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Full Length Article

Nurses perceptions about their behavioural counselling for HIV/AIDS, STIs and TB in eThekwini Municipality clinics KwAZulu-Natal, South Africa

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ABSTRACT

Background: HIV and AIDS, sexually transmitted infections (STIs) and tuberculosis (TB) are common co-infections in South Africa, and constitute major public health problems. Nurses have frequent contact with HIV positive and TB co-infected patients, their counselling behaviour being influenced by knowledge about counselling as well as their beliefs, attitudes and perceptions about barriers to counselling.

Purpose: The purpose of the survey was to assess the knowledge, attitude and beliefs of nurses about behavioural counselling for HIV and AIDS, STIs and TB (HAST) in three areas of the eThekwini Municipality.

Results: This was a quantitative descriptive cross sectional study, with stratified sampling being used to select 87 nurses from 24 PHC facilities who completed self-administered questionnaires. The most significant factors associated with the knowledge, attitude and beliefs of nurses about counselling behaviour were their age and level of education. Nurses were well informed about counselling behaviour (mean scores 4.1/5). However, the potential barriers to implementing effective counselling behaviour included their negative perceptions about counselling in HAST.

Conclusion: There is an urgent need for further studies to explore barriers to counselling behaviour and how these can be addressed by the nurses and their managers.

1. Introduction

HIV and AIDS, Sexually Transmitted Infections (STIs) and Tuberculosis (TB) (HAST) are common co-infections in South Africa, and constitute major public health problems, both as separate diseases and in combination (National Strategic Plan

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for HIV/AIDS, STIs and TB 2012–2016). There is a wide variation in HIV and TB prevalence across age, race, gender, socioeconomic status and geographical location within the country. It is within this context that many of those infected seek treatment at public sector facilities, where counselling forms an important part of their on-going testing and treatment schedule (Kanekar, 2011). This interaction is conducted by nurses, who are at the forefront of combatting these co-infections (DeMarco, Gallagher, Bradley-Springer, Jones, & Visk, 2012). Extensive training was undertaken to not only ensure that accurate information was provided to patients, but to ensure that they all receive quality services (Roura, Watson-Jones, Kahawita, Ferguson, & Ross, 2013).

Various interventions have been implemented by the health system to combat HAST at primary, secondary and tertiary levels, and these range from prevention to treatment (Colvin et al. 2010). This includes testing and screening for HIV and TB in order to enrol those with positive results into wellness, treatment, care and support programs, and to prevent further transmission of these infections (Kennedy, Medley, Sweat, & O'Reilly, 2010); (HIV Counselling and Testing (HCT) Policy guidelines 2010). These interventions all rely on suitably trained staff and adequate resources to ensure that they can be implemented, with counselling forming an important component. The term counselling is used to explain a wide range of issues which involves educating and supporting patients to adopt ways that improve their health behaviour (Fatti, Grimwood, & Bock, 2010). In most instances all the health care workers (HCWs) that are in touch with patients in the health system are expected to provide counselling for any condition that the patient has presented with, during the visit including TB, HIV/AIDS and STIs (Pope et al. 2010).

Behavioural counselling is seen as the most essential element during testing and screening, as it promotes behavioural change, educates clients about ways of preventing HIV transmission and promotes adherence to treatment (Kanekar, 2011). It aims to help patients modify their risky behaviours, this being an undesired response to something or someone in a person's environment. During the counselling, a Health Care Worker (HCW) would identify the risky behaviour with the patient, and together they would work to change or adapt it to reduce the possibility of HIV and TB transmission, and to promote early testing, treatment and care (Kiene et al. 2010). Although behavioural counselling provides benefits, patients are not obliged to be tested, this being voluntary, and is known as voluntary counselling and testing (VCT), as outlined in the DOH policy guidelines of 2010.

