Using Intervention Mapping to Develop a Motivational Interviewing Training and Support Program for HIV Lay Counsellors to Improve ART Uptake in The Primary Health Care Setting in Gauteng, South Africa

CURRENT STATUS: POSTED

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DOI:  
10.21203/rs.2.16282/v1

SUBJECT AREAS
Health Economics & Outcomes Research  Health Policy

KEYWORDS
HIV, Antiretroviral Therapy, Intervention Mapping, Motivational Interviewing, Counselling, Treatment Readiness, Treatment uptake.
Abstract

Background Worldwide, countries are striving to achieve universal antiretroviral treatment (ART) coverage. In South Africa, given the shortage of specialist health care professionals in the public sector, lay HIV counsellors are at the forefront of many HIV related behavioural interventions. They have limited formal counselling training and little ongoing in-service support, leading to considerable variability in skills, knowledge, and approaches to counselling. We aimed to use the Intervention Mapping approach to develop a motivational interviewing counselling training and support program for lay HIV counsellors practising in primary health care (PHC) clinics in Gauteng, South Africa.

Methods We applied the steps of Intervention Mapping. This included the analysis of key informant data collected among clinic managers and counsellors (target group), in-depth literature reviews on determinants of critical elements of target behaviours and approaches for influencing these. Extensive consultations with an expert team led to two program objectives: 1) improved general HIV counselling skills among lay HIV counsellors; and 2) sustained motivational interviewing skills for ART and HIV care demand creation. Matrices of change objectives were produced specifying performance and change objectives as well as evidence and theory-based training methods to achieve these.

Result We developed a motivational interviewing counselling training and support program titled “Thusa-Thuso - helping you help”. For objective one, we partnered with a seasoned psychologist and counselling trainers to recap and strengthen essential counselling skills and resilience. For objective two, we adapted the Boston University Brief Negotiated Interviewing motivational interviewing counselling training. Adaptations include adjusting the English readability level of training materials; translating materials to spoken Zulu and Sotho; anchoring the training around interactive sessions; producing contextually-relevant modelling videos, in-training role plays and on-site (clinic) mentoring using the Motivational Interviewing Treatment Integrity coding system (MITI) as a training and self-correction tool. The planned support component comprises of quarterly support and mentoring sessions over 12-months.

Conclusion The “Thusa-Thuso” motivational interviewing counselling training and support program is a contextually relevant, locally-produced, scalable training and support program designed to impart
sustained motivational interviewing counselling skills in lay HIV counsellors for improved ART uptake in the UTT era.

Background
Countries across the globe are striving to achieve universal antiretroviral treatment (ART) coverage among HIV infected individuals. In 2015, South Africa, with 7.9 million people living with HIV in 2017\(^1\)\(^-\)\(^3\), adopted the World Health Organisation’s (WHO) universal test and treat (UTT) policy and began measuring progress towards the UNAIDS 90-90-90 goals in order to increase ART coverage and reduce transmission\(^4\)\(^,\)^\(^5\). Guidance for ART initiation on the same day of HIV diagnosis was later provided in 2017 to help reduce loss to follow up and decrease time to viral suppression\(^6\)\(^,\)^\(^7\). However, despite these efforts, just over a two-thirds of HIV infected patients were initiated on treatment by 2017\(^1\)\(^-\)\(^3\) and new approaches will be needed to achieve these targets.

