenty male positive for HIV, who expressed that support and self-awareness are vital in life goals. Thus, nurses have a greater opportunity to assess and hear the sentiments and communicate therapeutically.

The visible problems among PLHIV were insufficient of HIV information about its impact

on their lives and non-compliance with treatment due to fear of disclosure. Hence, a spiritual needs assessment is also significant in the information process. Furthermore, the theory formulated from the name initials of the researcher "All-Loving Support (ALS)-Information, Education, And Counseling" theory is built on the premise that information, education, and counseling could be provided by the nurse. It has measures using the components of ALS-IEC after thorough information was given. Education will be acquired through reading some facts about the disease and its harmful effects on the body and mind of the person.

Thus, counseling will enhance life skills and grab learning opportunities that may slowly lead to appreciating the gift of life. This is an opportunity to build a trusting atmosphere between the health care provider and recipients of care and learning opportunities that offer the greatest leverage in extending HIV care. Hence, the visible problems among PLHIV are insufficiency of HIV information about the impact it will bring into their lives and non-compliance to treatment due to fear of disclosure. So, there is a need to enhance HIV information through extensive health teaching and exemplary education modeling that may lead them to live with dignity and hope as children of God.

The purpose of the study is to discover what substantive theory can be used to unearth variables such as active involvement in the society, life change advocacy, life promotion and dignity, one finds oneself, sensitivity to one's knowledge needs, and accountability and commitment to be a few which led to the development of "all loving support-information,

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Comment [OGA2]: Kindly rephrase! I guess, you meant that not all those diagnosed of HIV

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Comment [OGA3]: Kindly review this statement. CD4 is not the same as 'glycoprotein replication' so CD4 should not be in bracket. Again, it is not entirely correct that HIV attacks the immune system by glycoprotein replication. Kindly cross-check!

Comment [OGA4]: Provide the reference for this information.

education, and counselling theory; and aims to determine the effects of ALS-IEC theory among PLHIV through a pre-test-post-test approach and develop a specialized program to extend pre and post-HIV screening test counseling.

2. METHODS

2.1 Design

Mixed method embedded experimental design was used in testing the theory through focus group discussion utilizing a double-blind approach then quantified the grounded explored experiences of the participants through a pretest-post-test one group approach.

2.2 Research Locale

The study was conducted in the first district of Davao City region XI, Philippines. It is one of the local health centers where PLHIV are followed up for medical check-up, medication, series of laboratory tests, and counseling. However, the participants are from 18 schools or colleges in Davao City.

2.3 Sampling Technique

There were 50 college students (regular/irregular) living with HIV who are 18-24 years old, male, Christian, and currently enrolled in a college or university in Davao region, Philippines excluding those who are sick and admitted to the hospital. There were 20 participants for the qualitative study selected through snowball sampling technique and 30 participants for the quantitative study selected through a multistage sampling technique. The participants were not obliged to attend instead of a freely given appearance [4] during the data collection process.

Phase 1- Qualitative:

Tool Development:

In developing the tool, the ABC Model of Albert Ellis guided the researcher to analyze a person's behavior who developed irrational beliefs by following the ABC scheme: (A) Activating event - Record the situation that ultimately leads to some type of high emotional response or negative, dysfunction all thinking while (B) Beliefs

writing down the negative thoughts that occurred (belief) and (C) Consequence- the negative thoughts that bridge between the

situation and the distressing feelings. The model described emotions or negative thoughts that the client thinks are caused by (A), and this could be anger, sorrow, anxiety, etc.

Ellis believed that it is not the activating event that causes negative emotional and behavioral consequences, but rather a person interpreted these events unrealistically due to his belief system [5]. However, the researcher also utilized different concepts from the reviewed literature in developing the variables and used the model of Ellis as a guide in organizing the grounded tool of the proposed module by redefining ABC to IEC (Information, Education, Counseling). Hence, this will break the gap between misconceptions and lack of knowledge about HIV, drug adherence, and personal issues.