In 2010, the South African Department of Health (DoH) launched Provider Initiated Counselling and Testing (PICT) to complement VCT, with nurses encouraging clients who are seeking medical care to undergo HIV Counselling and Testing (HCT) (HIV Counselling and Testing (HCT) Policy guidelines 2010). The implementation of this service is dependent on the knowledge and motivation of the health care workers who provide the service (Sison et al. 2013). Patients are required to provide verbal consent for testing to occur, with the results forming part of the patient's records in- order to make a correct diagnosis and provide the HIV positive patients with appropriate treatment. Confidentiality and documenting the HCT results ensures continuity of care, the goal being to identify HIV positive patients (Roura et al, 2013).

As directed by the PICT policy guideline of 2010, nurses are obliged to offer HIV counselling and testing, as this affords patients an opportunity to know their status irrespective of their clinical presentation (National Strategic Plan for HIV/AIDS, STIs and TB 2012–2016). The policy makes it the nurses' responsibility to encourage the client to be tested, with counselling being provided before and after the results are known, irrespective of their status. This counselling uses verbal and non-verbal communication skills, and includes developing a risk reduction plan, whether they test positive or negative. Counselling for behaviour change requires that nurses empower and persuade patients to enable them to own the choices they make about their lives, adopt and implement the necessary steps, and maintain these to improve their health (Kanekar 2011). Worldwide, behavioural counselling is viewed as an effective strategy that draws on several well established behavioural theories, including the Health Belief Model (Glanz, Rimer, & Viswanath, 2008; Rosenstock, 1974), which was used to guide this study.

2. Health belief model framework

The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviour, in this case of the nurses, by focussing on their attitudes and beliefs (Rosenstock, 1974) as determined by four perceptions, which are the main constructs of the model, namely perceived susceptibility, severity, benefits and barriers.

Perceived susceptibility: the nurses weigh up the chances of getting a disease, with a greater perceived risk resulting in an increased likelihood of them taking precautionary measures. Perceived severity: This speaks to the nurses' belief about the severity of the disease, which is influencing their counselling behaviour, for example, in this study HAST are common co-infections and can have serious health implications. For instance, negative attitudes towards patients during counselling might result in patients not going back to the Primary Health Care Facility for further wellness, care and support. Perceived benefits: this refers to patients adopting a new behaviour when they see the benefits of the new course of action as explained by the nurses. Perceived barriers: these are the obstacles that may hinder a person from adopting a particular behaviour. For a new behaviour to be adopted, a person needs to believe that the benefits outweigh the consequences of the old behaviour, and that they are capable of performing the new behaviour. For instance, any decisions regarding behaviour change taken during counselling should be under the control of the patients, otherwise these will not materialise. The four constructs of the HBM are influenced by variables such as age, culture and educational level (Glanz et al. 2008; Rawlett, 2011).

The nurses need to understand the four constructs of the HBM when dealing with human behaviour to ensure that the correct information is appropriately conveyed, for them to be agents of change. Although nurses are expected to provide patients with useful information on HAST their own perceptions regarding this role are unknown. Effective behavioural

counselling on HAST depends on the knowledge, beliefs, attitudes, and anticipated barriers perceived by the nurses (Bandura, 1977). If nurses perceive that behavioural counselling is useful (perceived benefits), but do not think they are capable of providing it (barrier), they may avoid counselling patients and not encourage them to test for HIV and other STIs. Furthermore, if the nurses lack adequate information about HAST they might be fearful of contacting TB and HIV during counselling and testing. Hence the study was conducted to explore the perceptions of the nurses regarding behavioural counselling for HAST in eThekwini Municipality clinics of KwaZulu-Natal Province, South Africa.

3. Methods

3.1. *Research design*

A quantitative descriptive cross-sectional study was undertaken to determine the knowledge and perceptions of nurses concerning behavioural counselling for HAST (Creswell & Plano Clark, 2011: 64).