Plans to increase the number of patients on treatment and initiating ART on the same day as testing positive for HIV are being implemented in the context of limited specialist healthcare professionals\(^8\)-\(^1\(^2\). This has led to a greater reliance on lay health care workers to perform health promotion activities\(^1\(^3\)\(^-\)\(^1\(^5\)), support HIV testing, and provide adherence support and community-based HIV care and treatment\(^5\)\(^,\)^\(^1\(^6\)\(^,\)^\(^1\(^7\). Under the UTT and same-day ART initiation policies lay health care workers will increasingly be asked to support asymptomatic HIV infected patients (i.e. those with higher CD4 counts) who may not see the benefits of starting lifelong HIV treatment soon after diagnosis\(^9\)\(^,\)^\(^1\(^8\)\(^,\)^\(^1\(^9\). Yet, lay counsellors usually have limited formal training leaving considerable variability in their skills, knowledge, and approaches to counselling\(^1\(^3\)\(^,\)^\(^2\(^0\)\(^-\)\(^2\(^2\). It is, therefore, necessary to strengthen their capacity to provide counselling in a way that improves early patient demand for ART and HIV care to support ART scale-up efforts\(^2\(^3\)\(^,\)^\(^2\(^4\). Motivational interviewing counselling is a directive and collaborative counselling approach that could enable lay counsellors to effectively assist patients to successfully navigate existing barriers to acceptance of lifelong ART and remain in care despite existing challenges\(^2\(^3\)\(^,\)^\(^2\(^5\)\(^,\)^\(^2\(^6\). While this approach
has been previously used in substance abuse cessation programs and mostly used by clinicians and psychotherapists in high-income countries (HIC)\(^{20,27-29}\), application in the HIV field, by lay counselling staff, in primary care settings in sub-Saharan Africa is limited\(^{27-30}\). Where it has been used for HIV counselling by lay counsellors results have been mixed suggesting a need for greater investment to achieve any benefits\(^{29}\).

If motivational interviewing is to be successfully employed by lay counsellors, standard systematic approaches will need to be tailored to this population. Intervention Mapping is an iterative approach to developing\(^{31}\) or adapting\(^{32,33}\) tailored and context-specific interventions, following six well-defined steps. We describe the application of Intervention Mapping to develop of a contextually relevant motivational interviewing training and support program for lay HIV counsellors working in the primary healthcare setting in South Africa, targeting early ART uptake among newly diagnosed HIV patients under the same-day-ART policy.

**Methods**

**Intervention Mapping**

Intervention Mapping provided a framework to guide the development of a training and support program for lay HIV counsellors. It is a systematic method for the development, implementation and evaluation of health interventions grounded in behavioural theory and empirical evidence\(^{31}\). The Intervention Mapping protocol outlines a six-step process, using evidence and theory, starting from identifying the health problem to systematically developing interventions to address the health problem. It is an iterative and cumulative process continually using outputs from preceding steps to inform subsequent steps in the process\(^{31}\). Step 1 begins with conducting a needs assessment focusing on analysis of the health problem and development of a logic model of the problem. This involves the description of the health-related problem, the at-risk population, impact on the quality of life, the environmental and behavioural factors related to the problem and their determinants. In step 2, evidence from the needs assessment is used to select the target groups, and the behavioural and environmental program outcomes based on importance and changeability. Behavioural outcomes in the target population and environmental agents are sub-divided into specific performance objectives.
that stipulate actions that need to be taken to change individual behaviour. Matrices of change objectives are then produced by combining performance objectives with determinants thus creating change objectives. In step 3, theory-informed methods and practical strategies are selected and used in step 4 to produce the final intervention program. Step 5 focuses on planning program adoption and implementation and the last step is producing an evaluation plan to assess effectiveness and implementation success of the intervention program\textsuperscript{31}.

The application of Intervention Mapping in designing our intervention relied on stakeholder participation and engagement as well as the incorporation of theory-based behavioural change methods. We were also mindful of the target group and implementer importance in the ultimate success of the intervention. Lay HIV counsellors exist and operate within communities and organisational environments, and as such we also sought to understand and incorporate the social-ecological perspective when designing the training intervention. This involved engaging with and garnering support from district and clinic managers who oversee counsellor’s operational environmental. Intervention Mapping is facilitated through core processes: posing questions, brainstorming with the planning group, reviewing findings from empirical literature, reviewing theories for additional constructs, assessing and addressing needs for new data, and developing a working list of solutions\textsuperscript{31,34}.

Results

Step 1: Needs assessment

In line with Step 1 of the Intervention Mapping process, we created an intervention planning group consisting of researchers, HIV prevention specialists from a local non-governmental organisation (NGO) that provides HIV-specific technical support to primary health care clinics, psychologists, representatives from an advocacy group for persons living with HIV and a local community counselling organisation. The first and final author of the intervention planning group were formally trained on Intervention Mapping at Maastricht University (www.interventionmapping.com).