The survey tool known as the personal health assessment tool was finalized based on the 6 domains (social-psycho-sexual-bio-cultural-spiritual). Thus, the personal health assessment tool or the grounded tool will assess the different domains. The six (6) variables referred to Active involvement in the society (A1-social), Life change advocacy (L1-psycho-sexual-social), Life promotion and dignity (L2-socio-cultural), One finds oneself (O-psychological), Sensitivity to one's knowledge needs (S-bio-psycho-sexual), and Accountability and commitment to be safe (A2-spiritual). The 6 domains used the acronym ALLOSA which signifies the maiden name of the principal author.

The 6 domains were based on the reviewed related literature. The formulated set of questionnaires about the experiences of PLHIV in the community as HIV advocate, course of treatment, being positive with HIV; importance of love, acceptance, respect; human rights; discrimination; decision in life ways, coping; and knowledge on antiretrovirals. Then, it was validated by academic experts and HIV experts and pretested to 10 participants to check if the participant understands the questionnaire. This is done to know if they have any clarifications. Pre-testing of the tool is needed as the direct evidence for the validity of each item of the questionnaire [6].

Research procedure:

In phase 1, the study used a grounded tool developed from the theory building and grounding stages. It uses a set of procedures to develop an inductively derived grounded theory

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Comment [OGA8]: Rationale behind the redefinition of ABC to IEC is not clear or detailed. Also the relevance of the ABC model to the objective of this study is not adequately stated.

Comment [OGA7]: Kindly indicate the rationale behind the age bracket sample selection. Justify the inclusion and exclusion criteria appropriately.

about a phenomenon. The built theory is grounded from the researcher's philosophy in life. The flashback of experiences and observations across a diversity of cultures made the researcher believe that God is full of mercy and compassion and a source of forgiveness. As a nurse, through the encountered experiences of patients diagnosed with HIV or AIDS and wanted to know their thoughts and feelings of being positive with HIV.

Literature and related studies were reviewed and found out that PLHIV really need holistic care. The researcher used her maiden initials (ALLOSA) in formulating the six (6) variables. Each variable is defined based on the reviewed concepts encompassing bio-psycho-socio-spiritual behavior. Then, the initial research process began by making the semi-structured questions for focus group discussion.

The questionnaire was validated by a priest, HIV nurse counselor, HIV physician, HIV social worker, and a guidance counselor after approval of the City Health Office and Ethics Committee of Reproductive Health and Wellness Center (RHWC) and San Pedro College. The person of reference (HIV nurse counselor) was the one who chose and helped the researcher in the orientation process. The participants signed and agreed to the scheduled date of focus group discussion (FGD) with emphasis on maintaining privacy and anonymity.

Moreover, the participants were all present during the audio-recorded conversation with the presence of the HIV counselor and documenter. The participants granted the audio-recording if no names will be mentioned, and no picture taking to maintain a safe and respectful group environment and prevent emotional breakdown [7].