3.2. *Study population & sampling*

The study was conducted at eThekwini District in KwaZulu-Natal. There were a total of 55 primary health care clinics (PHC) in eThekwini municipality. The sample size, based on alpha equals 5% and beta equals 80% required a sample of 24 of the 55 PHC clinics which were randomly selected using stratified sampling. eThekwini Municipality is divided into three health sub-districts including West, with 18 municipal PHC clinics, North with 11 municipal PHC clinics and South sub - districts with 26 municipal PHC clinics. A proportional number of clinics were selected randomly from each sub-district and 150 of the 600 professional nurses were randomly selected for participation from the list.

3.3. *Development of the questionnaire*

The questionnaire was based on the four constructs of the Health Belief Model. A focus group discussion with nurses was conducted to contextualise the questions. Cooper and Schindler (2005) provided guidance in the further development of the questionnaire. The questionnaire comprised 51 questions that were divided into five sections, the first one was for obtaining biographical data on sub-district, age, status (staff or professional nurse), level of education, number of patients seen per day, training received on HAST and the duration of such training.

The second section measured nurses' knowledge regarding counselling behaviour for HAST. The knowledge theme included the following statements: "During consultation, both the HCW and the patients should get a chance to talk and listen to each other." "Asking patients more questions may result in the HCWs getting a clearer picture about the patient's situation." Respondents were required to select likert scale options that were numerically scored, ranging from Strongly disagree (1), disagree (2), Neutral (3), Agree (4), Strongly agree (5). Cronbach's alpha was used as a measure of internal consistency (Gliem & Gliem, 2003), and the scores were combined to form a scale, with a moderate Cronbach's alpha = 0.60.

The third section used statements to measure nurses' beliefs about their clients' perceptions regarding counselling behaviour for HAST, and comprised of the following: "No amount of counselling can help as some people and some communities are completely helpless", "Patients in urban areas know all about how to improve their health", "Poverty stricken patients just need treatment as they cannot do anything to improve their health", "Uneducated patients can never understand no matter how much time one spends talking to them", "Very few patients benefit from health talks" and, "Blaming patients for their health condition may prevent them from opening up". Likert scales were again provided, and Cronbach's alpha was used as a measure of internal consistency and were combined to form a scale with a Cronbach's alpha = 0.60.

The fourth section used statements measuring their attitudes to HAST counselling behaviour and included: "An experienced nurse should just decide for a patient to save time", "Nurses should not waste time counselling patients with good adherence", "Patients who abuse alcohol do not benefit from counselling". These questions were combined to form a scale, with a Cronbach's alpha = 0.60, and Likert scales were provided for their replies.

The fifth section sought responses about potential barriers to counselling for HAST, and addressed factors such as space and time, fear, self-confidence, self-efficacy and adherence, as well as patient variables such as age, gender, marital status and use of alcohol. These statements were phrased in the following manner: Marital status: "I feel safe when talking to a married HIV positive patient." Space: "In the clinic where I work there is sufficient space to counsel patients." Time: "Nurses have sufficient time to counsel patients properly." Fear: "I am afraid that I may get TB when talking to patients", "I am afraid to care for patients who look HIV positive." Counselling a lot of TB patients puts my own life in danger. Self-confidence: "I do not feel confident in counselling HIV positive patients." Adherence: "HIV positive patients who fail to adhere to ART deserve no sympathy." Self-efficacy: "I do not feel confident that I have enough skills to counsel patients about HIV, STIs and TB." Age: "Young patients should never be left to make choices about how to improve their health." Gender: "For everybody's sake, HIV positive female patients must be told how to live their lives". Alcohol: "Patients that abuse alcohol deserve no sympathy". A five point Likert scale (1–5) was used that measured from strongly disagree, disagree, neither agree/disagree, strongly agree and agree.

3.4. *Validity and reliability of the questionnaire*

The pilot study was undertaken with nurses who were attending TB Training at the Nelson Mandela School of Medicine, with feedback being used to reduce the questionnaire to 51 questions/statements. It was translated into Zulu by an experienced translator, and back translated into English to improve the clarity of questions. Respondents were encouraged to respond either in English or Zulu. Efforts

were made to ensure that respondents felt comfortable and were not intimidated by the research. During the main survey the principal investigator visited each clinic and requested the participants to complete the anonymous questionnaire.