Preliminary research

The needs assessment process included an extensive literature review to understand the landscape of
counsellor skills, practice approaches, and challenges. The literature review was augmented by in-depth interviews with seven clinic managers and lay HIV counsellors of four primary health clinics in Johannesburg between October and December 2017, exploring current approaches to demand creation for ART\textsuperscript{35}. We found that approaches for ART demand creation were inconsistent and counsellor dependent (Figure 1). Counsellors who had been personally affected by HIV emphasised the benefits of ART and preferred early uptake, whereas those who were less personally impacted were more concerned about preparing patients to cope with treatment challenges. The process for assessing patient readiness was poorly defined, inconsistent, and counsellor dependent. We also found that providers were unclear of the process to ensure patients who defer treatment return for ongoing counselling\textsuperscript{35}.

*Figure 1. Summary of results from key informant interviews with clinic managers and lay HIV counsellors*\textsuperscript{35}

**Step 2: Program goals and objectives**
Formative data collected among clinic managers and counsellors, as well as consultations with the planning group, confirmed and enriched evidence from extensive literature reviews. In addition to the previously described need to train lay counsellors on motivational interviewing, we identified critical counselling skills gaps and important factors to consider in the training program development including lack of ongoing in-service training and support. Two main program outcomes were outlined as:

- Improved general HIV counselling skills among lay HIV counsellors;
- Sustained motivational interviewing skills for ART and HIV care demand creation

The training outcomes were focused mainly on the need to improve ART uptake and retention in care among newly diagnosed HIV positive patients in South Africa.

To improve general HIV counselling skills (outcome one), we partnered with psychologist and counselling trainers and used the textbook “Elements of Counselling”\textsuperscript{36} that targets lay counselling staff in the South African context, to strengthen key counselling skills and develop counsellor resilience. To develop motivational interviewing skills (outcome two), we adapted and expanded on
the Boston University Brief Negotiated Interview (BNI) training tools for adults.

We proceeded to formulate performance objectives (PO), which are interim trainee behaviour targets needed to achieve the expected program outcomes (Table 1). Examples include PO 1: “Participate in the motivational interviewing counselling training program” which focuses on creating awareness of the intervention program among trainees and motivation for participation. PO 3: “Practice motivational interviewing counselling skills acquired in the training program in a practice setting” makes provision for supported modelling opportunities. Also, PO 6: “Provide motivational interviewing counselling to newly diagnosed HIV positive patients according to protocol” which makes provision for supporting implementation of the skills acquired from the training program. POs are organised in a matrix format (Table 1) with the evidence-based determinants of each performance objective to assist in the definition/selection of appropriate training methods to include in the program. Determinants of performance objectives were identified through planning group brainstorming session asking questions regarding determinants for the behavioural outcome for our target population, i.e. lay HIV counsellor motivational interviewing counselling efficacy. A preliminary list of possible determinants was drawn-up, which was refined further through evidence from the literature and applicable theoretical constructs associated with the program outcome. Determinants were graded by 1) relevance (the strength of the association with the behaviour) and 2) changeability of the determinants. For example, the age and gender of the counsellor are not changeable but are likely to have some influence on their efficacy in counselling patients who may differ from them in age and gender37. Also, low or inconsistent remuneration has been shown to negatively impact counsellor motivation, work ethic, and consequently the quality of counselling service38,39. Remuneration change is theoretically possible but is unlikely through a training program as it requires intervention at the national level of government21. On the other hand, knowledge and skills are critical determinants of counselling efficacy and have been found to be changeable through ongoing training, supervision, and support13,40.

Matrices of change objectives were developed by connecting the performance objectives with
identified relevant and changeable determinants. These matrices guided the development of the training program, manuals, and tools.

Table 1. Matrix of change objectives for the lay HIV counsellor Motivational Interviewing counselling training and support program.