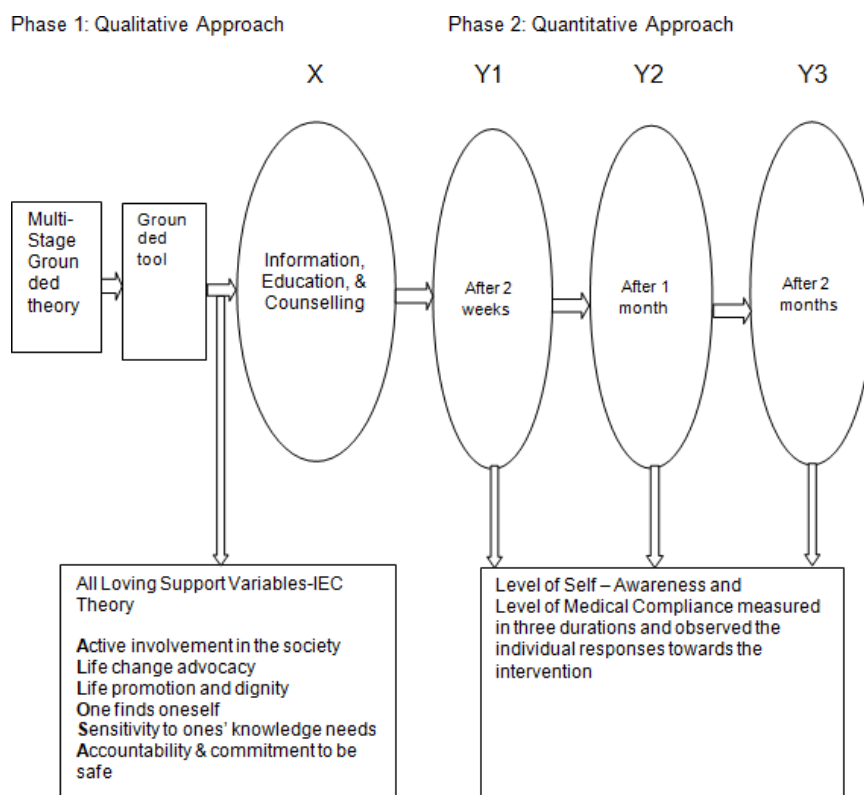


Fig.1. Conceptual Model

During the interview, the participants answered the questions for forty minutes but not more than ninety minutes during FGD. All answers were validated with the participants, but the audio-recorded conversation was deleted after transcription as requested from the president of the PLHIV organization to cover privacy and confidentiality (refer Annex C). The law stipulated the emphasis on human rights vis-a-vis public health and safety among PLHIV. All printed documents were kept in the RHCW to keep the data safe.

Data analysis:

The results were transcribed, translated, interpreted, and analyzed through theoretical sampling method. The data collected followed the process of coding such as open coding, axial coding, and selective coding. The generated data will discover categories and each element to explain interrelationships between constructs. Theoretic sampling grounded theory approach is based on analytic induction. This is always used to participants with additional diversity of attributes within the same group [8]. The defined statements or emerged themes were coded (open coding), relationships among the open codes were made to see the connections among the codes (axial coding). Then, the core variable included all the data was figured out and read the transcripts, and selectively coded any data that relates to the identified core variable. Open coding, axial coding, and selective coding

or selection of statements led to the emergence of conceptual or theoretical structure [9] (refer Annex A).

The series of open and axial coding techniques finally arrived in selective coding and built the theory. Hence, the researcher postulated that theory X would lead to theory Y, which entails forgiveness and preparedness before the end of life. Then, the constructs determined that theory X is the support system and theory Y is self-awareness. After building the blocks of the theoretical concepts, a theory was developed behind the events stating that support will boost self-awareness and lead to self-help. This means that this is the result of the researcher's "All Loving Support" in support of PLHIV and became ALS signifying Anna Liza Saus' effort in formulating the theory. Thus, the under study variables provided the explanation of the built theory [10].

3. QUALITATIVE RESULTS

Qualitative results revealed 13 emergent themes: (1) information dissemination, (2) understand prohibitions, (3) solitude, (4) dignity, (5) survival, (6) shame, (7) medical compliance, (8) health promotion, (9) carelessness, (10) self-expression, (11) reaching out, (12) perseverance, and (13) endeavor. A series of open and axial coding techniques finally arrived in selective coding and built the theory.

Comment [OGA9]: Deleting the audio-recording is not best practice for confidentiality and privacy protection. I suggest you review and update this section.

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Chart 1. List of themes and its associate codes

Themes	Open Codes	Axial Codes	Selective Codes
1. information dissemination (ACTIVE INVOLVEMENT IN SOCIETY)	inform, awareness, support	Government agencies encouraged PLHIV to participate as HIV advocate.	Support from the government
2. understand prohibitions (LIFE CHANGE AD VOCACY)	instruction, avoidance, protection	R.A. 8504 empowered people to prevent further HIV transmission.	Support from the government
3. solitude (LIFE PROMOTION AND DIGNITY)	disappointed, stay away, self-isolation	Every human being has an innate right to be valued, respected, and receive ethical treatment.	Support from the people
4. dignity (LIFE PROMOTION AND DIGNITY)	acceptance, stay away, self-isolation, feeling of different	People are encouraged to show equality among people from all walks of life.	Support from the people
5. survival (ONE	convince, denial,	Self-awareness	Self-awareness