3.5. *Data collection*

Data were collected from 24 PHC Municipality clinics in eThekwini district municipality. Data collection took a period of two months (May–June 2010). The coded questionnaire was self-administered by the nurses in their consultation rooms in their respective clinics and they took about 25 min to complete the questionnaire. On completion, a researcher checked for completeness, accuracy and consistency on a daily basis.

3.6. *Data analysis*

The replies were captured onto Microsoft Excel, with univariate, and bivariate analyses being performed using SPSS version 14 (Creswell & Plano Clark, 2011: 204). Frequencies, means and medians were used to summarize all the categories. The one sample Kolmogorov test was used to check the normality of the data for knowledge, attitude, belief and barriers scores (Gliem & Gliem, 2003). The test showed that knowledge scores were not normally distributed, while the attitude and belief scores were. The mean scores for attitudes and beliefs were compared using ANOVA. The median knowledge scores were compared with attitudes and belief scores using the non–parametric Kruskal–Wallis test due to the former being skewed.

3.7. *Ethical considerations*

Ethical approval was obtained from University of KwaZulu-Natal Biomedical Research Ethics Committee, BREC number: BF077/08. Permission to collect data in clinics was obtained from eThekwini District, and the Provincial Department of Health in KwaZulu-Natal Province. All the nurses who agreed to participate in the study signed an informed consent statement voluntarily. The anonymous questionnaires were labelled with unique numbers to ensure confidentiality.

4. Results

4.1. *Demographic characteristics*

The demographic characteristics of the 87 nurses who completed the questionnaire are presented in Table 1. Their ages ranged from 21 to 60 years, 49% were married, 51 (58.6%) were female and 36 (41.4%) were males. Of those who completed the questionnaire, 54 (62.1%) were based in urban clinics and 47 (54.0%) had a university degree. Of the three sub-districts 36 (41.4%) nurses were from the Northern, 29 (33%), from the Western and 22 (25.3%) were from the Southern sub-district. Most of the nurses 83 (95.4%) had undergone training for HAST, of whom 35 (40%) were trained in 2010 and 51 (58.6%) were trained in 2009. The duration of the HAST training ranged from hours to days.

Table 1 – Demographic description of the nurses, n = 87.

Characteristics	No. (%)	
Characteristics		
Number	87	
Age (years)		
Range	21–60	
Number, percentage, 95% Confidence intervals		
Sex		
Male	36 (41.4) (31.6, 51.9)	
Female	51 (58.6) (48.1, 68.4)	
Marital status		
Single	4 (4.6) (1.8, 11.2)	
Married	43 (49.4) (39.2, 59.7)	
Divorced	39 (44.8) (34.8, 55.3)	
Widower	1 (1.1) (0.2, 6.2)	
Place of work		
Urban	47 (54.0) (43.6, 64.1)	
Rural	32 (66.6) (27.4, 47.3)	
Peri-Urban	11 (2.6) (7.2, 21.2)	
Level of education		
University nursing degree	47 (54.0) (43.6, 64.1)	
Nursing College	40 (46.0) (35.9, 56.4)	
Sub-district	No. of respondents	No. of clinics
North	36 (41.4) (31.6, 51.9)	5 (20.8) (9.2, 40.5)
West	29 (33.3) (24.3, 43.7)	8 (33.3) (18.0, 53.3)
South	22 (25.3) (17.3, 35.3)	11 (45.8) (27.9, 64.9)
HAST training		
Yes	83 (95.4)	
No	4 (4.6)	

4.2. *Knowledge about counselling behaviour (see Table 2)*

Regarding the nurses' knowledge statements about counselling behaviour, they were asked to indicate whether or not they agree or disagree with the statements. A third of the nurses 27 (31%), (95% CI:22.0,40.0) agreed that during consultation both the health worker and a patient should get a chance to talk and listen to each other, with more than thirds of the nurses 33 (37.9%), (95% CI 28.0,48.0) choosing to strongly disagree with the statement. Almost half of the nurses 41 (47.1%), (95% CI: 36.0, 57.0) agreed that when they ask patients additional questions about their situation, they may get clearer picture of the state of the patients. More than half of the nurses 46 (52.9%), (95% CI: 42.0, 63.0) strongly agreed that a health worker can naturally counsel patients without being trained on HIV counselling.