**Step 3: Program Design**

We then applied theory-based behaviour change methods that targeted the selected determinants to achieve the change objectives formulated in Table 1. Theories used included theories of learning\textsuperscript{41}, information processing\textsuperscript{42}, self-regulation, and social cognitive theory \textsuperscript{43}. Since skills development generally relies on knowledge, practice and feedback, behaviour change methods applied include methods to increase knowledge, increase self-efficacy, and change attitude and outcomes expectation such as repeated exposures, reinforcement, elaboration, and providing cues. We also used behaviour change method to increase skills which included modelling and guided practice, applied through skills demonstration videos as well as opportunities for skills practice. To ensure contextually relevant applications of behaviour change methods used, we ensured that the training videos were conducted in the local languages, used realistic settings, using model clients, and counselling scenarios to make them more relevant and meaningful to the lay HIV counsellors\textsuperscript{44}. We also adhered to the theoretically defined conditions for the methods to be effective\textsuperscript{44}.

**Step 4: Program production**

**Description of the training intervention**

The intervention planning group, in consultation with key primary healthcare stakeholders, developed a program consisting of a 10-day baseline training including three days of onsite practice (Figure 2). The 10-day baseline training consists of a five-day venue based training, followed by a three-day onsite practice component. The onsite practice involves trainees going back to their clinic facilities to implement the motivational interviewing counselling under the supervision of members of the facilitation team. With a sample of counselling sessions audio recorded (with clients’ written consent) for competency self-assessment using the motivational interview treatment integrity system\textsuperscript{24}. The training then ends back at the training venue where the motivational interview treatment integrity
(MITI) assessment is used as a training tool to help counsellors to learn self-assess and correct mistake and plan for ongoing integration of newly learned motivational interviewing skills in routine counselling practice. MITI is a behavioural coding system that assesses a practitioner’s competence in motivational interviewing counselling. It is also a means of providing structured, formal feedback about ways practitioners can improve their proficiency even in non-research settings. The MITI code has shown acceptable internal consistency and reliability in evaluating specific practitioner skills relevant to the use of motivational interviewing.

Figure 2. Summary of the Thusa-Thuso motivational interviewing training and support program

Consultations with the planning group, including lay HIV counsellors from the NGO highlighted how a lack of ongoing implementation support following training has led to challenges in adoption and maintenance of new skills learned. Additionally, brief, once-off motivational interviewing training interventions have been shown to be insufficient in providing full competency and impacting client outcomes. Without continued practice beyond the training and in-service or follow-up training competency is likely to regress. Therefore, the program includes onsite implementation support by members of the facilitation team for 12 months, and quarterly 2-day refreshers and debriefing sessions conducted in those 12 months.

Evidence gathered has shown that counsellors encounter emotionally difficult situations during interactions with clients, which necessitates emotional support or debriefing incorporated and supported through their work environment. We applied the improving physical and emotional states behaviour change method, a component of Social cognitive theory, by including journaling for self-care as part of our program. Self-care is taking care of one’s mental, emotional, and physical health to be better able to take care of others as well. Journaling is a simple, inexpensive, and effective form of self-care which has been shown to assist in emotional healing and resilience when approached in a purposeful manner. It has been effective in addressing compassion fatigue, burnout, post-traumatic distress disorder (PTSD) among different cadres of health workers in different settings.
Branding and theme

We titled the program “Thusa-Thuso - helping you help” using Sotho, one of the local languages in Gauteng.

Figure 3. The “Thusa-Thuso - helping you help” branding

The theme, including the logo developed, combined the skills development and wellness support components which aim to support the lay HIV counsellors to support their clients in deciding to adopt health-promoting behaviours of initiating ART and remaining in HIV care. This was also the case for all illustrations included in all the training materials which used contextually relevant modelling scenarios for skill demonstrations role-plays. We also developed locally produced training videos modelling motivational interviewing counselling using local languages and in settings similar to their work environments, with realistic model clients, and counselling scenarios to make them more relatable to the trainees.

The HIV treatment readiness framework

We developed a HIV treatment readiness framework, an implementation support tool for the lay counsellor. This was formulated through a theoretical model of HIV treatment readiness we developed by integrating change theory\(^{51}\) and the theory of planned behaviour\(^{52}\) to the anecdotal evidence gathered through formative research, planning group discussions and stakeholder consultations (Figure 4). To this end, we posited that HIV treatment readiness is dependent on patients having correct knowledge about HIV disease and the benefits of early and consistent treatment. It is also dependent on patients perceiving the importance of early treatment, having self-efficacy to develop and apply a “SMART” plan (Specific, Manageable, Attainable, Relevant and Time-bound) for continued engagement with the health system for HIV care, perceived readiness to apply the SMART plan, and patient awareness of and access to support (enablers) of the target behaviour.