Themes	OpenCodes	AxialCodes	SelectiveCodes
FINDSONESELF) 6.shame(ONEFINDSO NESELF)	weak,readiness faked emotions,silenc e	promotesacceptance. Increased self- esteemreflects emotionalevaluationof hisown worth.	Self-awareness
7.medicalcompliance(SENSITIVITYTO ONE'SKNOWLEDGE NEEDS)	preventive measures,medical follow- up,vulnerability, prevention,protection, safesex	Recognition ofnegativityentails acceptanceofrealitya ndresolution.	Self-awareness
8. health promotion(SENSITIVI TY TOONE'SKNOWLED GENEEDS)	difficulty, privacy,Antiretro virals	Conscious knowledgeofone'sown characterentailself- worth.	Self-awareness
9. carelessness(SENSIT IVITY TOONE'SKNOWLED GENEEDS)	difficulty, abandon,convince	Familiarization of newdailyroutinemayh elpan individual developself- discipline.	Self-awareness
10. self- expression(SENSITIV ITY TOONE'SKNOWLED GE NEEDS)	lifecoaching,caring,u nderstanding,selecti ve trust	Ventilationoffeelings may boosts a betterunderstanding of oneself.	Self-awareness
11. reaching out(SENSITIVITYTO ONE'SKNOWLEDGE NEEDS)	self- threatenedfaith,hope lessness,counseling	Counseling bringsforthself- expression.	Self-awareness
12. perseverance(ACCO UNTABILITYAND COMMITMENTTOB ESAFE)	advocate, overseasworker, health careprovider	Conscious knowledgeand understanding ofown character,feelings,mot ives,and desireswillentailinnerst rength.	Self-awareness
13. endeavor(ACCOUN TABILITYANDCOM MITMENT TOBESAFE)		Self- determinationhelps an individualachieveelf egoals.	Self-awareness

Hence, the researcher postulated that theory X would lead to theory Y, which entails forgiveness and preparedness before the end of life. Then, the constructs determined that theory X is the support system and theory Y is self-awareness. After building the block of the theoretical concepts, a theory was developed behind the events stating that support will boost self-awareness and lead to self-help. This means that this is the result of the researcher's "All Loving Support" in support of PLHIV and became ALS signifying Anna Liza Saus' effort in formulating the theory. Thus, the under study variable provided the explanation of the built theory [11].

Finally, the researcher developed the grounded tool survey questionnaire as part of an information inquiry about the facts of HIV.

Thesecondpartistheanswerstothequestionnaire

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as an educational strategy, and awareness awakening about being one of PLHIV is the last part of the module. It deals with counseling or communication, with listed support groups. So as if they reach out to the organization, it indicates self-help.

4. QUALITATIVE DISCUSSION

Based on the results of the study, the themes or defined statement that emerged are information dissemination, understanding prohibition, solitude, dignity, survival, shame, separation, health promotion, carelessness, self-expression, reaching out, perseverance, and endeavor led to the development of the "All Loving Support-Information, Education, and Counselling" theory that can be used as a basis for positive prevention programs.

In previous studies, the support system was not fully determined when it comes to key health outcomes [12]. However, the study determined the specific support system needed by PLHIV which is from the government, people, and family. Beyond testing, the government program should improve resources in detecting HIV positives and continue giving direct assistance and referral to any nearby HIV center to make sure clients with reactive results should go to the main HIV center [13]. The Philippines lawmakers introduced the approved HIV and AIDS Policy Act of 2018 (Republic Act 11166 former R.A. 8504) which includes the protection of PLHIV rights [14] because the dignity and equal rights of these people are at stake. Even though the law prevails there are still underutilized health laws in the fields of health sciences [15]. Support from the people often improves disclosure with potential prevention benefits [16]. Helping them by talking, actively listening, imparting more knowledge about HIV, encouraging drug adherence, asking appropriately, and keeping the talk confidential will build their self-esteem, and trust will be achieved between nurse and client [17]. Family support significantly contributes to a better quality of life among PLHIV [18]. With the support system, self-awareness may develop through the efforts of advocates and peer counselors' encouragement as well as spiritual counseling. PLHIVs really need regular counseling because some of the young PLHIVs mostly choose self-isolation because of feelings of rejection from their families. These people need help to regain self-worth aside from fighting the ill effects of the virus to regain ART [19].