4.3. *Beliefs about counselling behaviour*

Participants were asked to indicate the extent to which they agree or disagree with the statements about behavioural counselling, while the results showed that nurses disagreed with the statements that were not in favour of the counselling behaviour for HAST, in that 54 (62%), (95% CI: 50.0, 71.0) of the nurses believed that poverty stricken patients only need treatment since they cannot do anything to improve their health (see Table 3).

Table 2 – Nurses knowledge statements about counselling behaviour, n = 87.

Statements	Strongly disagree			Disagree			Neither A/D			Agree			Strongly agree		
	No	%	95% CI	No	%	95% CI	No	%	95% CI	No	%	95% CI	No	%	95% CI
During consultation both the health care worker and patients should get a chance to talk and listen to each other	27	31	22.0, 40.0	6	6.2	0.03, 0.14	21	24.1	0.16, 0.34	33	37.9	28.0, 48.0	0	0	0
Asking the patient more questions may result in the health worker getting a clearer picture about the patients' situation.	0	0	0	0	0	0	22	25.3	0.17, 0.35	41	47.1	36.0, 57.0	24	28	0.19, 0.37
Health workers know a lot about HIV and AIDS, STIs and TB.	0	0	0	3	3.4	0.01, 0.09	18	20.7	0.13, 0.30	46	52.9	0.42, 0.63	20	23	0.54, 0.32
Naturally every health care worker can counsel without being trained on counselling.	0	0	0	0	0	0	20	23	0.15, 0.32	22	25.3	0.17, 0.35	45	52	0.41, 0.61

Table 3 – Nurses beliefs statements about counselling behaviour for HAST, n = 87.

Statements	Strongly disagree			Disagree			Neither A/D			Agree			Strongly agree		
	No	%	95% CI	No	%	95% CI	No	%	95% CI	No	%	95% CI	No	%	95% CI
No amount of counselling can help a s some are completely helpless.	14	16.1	0.09, 0.25	41	47	0.36, 0.57	25	28.7	0.20, 0.38	7	8	0.03, 0.15	0	0	0
Patients in urban areas know all about how to improve their health.	46	52.9	0.42, 0.63	29	33	0.24, 0.43	9	10.3	0.05, 0.18	0	0	0	3	3.4	0.01, 0.09
Uneducated patients can never understand no matter how much time one spends talking to them.	53	60.9	0.50, 0.70	34	39	0.29, 049	0	0	0	0	0	0	0	0	0
Poverty stricken patients just need treatment as they cannot do anything to improve their health.	0	0	0	0	0	0	33	37.9	0.28, 0.48	33	37.9	0.28, 0.48	21	24.1	0.16, 0.34

Table 4 – Nurses attitude statements about their counselling behaviour for HAST, number (%), n = 87.

Statements	Strongly disagree			Disagree			Neither A/D			Agree			Strongly agree		
	No	%	95% CI	No	%	95% CI	No	%	95% CI	No	%	95% CI	No	%	95% CI
An experienced health care worker should just decide for a patient to save time.	44	50.6	0.40, 0.60	16	18.4	0.11, 0.27	18	20.7	0.13, 0.30	9	10.9	0.05, 0.18	0	0	0
Health care workers should not waste time counselling patients with good adherence.	18	20.7	0.13, 0.30	39	44.8	0.34, 055	21	24.1	0.16, 0.34	9	10.3	0.05, 0.18	0	0	0
Patients who abuse alcohol do not benefit form counselling.	54	62.1	0.51, 0.71	12	13.8	0.08, 0.22	20	23	0.15, 0.35	1	1	0.00, 0.06	0	0	0
In the clinic where I work there is sufficient space to counsel patients.	41	47.1	0.36, 0.57	5	5.7	0.02, 0.12	39	44.8	0.03, 0.55	2	2.3	0.00, 0.08	0	0	0