The model is a stepwise process with motivational interviewing counselling skills applied to move closer towards readiness to start ART. Each step is dependent on first addressing barriers or gaps identified, and reinforcing facilitators and patient self-efficacy in the preceding step before moving forward. The model is adaptable and may be used in determining readiness for other health
behaviours such as condom use and other HIV risk reduction measures.

Figure 4. The theoretical model of HIV treatment readiness

Step 5: Program Implementation Plan
We presented the training program and implementation tools to key stakeholders including decision makers at the district health management level, as well as to frontline health providers who are closest to the HIV testing implementation. We invited primary health care clinic managers to a workshop where we presented the training program, including implementation support tools. This consultation served three main purposes, 1) to provide further input into intervention development, 2) to gather support from the managers as gatekeepers to the implementation level, 3) to receive input on implementation planning from managers as they oversee operations at the clinic level.

The group appreciated efforts made in the bottom-up approach to the development of the training program, particularly the extensive engagement with HIV programme implementers at different levels. They strongly supported the inclusion of the emotional support component of the intervention program, highlighting that they also don’t have access to any form emotional support available to help them cope with the emotional distress they are often exposed to in their profession. They also supported the need for ongoing implementation support, highlighting its importance to sustain counsellor motivational interviewing competency. Some strongly felt that the success of the program depends on it.

The managers indicated that they could not authorise the release of all counsellors for the baseline training as it would disrupt HIV testing services. However, they saw the benefit of having trained counsellors and suggested that the training could be run in two rounds, with each round including half of the counselling team.

Discussion
We have provided a detailed description of our application of Intervention Mapping to develop a motivational interviewing training intervention for lay HIV counsellors in the primary health care setting in Gauteng, South Africa. This resulted in the formation of the “Thusa-Thuso - helping those who help” programme that provides training in motivational interviewing counselling, ongoing
implementation support, and implementation support tools, as well as providing a scalable method for remotely counselling HIV patient to encourage retention in HIV care. We also provide support and tools for self-care journaling as a simple but effective self-care tool that can be used outside the training. The program also offers counsellors regular debriefing during quarterly refresher training sessions to ensure emotional support.

We found Intervention Mapping requires a commitment by the planning group members to the process, which requires considerable time and effort. Members of the planning group required reorientation on the key elements of Intervention Mapping, with emphasis on the importance of evidence and theory-based decision making in the intervention development process. The Intervention Mapping steps are not necessarily sequential and therefore requires a correct understanding of the process and considerable flexibility in its application. Intervention Mapping provided a systematic approach to be able to adapt the Boston University BNI Motivational Interviewing counselling training, an evidence-based intervention which has shown effectiveness in hospital emergency departments, to develop our training intervention.

We found that a majority of existing motivational interviewing and the Boston University BNI Motivational Interviewing counselling training materials, including training videos, were created in high-income countries, mainly for substance abuse cessation programs. It was apparent that it would be difficult for lay HIV counsellors in our setting to relate to these individuals in these training videos, who do not look or sound like them or address health issues that were a priority in their setting. We used theory and evidence to adapt training and implementation tools for the program for the local cultural context. Adaptations we made include adjusting the readability level of English training materials; translating materials to spoken Zulu and Sotho to ensure easy understanding; anchoring the training around interactive sessions to build motivational interviewing self-efficacy, use visual modelling by local trainers, locally produced videos with contextually relevant scenarios, and implement in-training role plays.

Motivational interviewing is a key aspect of our counselling intervention. It is a patient-centred, goal-
oriented counselling approach that seeks to help the client resolve barriers to behaviour change.\textsuperscript{26} With changes in HIV treatment policy, counsellors will increasingly encounter patients who may be ambivalent about starting ART. Our adaptation of the Boston University BNI algorithm and tool focused on preserving core elements of the original program which were key in its effectiveness.\textsuperscript{33}

The algorithm provides a summary of motivational interviewing counselling\textsuperscript{59}, and its brevity made it easily adaptable to guide lay HIV counsellors to enhance patients’ motivation to take up ART treatment. We modified the tool for our setting to build up a readiness framework, an implementation support tool to guide counsellors in the application of motivational interviewing counselling for ART uptake and retention in care.