Phase 2-Quantitative:

Tool Development:

Finally, the researcher developed the grounded tool or survey questionnaire as part of an information inquiry about the facts of HIV. The second part is the answers to the questionnaire as an educational strategy, and awareness awakening about being one of PLHIV is the last part of the module. It deals with counseling or communication, with listed support groups. So as if they reach out to the organization, it indicates self-help. Further, the ALS-IEC theory that emerged in the first phase was experimented in the second phase of the study.

Consequently, IEC stands for information about the facts of HIV, education about HIV, and

counseling on health concerns. Thus, the 6 variables became the content of the personalized health assessment tool (grounded tool) that will assess the combined domains of social-psycho-sexual-bio-cultural-spiritual. The six (6) variables are Active involvement in the society (A1-social), Life change advocacy (L1-psycho-sexual-social), Life promotion and dignity (L2-socio-cultural), One finds oneself (O-psychological), Sensitivity to one's knowledge needs (S-bio-psycho-sexual), and Accountability and commitment to be safe (A2-spiritual) were measured in the second phase. The validation process of the survey tool was done in the same manner in doing the qualitative phase. The level of awareness tool is for the primary participants and the level of medical compliance tool is for the secondary participant. Both survey tools utilized the 6 variables encompassing different domains (refer to Annex B).

Research procedure:

In phase 2, the process was conducting the qualitative phase is similar with the quantitative phase when it comes to inclusion and exclusion criteria and sampling technique. In the first stage of phase two (2), the person-in-charge of the records of PLHIV had summed up all registered PLHIV in RHW, Region XI, with a total of 234 in October 2018. In the second stage, all males were extracted from the list with a total of 110; in the third stage, all males aged 18-24; in the fourth stage was the identification of schools where they are studying; in the fifth stage was the selection of the participants in fifteen (15) schools or colleges; and in the sixth stage was the selection of two (2) to three (3) participants from each school with a total of 30 participants.

The secondary participant (HIV counselor) who have worked for more than two (2) years oriented the participants and explained some of the benefits and purpose of the study. The intervention was done in one of the HIV hubs centers in region XI. This is the reason why most of them accepted the challenge as part of the study. All participants did not know who the researcher is and did not know each other but aware that they are under study. Double-blind studies are particularly useful for preventing bias due to demand characteristics or effect [20] and is considered the "gold standard" in intervention studies [21]. This is a chain referral process that allows the researcher to reach populations who are difficult to sample when using other sampling

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methods[22]. However, the total number of persons positive with HIV was not divulged because it requires a proper review of the documented list before reporting to DOH. Moreover, all of them had an equal chance of participating in the study. Thirty participants were purposively selected from 18 schools or colleges except for those who refused to participate in the study. The HIV nurse counselor assisted in explaining how to answer the personal profile forms using the file number as the code name and coded school name. This is done to maintain the confidentiality of information collected from research participants that only the research team can identify the responses and must maintain privacy. Confidentiality, privacy, and anonymity were maintained. Participants' information from the collected data were kept in the RHCW office. Names and school are numbered to keep the participants' identity; because this research is considered a sensitive issue that needs rigid enforcement of ethical procedures [23]. Then, the participants' response was measured from pre-test to 3 post-tests (after two (2) weeks, one (1) month, and two (2) months).

This mixed method is almost similar in the within-subjects design where the data collection during pre-test of the personalized health assessment tool was analyzed and followed by series of post-test. Then, analysis and comparison of the pre-test and post-test results were carried out. Everyone has more than one score in which the

effect occurs within each participant. However, the embedded experimental design is really the foundation of the theoretical framework and not its method, since the researcher needs to quantify the qualitative data by transforming qualitative codes into ratings [24].

Data analysis:

The study aims to determine the effects of ALS-IEC theory on persons living with HIV.

Specifically, it sought to answer the pre-test levels of awareness and medical compliance in terms of active involvement in society, life change advocacy, life promotion and dignity, one finds oneself, sensitivity to knowledge needs, and accountability and commitment to be safe; post-test levels of awareness and medical compliance after two (2) weeks, after one (1) month, and after two (2) months; the significant difference of both level of self-awareness and medical compliance after two (2) weeks, after one (1) month, and after two (2) months; and the significant difference between the pre-test and post-test scores of both level of self-awareness and level of medical compliance.