4.4. *Attitude about counselling behaviour*

Participants were asked to indicate the extent to which they agree or disagree with the statements about behavioural counselling. The results showed that some nurses have a negative attitude towards counselling behaviour for HAST (see Table 4). This was reflected by 20 (23. %), (95% CI: 15.0, 35.0) nurses that could not decide about the following statements such as "patients who abuse alcohol do not benefit from counselling", and "health care workers should not waste time counselling patients with good adherence".

4.5. *Potential barriers to counselling behaviour for HAST*

Table 5 shows that nurses reported having not enough time to counsel patients 35 (35%), (95% CI: 26.0, 46.0) and 39 (44.8%), (95% CI: 0.34, 0.55) were unsure if they had sufficient space. Less than a quarter 17 (19.5%), (95% CI: 12.0, 29.0) reported

Table 5 – Potential barriers to nurses counselling behaviour for HAST n = 87.

Category	Statement	Strongly disagree			Disagree			Neither A/D			Agree			Strongly agree		
		No	%	95% CI	No	%	95% CI	No	%	95% CI	No	%	95% CI	No	%	95% CI
Time	Health care workers have insufficient time to counsel patients properly	31	35.6	0.26, 0.46	31	35.6	0.26, 0.46	25	28.7	0.20, 0.38	0	0	0	0	0	0
Space	In the clinic where I work there is sufficient space to counsel patients	4	47.1	0.01, 0.11	5	5.7	0.02, 0.12	39	44.8	0.34, 0.55	2	2.3	0.00, 0.08	0	0	0
Fear	I am afraid that I may get TB whilst talking to patients	49	56.3	0.45, 0.66	14	16.01	0.09, 0.25	2	2.3	0.00, 0.08	5	5.7	0.02, 0.12	17	19.5	0.12,0.29
Confidence	I do not feel confident in counselling HIV positive patients	51	58.6	0.48, 0.68	21	24.1	0.16, 0.34	15	17.2	0.10, 0.26	0	0	0	0	0	0
Self-efficacy	I am confident that I have enough skills to counsel patients about HIV and AIDS, STIs and TB	7	8	0.03, 0.15	44	50.6	0.40, 0.60	28	32.2	0.23, 0.42	8	9.2	0.04, 017	0	0	0
Geographic location	Patients in urban areas know all about how to improve their health	46	52.9	0.42, 0.6	29	33.3	0.24, 0.43	9	10.3	0.05, 0.18	3	3.4	0.01, 0.09	0	0	0

being concerned about getting TB while counselling patients. Of the 87 nurses, 28 (32.2%), (95% CI: 23.0, 42.0) could not decide whether they had adequate skills to counsel patients about HIV and AIDS, STIs and TB.

4.6. *Comparative analysis of knowledge, beliefs and attitude scores about counselling behaviour for HAST*

Fig. 1 shows the scores of nurses' knowledge, beliefs, attitudes and barriers. The median scores of nurses' knowledge (4.0) were higher than those of their attitude (2.7), beliefs (2.2) and barriers (2.3) scores. Most of the nurses 83 (95.4%) (95% CI: 88.0, 98.0) had undergone training for HAST.

4.7. *Comparison of knowledge, beliefs and attitudes scores demographic characteristics and daily patient load of the nurses*

The demographic characteristics that were selected for comparison included age, sex, and level of education. The results showed that there was a statistically significant association between the belief scores and age and the nurses' level of education. Participants who were forty years and older had the highest average score ($p = 0.001$). Nurses were asked to report on their patient work load. Most of the nurses 59 (67.8%), (95% CI: 57.0, 76.0) saw more than 100 patients per day and the workload was compared with the ages of the nurses. The older the nurses were (40 years and above) the higher was the average number of the patients seen.