Through our experience in using Intervention Mapping, we came to recognise the importance of ongoing key stakeholder engagement. This included program implementers, whose contribution is important not only because they are most knowledgeable regarding frontline conditions for implementation, but also because they are the ultimate users of the intervention. This makes getting their buy-in and support for the intervention critical for successful implementation. We organised a stakeholder workshop with facility managers of clinic facilities to be targeted with the intervention to a workshop and introduced them to the training program, including implementation support tools as well as the process we undertook to develop the program.

The inclusion of an evaluation plan ensures that the effectiveness of the intervention will be measured systematically by gathering evidence from implementation. This will also provide an opportunity to make any necessary updates to the program to improve impact as well as strengthening adoption beyond the planned sites for evaluation.

Limitations

Since this paper does not present evaluation data, we cannot, at this stage, draw conclusions on the effectiveness of the intervention in increasing lay HIV counsellor motivational interviewing skills or ART uptake among HIV patients. However, the face validity data obtained from primary healthcare stakeholder engagement and the various consultation indicate the demand for such training, the relevance and early satisfaction with its content.
Conclusion
Even with challenges encountered during the application, Intervention Mapping still offered a well-structured, evidence-based framework for developing our training and support intervention relevant to the context of the target population, with training components that reflect the program’s purpose and intention to strengthen lay counsellor motivational interviewing counseling skills to improve ART uptake and retention in HIV care.

List Of Abbreviations
ARTantiretroviral therapy
UTTuniversal test-and-treat
WHOWorld Health Organisation
NGO Non-governmental organisation
HIC High-income countries
POPerformance Objective
MITIMotivational interview treatment integrity
PTSDPost-traumatic distress disorder
SMARTSpecific, manageable, attainable, relevant and time-bound
BNI Brief Negotiated Interview

Declarations
Ethics approval
The study was approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand (M170579).

Consent for publication
Not applicable

Availability of data and material
All relevant data are included in the paper.

Competing interests
The authors have declared that no competing interests exist

Funding
This study has been made possible by the generous support of the American People and the President’s Emergency Plan for AIDS Relief (PEPFAR) through United States Agency for International
Development (USAID) under the terms of Cooperative Agreements 674-A-12-00029 and 72067419CA00004 to the Health Economics and Epidemiology Research Office, and the Cooperative Agreement 674-A-12-00020 to Right to Care. The contents are the responsibility of the authors and do not necessarily reflect the views of PEPFAR, USAID or the United States government.

Author’s contribution
DO conceptualised the project. DO, IM TS and MV participated in the Intervention Mapping process. IM and DO drafted the manuscript. RR provided expert guidance on the Intervention Mapping approach during intervention development and provided comments on the manuscript. MF, TS and MV provided comments on the manuscript. All authors critically reviewed and approved the final version of the manuscript.

Acknowledgements
We gratefully acknowledge individuals and partner organisations involved at various stages of the intervention development. Ms Bulelwa Ngoma, Mrs Jonas Langa, Ms Alynn Dlamini and Mrs Mpume Cele from Right to Care, a local Non-Governmental Organization partnering up with the South African National and Gauteng provincial Department of Health to providing support to local government clinic sites. Mr Pholokgolo Ramothwala from Positive Convention (an advocacy group for persons living with HIV), as well as Mpumi Zondi and Johanna Kistner, executive and clinical directors of Sophiatown Community Psychological Services, a local community counselling organisation.