The checklist survey form was developed after the grounding stage to measure the level of self-awareness and medical compliance of PLHIV utilizing a four (4) point Likert's scale, and the equivalent measure is reflected below.

Level of Awareness		Level of Medical Compliance	
Score	Scale	Description	Interpretation
4	3.50-4.00	Strongly agree	fully aware fully compliant
3	2.50-3.49	Agree	partially aware partially compliant
2	1.50-2.49	Disagree	partially unaware partially non-compliant
1	0.50-1.49	Strongly Disagree	unaware non-compliant

SPSS software was used in analyzing the statistical results to get the mean ratings in determining the pre-test and post-test scores of the level of self-awareness and the level of medical compliance through a series of intervention after 2 weeks, after 1 month, and after 2 months. Then, its significant difference of the three durations was analyzed through ANOVA while the pre-test and post-test scores of both the level of self-awareness and level of medical compliance was statistically treated with paired t-test.

5. QUANTITATIVE RESULTS

Pretest findings revealed that the participants were moderately informed about facts on HIV and moderately followed the course of treatment but after a series of tests (post-test after two weeks, after one month, and after two months); results showed that they were totally informed about the facts on HIV and will strictly adhere to the therapy. Refer to the series of Tables 3, 4, 5, 6, 7 and 8.

Comment [OGA13]: What is the full meaning of DOH...? Ensure to write the full meaning at first appearance.

Table1.Pre-testLevelof AwarenessamongPLHIV

IndicatorsofAwareness	Mean	SD	Interpretation
ActiveInvolvementinSociety	3.71	0.63	FullyAware
LifeChangeAdvocacy	3.42	0.36	PartiallyAware
LifePromotionandDignity	3.17	0.37	PartiallyAware
OneFindsOneself	3.36	0.39	PartiallyAware
SensitivitytoOne'sKnowledgeNeeds	3.27	0.54	PartiallyAware
Accountabilityand Commitmenttobe Safe	3.42	0.30	PartiallyAware
OverallMean	3.39	0.32	PartiallyAware

Table2.Pre-testLevelof MedicalComplianceamongPLHIV

IndicatorsofAwareness	Mean	SD	Interpretation
ActiveInvolvementinSociety	2.88	0.93	PartiallyCompliant
LifeChangeAdvocacy	3.9	0.31	FullyCompliant
LifePromotionandDignity	2.93	0.69	PartiallyCompliant
OneFindsOneself	3.63	0.43	FullyCompliant
SensitivitytoOne'sKnowledgeNeeds	3.77	0.28	FullyCompliant
Accountabilityand Commitmenttobe Safe	3.53	0.51	FullyCompliant
OverallMean	3.44	0.38	PartiallyCompliant

Table3.Post-testlevelofawareness amongPLHIV after2weeks,after1month,andafter2months

Awareness	after2weeks			after1month			after2months		
	Mean	SD	Interpret	Mean	SD	Interpret	Mean	SD	Interpret
A1	3.58	0.19	FA	3.66	0.15	FA	3.91	0.1	FA
L1	3.52	0.28	FA	3.42	0.17	PA	3.55	0.06	FA
L2	3.33	0.36	PA	3.75	1.17	FA	3.52	0.16	FA
O	3.45	0.35	PA	3.53	0.16	FA	3.57	0.15	FA
S	3.53	0.32	FA	3.35	0.16	PA	3.41	0.2	PA
A2	3.76	0.28	FA	3.91	0.09	FA	3.82	0.16	FA
Overallmean:	3.53	0.2	FA	3.6	0.19	FA	3.63	0.03	FA

Legend: FA-Fully
AwarePA-Partially
Aware

**Table4.Post-testlevelofmedicalcomplianceamongPLHIV
after2weeks,after1month,andafter2months**

Awareness	after2weeks			after1month			after2months		
	Mean	SD	Interpret	Mean	SD	Interpret	Mean	SD	Interpret
A1	2.72	0.72	PC	2.72	0.72	PC	2.72	0.72	PC
L1	3.87	0.35	FC	3.83	0.38	FC	3.87	0.35	FC
L2	3.50	0.82	FC	3.50	0.82	FC	3.50	0.82	FC
O	3.82	0.28	FC	3.82	0.28	FC	3.82	0.28	FC
S	3.82	0.23	FC	3.82	0.23	FC	3.82	0.23	FC
A2	3.87	0.35	FC	3.87	0.35	FC	3.87	0.35	FC
Overall mean:	3.60	0.25	FC	3.59	0.27	FC	3.60	0.25	FC