5. Discussion

This study found that although nurses knowledge about HAST was good, their attitudes, beliefs and perceptions regarding counselling for HAST need attention. HAST is one of the priority government programmes in South Africa (National strategic plan for HIV/AIDS, STIs and TB 2012–2016; Day & Gray, 2012). The national objectives require that an increased number of people be screened and enrolled early on wellness interventions. Screening and enrolment into wellness interventions is a process which requires the commitment of the health care workers and the patients (Odhiambo et al. 2008). When nurses hold negative attitudes and beliefs regarding counselling for HAST, screening and enrolment to wellness interventions might be compromised and the patients might not receive comprehensive care from such nurses.

5.1. *Knowledge about counselling behaviour*

Nearly all the nurses in the current study had undergone training for HAST and this training is aimed at empowering nurses to be able to provide information and support to patients seeking HAST services, as a result they were well informed about behavioural counselling for HAST. They were cognisant that for positive mutual outcomes during counselling, it was critical that a good relationship with the patient be established (Day & Gray, 2012) and that listening to patients and giving an opportunity to patients to participate in the counselling was an essential tool that they were

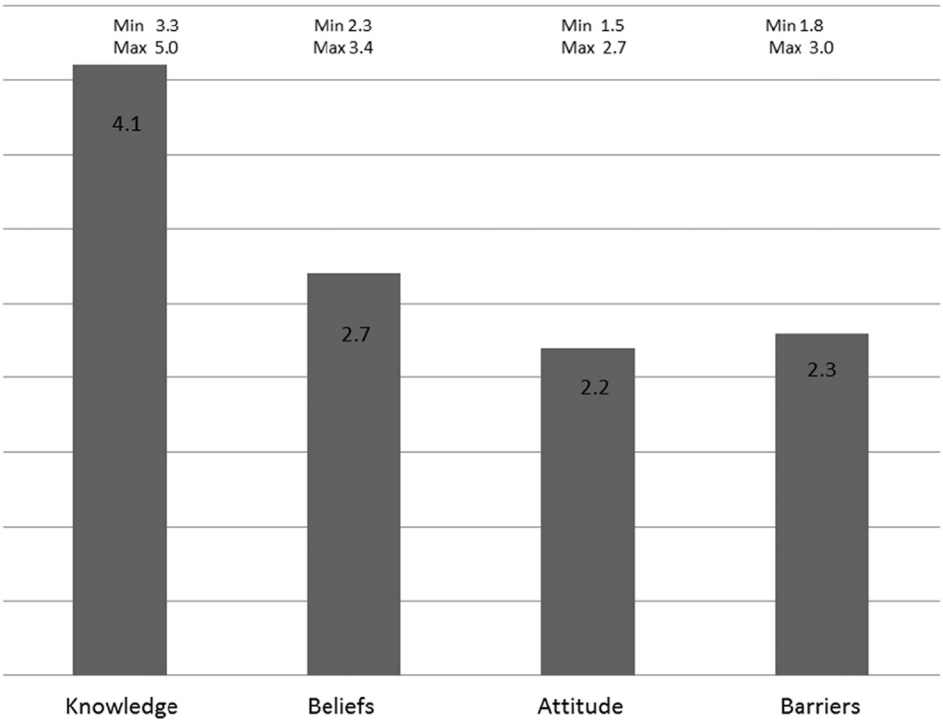

Fig. 1 – Knowledge, beliefs, attitude and barriers to HAST: Nurses' median scores, minimum and maximum.

using (Pope et al. 2010). Almost half of the nurses also agreed that probing patients by asking questions might help them to understand better the context of the patient. For successful patient encounter, knowledge about the background of the patient will result in relevant intervention initiation (Fatti et al. 2010). Furthermore, during counselling nurses are also expected to educate patients on HAST, including prevention through health education and promotion, counsel patients about risk reduction and the development of a risk reduction plan, whether the patients test positive or negative and to promote adherence to medication (Roura et al. 2013). Therefore this study revealed that the knowledge of the nurses about HAST put them in a better position during counselling.