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Tables

| Performance Objective | Personal | 
|-----------------------|---------|
| Program Objective 1: Provide Motivational Interviewing coun... | |
| Table 1. Matrix of change objectives for the lay HIV counsellor Motivational Intervi... | |
| PO1 | Participate in the motivational interviewing counselling training program |
|-----|--------------------------------------------------------------------------|
| CO1 | Knowledge of key motivational interviewing behaviours/principles and how to apply them in practice |
| METHODS: Providing cues, Advance organising, Discussion |
| THEORIES: TIP, TPC |
| CO2 | Express confidence in ability to actively participate in the motivational interviewing counselling training program |
| METHODS: Participation, Self-affirmation, Repeated exposure, Active learning |
| THEORIES: TIP, THB, TL, SCT |

| PO2 | Participate in the motivational interviewing counselling component of the training program to support counselor wellbeing |
|-----|--------------------------------------------------------------------------|
| CO1 | Knowledge of the venue and times the training program will be conducted |
| METHODS: Persuasive communication, Participation, Facilitation, Advance organizers, Repeated exposures |
| THEORIES: TPC, TP, SCT, TL |
| CO2 | Express confidence in being able to actively participate in the motivational interviewing counselling component of the training program |
| METHODS: Improving physical and emotional states, Guided practice, Self-monitoring of behaviour, Self-affirmation |
| THEORIES: TL, SCT, TPC |

| PO3 | Practice motivational interviewing counselling skills acquired in training program in a practice setting |
|-----|--------------------------------------------------------------------------|
| CO1 | Knowledge of key motivational interviewing behaviours/principles and how to apply them in practice |
| METHODS: Providing cues, Advance organising, Discussion |
| THEORIES: TIP, TPC |
| CO2 | Demonstrate motivational interviewing counselling skills in a practice setting |
| METHODS: Modelling, Guided practice, Repeated exposure, Cultural similarity, Tailoring |
| THEORIES: SCT, TL, TL, TPC |
| CO3 | Express confidence in applying motivational interviewing counselling skills during practice application |
| METHODS: Guided practice, Modelling, Repeated exposures, Cultural similarity, Tailoring |
| THEORIES: TL, TPC, TL |

| PO4 | Participate in assessments of motivational interviewing counselling competence in a practice setting |
|-----|--------------------------------------------------------------------------|
| CO1 | Knowledge of benchmarks used in assessing competence |
| METHODS: Advance organising, Repeated exposure, Cultural similarity, Tailoring |
| THEORIES: SCT, TL, TPC |
| CO2 | Express confidence in applying motivational interviewing counselling skills during participating in motivational interviewing counselling training program |
| METHODS: Practicing, Guided practice, Repeated exposures, Cultural similarity, Tailoring |
| THEORIES: TIP, TPC, TL, TL, TL, TPC |
| PO5. Use feedback from practice setting competency assessments to improve motivational interviewing competency | CO. Describe how feedback has been used in improving motivational interviewing competency.  
**METHODS**: Discussions, Elaboration, Feedback  
**THEORIES**: TPC, TIP, SCT, TL | CO. Demonstrate improved motivational interviewing competency by assimilating feedback from practice.  
**METHODS**: Self-monitoring, behaviour, Feedback, Discussion  
**THEORIES**: TSR, SCT, TL, TPC | CO. Express confidence in incorporating training practice into work environment to improve competency.  
**THEORIES**: TSR, SCT, TL, TPC |

| PO6. Provide motivational interviewing counselling to newly diagnosed HIV positive patients according to protocol | CO. List key motivational interviewing behaviours/principles and how to use them in the work environment according to protocol.  
**METHODS**: Using imagery, Providing cues  
**THEORIES**: TIP | CO. Demonstrate ability to conduct motivational interviewing counselling in the work environment, according to protocol.  
**METHODS**: Guided practice, self-monitoring behaviour  
**THEORIES**: TSR, SCT | CO. Express confidence in using motivational interviewing counselling in the work environment according to protocol.  
**THEORIES**: TIP, TSR |

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**THEORIES**: PO – performance objective, CO – change objective, TPC – Theories of persuasive communication, TP – Theories of Power (empowerment theory), SCT – Social Cognitive theory, TIP – Theories of Information processing, TL – Theories of learning, TSR – Theories of self-regulation, THB – Theories of health behaviour, TTT – Trans-theoretical theory (Change theory)
Summary of results from key informant interviews with clinic managers and lay HIV counsellor

Summary of the Thusa-Thuso motivational interviewing training and support program
Figure 3

The “ThusaThuso - helping you help” branding

Figure 4

HIV treatment Readiness Framework