Legend:F.C.-FullyCompliant
P.C.-PartiallyCompliant

Table 5. Difference of the Level of Awareness among PLHIV after 2 weeks, after 1 month, and after 2 months of Intervention

Awareness	F value	p-value	Wilk's Lambda	p-value	Pairwise	Interpret	Decision
A1	73.76	0.008	0.166	0.00*	2w,1m<2m	S	RejectHo1
L1	0.331	0.569	0.639	0.002*	2w,>1m<2m	S	RejectHo1
L2	8.074	0.008	0.734	0.013*	2w,<1m2m	S	RejectHo1
O	2.87	0.133	0.909	0.264	2w,<1m2m	N.S.	AcceptHo1
S	4.587	0.041	0.75	0.018*	1w,2m<2m	S	RejectHo1
A2	1.099	0.303	0.671	0.004*	2w,<1m2m	S	RejectHo1

*Significant @ p-value < 0.05
 Legend: 2w-after 2 weeks; 1m-after 1 month; and 2m-after 2 months
 NS-Not Significant; S-Significant

Table 6. Difference of the Level of Medical Compliance among PLHIV after two (2) weeks, after one (1) month, and after two (2) months of Intervention

Awareness	F value	p-value	Wilk's Lambda	p-value	Pairwise	Interpret	Decision
A1	-	-	-	-	-	NS	AcceptHo2
L1	0.022	0.326	0.967	0.326	-	N.S.	AcceptHo2
L2	-	-	-	-	-	N.S.	AcceptHo2
O	-	-	-	-	-	N.S.	AcceptHo2
S	-	-	-	-	-	N.S.	AcceptHo2
A2	-	-	-	-	-	N.S.	AcceptHo2

*Significant @ p-value < 0.05
 Legend: NS-Not Significant

Table 7. Difference of Level of Awareness between Pre-test and Post-tests Scores

Awareness	Pretest		Post-test		T-value	p-value	Interpret	Decision
	Mean	SD	Mean	SD				
A1	3.71	0.63	3.91	0.10	-7.164	0.00*	S	RejectHo3
L1	3.42	0.36	3.55	0.06	2.043	0.05	NS	AcceptHo3
L2	3.17	0.37	3.52	0.16	-5.159	0.00*	S	RejectHo3
O	3.36	0.39	3.57	0.15	2.545	0.017*	S	RejectHo3
S	3.27	0.54	3.41	0.20	-1.414	0.168	NS	AcceptHo3
A2	3.63	0.34	3.82	0.16	2.998	0.006*	S	RejectHo3
Overall Mean:	3.43	0.30	3.63	0.03	-3.829	0.001*	S	RejectHo3

Table 8. Difference of Level of Medical Compliance between Pre-test and Post-tests Scores

Awareness	Pretest		Post-test		T-value	p-value	Interpret	Decision
	Mean	SD	Mean	SD				
A1	2.88	0.93	2.72	0.72	0.372	0.712	NS	AcceptHo3
L1	3.9	0.31	3.87	0.35	0.841	0.407	NS	AcceptHo3
L2	2.93	0.69	3.5	0.82	3.084	0.004*	S	RejectHo3
O	3.63	0.43	3.82	0.28	2.362	0.025*	S	RejectHo3
S	3.77	0.28	3.82	0.23	-0.841	0.407	NS	AcceptHo3
A2	3.53	0.51	3.87	0.35	-2.763	0.01*	S	RejectHo3
Overall Mean:	3.44	0.38	3.6	0.25	2.223	0.034*	S	RejectHo3

6. QUANTITATIVE DISCUSSION

Consecutively, the qualitative survey questions were quantified using the 4-point Likert scale to test the ALS-IEC theory among college students living with HIV. It is a personalized health assessment tool for PLHIV encompassing psychosocial-sexual-bio-cultural-spiritual. The pre-test result showed that they are partially aware of the facts of HIV and partially compliant with the treatment regimen. Even when support groups and treatment are available and accessible, retention in care is frequently cited as a key issue in many countries. Students positive for HIV are vulnerable to being lost to follow-up because of different reasons. To mitigate these events, it is important to encourage a positive outlook in life through a support system from medical professionals, lawmakers, and the general population [25].