5.2. *Attitude about counselling behaviour*

It is well recognized that knowledge alone does not necessarily result in a positive attitude to behaviour change (Glanz et al. 2008). The results show that the attitudes of the nurses towards counselling behaviour might result in nurses avoiding counselling, and this major role is placed mostly on their shoulders due to the shortage of physicians (Colvin et al. 2010; Fatti et al. 2010). In this study, some nurses were unsure when asked, "health care were should not waste time counselling with good adherence". Various theories for health behaviour in health promotion have been used as a reference to understand human behaviour (Glanz et al. 2008). To enhance effectiveness of counselling for behaviour change, application of the constructs of the health belief model (HBM) can be valuable. The underlying concept of the HBM is that health behaviour is determined by personal beliefs and perceptions (Rosenstock, 1974).

5.3. *Beliefs about counselling behaviour*

The survey confirmed that being older and holding a university degree was associated with positive beliefs about counselling for behaviour change for HAST, but that there was no significant association with other socio demographic factors. These results are congruent with previous HIV studies conducted on VCT such as that of Scott et al. (2010). Influenced by their age and a university degree, HCWs' beliefs about counselling behaviour for HAST may lead to the enhancement of the service, and an increased number of clients accessing wellness programmes and patient satisfaction. However, the results of this study where many nurses were unsure whether or not they were in agreement with the statements indicating that on-going in-service training is required to enhance their counselling skills.

5.4. *Potential barriers to counselling behaviour for HAST*

In this survey less than a quarter 17 (19.5%) of the nurses perceived themselves to be at risk of getting infected with TB when counselling patients. Currently in South Africa, TB incidence has risen due to the HIV/AIDS pandemic. The evidence from previous studies shows that patients with HIV are at increased risk of being infected with TB (Abdool Karim et al. 2011), notwithstanding the above, as per the guidelines on TB management, nurses are required to take precautionary measures when dealing with patients, including having suitable counselling rooms. We found in our study that space for conducting counselling for HAST needs attention as nearly half of the nurses were unsure whether they had sufficient space to conduct counselling. This is despite the government

interventions aiming to improve infrastructure development such as at the facilities. Over a third of the nurses also indicated the socio-economic status of the patients as another potential barrier concerning counselling behaviour about HAST, despite the economic interventions, such as social grants and food parcels to mitigate the circumstances of people who are living in poverty.

Furthermore, in accordance with other studies and government reports (Colvin et al. 2010), this survey found that nurses 59 (67.8%) attend to more patients than the previously acceptable norm of 34 patients per HCW per day. Although introduction of PICT may provide benefits for HIV positive patients, the workload of the nurses must be reviewed. Attending to more patients than the acceptable norm is likely to affect the quality of counselling sessions, as nurses will be under pressure to see as many patients as possible (Pope et al. 2010). Although group counselling is encouraged; behavioural counselling is a process, patients visiting the clinics are at different stages of change and therefore some patients might require more time for counselling than others (Prochaska, 2013).

6. Limitations

The study had a small sample size. Some of the reasons that affected the size of the sample were that some nurses were away on study leave, others were attending NIMART training and nurses were working in shifts. The questionnaire however was standardized regardless of the different contexts where the clinics operate. Further, the questionnaire was self-administered and as a result this study did not include observations or patient exit questions. Nurses did not have a lot of time to complete questionnaire.

7. Recommendations and conclusion

HIV and TB have high prevalence rates in South Africa. Access to the HAST government services is of the greatest importance and urgency to all diagnosed with these conditions and to prevent infections in uninfected patients. For the patients to benefit from HAST services, they require good and supportive agents of change, who will educate, advise and motivate them about life skills, adherence to medication and encourage new plans. Counselling is a critical strategy to accomplish this transformation. There is an urgent need for further studies that will address the barriers to counselling behaviour and develop new approaches as to how these are handle by the nurses, in order to address constraints to behavioural counselling for HAST.

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