After two (2) weeks of intervention, A2 shows the highest level of awareness while L2 shows the lowest level of awareness; after one (1) month, A2 shows the highest level of awareness while S shows the lowest level of awareness; and after two (2) months, A1 shows the highest level of awareness while S shows the lowest level of awareness. Overall, the participants are fully aware of the facts of HIV after a series of tests. However, there is a significant difference in the level of awareness when it comes to the numerical value of each variable. This shows that behavior changes if being influenced by a stimulus where a person interacts with the environment; and that stimulus pool to make up a specific internal impact to reach the adaptation level. Hence, the health care providers should apply specific interventions after a clear assessment tool to reach the target goal of adopting a new daily routine as one of PLHIV [26].

Meanwhile, the medical compliance showed that after two (2) weeks of intervention, L1 and A2 shows the highest level of medical compliance and A1 has the lowest level of medical compliance; after one (1) month, A2 has the highest level of medical compliance while A1 has the lowest level of medical compliance; and after two (2) months, L1 and A2 have the highest level of medical compliance while A1 has the lowest level of medical compliance. Overall, the participants are fully compliant in following the course of treatment and show that the outcome of the intervention of the program has no significant difference although it decreased after one (1) month and slightly increased after two (2)

months. There are factors that may affect experimentation. Environmental and social factors may change the situation. Some factors are visible, while others cannot be seen. In some situations, only the effects of these factors are evident. However, a person or the interactive role of these factors may also affect how they execute in time and space [27].

Generally, the entire result shows a significant difference between the pre-test and post-tests of interventions on the level of awareness among college students living with HIV after two (2) weeks, after one (1) month, and after two (2) months. A1 shows the greatest level of significance while S shows no significant numerical value on the level of medical compliance. Consistent monitoring will help them nurture their inner self or realize self-worth. This is the part of their lives that has a slow pace of moving on. They needed authentic support from loved ones and people from all walks of life. Safe-sex education should be provided or taught repeatedly in schools or colleges to realize the love of self, increase self-esteem, and reduce stigma [28].

Furthermore, the entire result of the level of medical compliance shows a significant difference between the pre-test and post-tests of intervention among college students positive for HIV after two (2) weeks, after one (1) month, and after two (2) months. A2 shows the greatest level of significance while A1 has the lowest numerical value.

Most of them are encouraged to have regular medical and/or psychological consultations along with counseling. Different motivational approaches were used by medical personnel through education about positive prevention. Consistent appearance in medical facilities signifies that an evidence-based psychosocial support program is effective. The existing program can be further enhanced by accommodating another technique in support of better psychological well-being leading to continuous access to medical facilities for drug adherence [29]. The personalized assessment tool may also help assess holistically to address a specific need. On this account, the interventions support the global plan of action to curb HIV/AIDS. The personalized health assessment tool could be of help in monitoring the different aspects of concerns or issues of PLHIV.

Comment [OGA14]: Kindly provide a reference for this assertion and possibly identify some of the reasons for vulnerability to LTFU.

Comment [OGA15]: How does this result or finding relate to previous studies...? Any citation to support or contradict your findings?

Comment [OGA16]: The discussion for both the qualitative and quantitative can be further improved for clarity, coherence and proper justification of findings.

7. CONCLUSION

Both qualitative and quantitative results showed significant impact in the formulation of a specialized program. The concept of the program is systematically arranged in the module entitled "The All Loving Support-Information Education and Counselling Module." This tool may aid the local government unit around the globe in addressing concerns among PLHIV regarding the bio-psycho-socio-spiritual aspects as part of their extended program on pre and post HIV screening test counselling. It is assumed that the personalized health assessment tool which is part of the module is effective among PLHIV. Hence, the study shows the general population that PLHIV needs support from the government, people, and family to nurture individuals self-awareness.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

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