ORIGINAL ARTICLE

Health literacy in indigenous Sesotho-speaking dialysis patients in South Africa: a multi-centre, cross-sectional study

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ABSTRACT

Background: Limited health literacy is associated with poor health outcomes in dialysis patients. In Africa, including South Africa, dialysis patients' health literacy levels are unknown. The primary objective of this study was to assess the general health literacy levels of Sesotho first-language end-stage kidney disease (ESKD) patients in the Free State province of South Africa. The secondary objectives were to compare health literacy levels of those on haemodialysis (HD) vs peritoneal dialysis (PD), and those dialysing at private and public dialysis centres using the parameters in the test.

Methods: The Sesotho Health Literacy Test, a validated, indigenous, context-specific general health literacy test that focuses on appraisal and understanding of information, was used in this multi-centre, cross-sectional study. A group of 263 Sesotho-speaking ESKD patients from the private and public healthcare sectors were conveniently selected. Frequencies and percentages for categorical data, using the chi-squared or Fisher's exact tests, and medians and percentiles were calculated per group using the Kruskal–Wallis test.

Results: Of the 263 respondents, 109 received HD in the private and 88 in the public healthcare sector, whereas three received PD in the private and 63 in the public healthcare sector. Most respondents presented with low (n = 34, 12.9%) and moderate (n = 130, 49.4%) health literacy levels. No significant statistical associations were found between the health literacy levels of HD and PD respondents (P = 0.801) or the healthcare sector groups (P = 0.584). Dialysis patients' educational levels (P < 0.001) and their scores obtained in appraisal and understanding questions (P < 0.001) were significantly associated (P < 0.001) with limited health literacy levels.

Keywords: Dialysis; general health literacy; Sesotho Health Literacy Test.

INTRODUCTION

Health literacy is the personal skill that empowers patients to access, understand, appraise and use information related to personal health [1]. Low health literacy contributes to poorer health outcomes and higher mortality rates [2] and is more common in patients with chronic conditions than in the general population [3]. Chronic conditions such as diabetes and hypertension, and consequently end-stage kidney disease (ESKD), are influenced by a patient's health literacy level [4]. ESKD patients with low health literacy levels have an increased risk of hospitalisation [3] and atherosclerotic events [2]. An increase in missed dialysis sessions has also been reported amongst ESKD patients with poor health literacy levels [2].

As chronic kidney disease progresses into ESKD, and therefore dialysis treatment, active decision-making and self-management are required of these patients [2]. This complex treatment journey requires changes to lifestyle and diet, adapting to the use of multiple medications, making dialysis modality choices, or possible transplan-

tation, advance care planning, and multiple tests and treatment options regarding ESKD comorbidities [5]. The complexity of renal replacement therapy (RRT) requires patients to have health knowledge, self-motivation, as well as navigation and investigative skills – skills enabled by adequate health literacy levels [6].

Low health literacy results in missed or abbreviated dialysis sessions [7], non-adherence to prescribed medications [8], non-compliance to dietary and fluid restrictions [9], less access to a transplant [10], and consequently, increased hospitalisation and mortality among these populations [2]. A pooled prevalence of low health literacy levels of 25% is reported for patients with chronic kidney disease in a systematic review (mostly conducted in the United States) [11]. The prevalence among the dialysis patients was even higher (27%) [11], and similar results were reported for Australian dialysis patients [12]. However, in Africa, including South Africa, ESKD patients' health literacy levels are unknown.

Health literacy, and its measurement, plays an essential role in the care of dialysis patients [13]. Measuring health literacy is complex [14], and various contextual health literacy recording instruments have been developed internationally over the past 20 years [15]. However, most of these instruments originate from developed countries, such as the USA, and are primarily published in English. Given South Africa's different socio-economic, cultural and health systems [16], it is essential to use a multidimensional, contextually relevant, objective [1] and language-specific instrument [17].

South Africa comprises private and public healthcare sectors, with the majority (85%) of the population being served by the under-resourced public health system [18]. The private sector is funded through individual contributions to medical aid schemes or health insurance and serves around 16% of the population [19]. RRT is not readily available in the public healthcare sector, thus limiting access by those who cannot afford private medical care [20]. Being younger is a critical selection criterion in the public sector [21], and unless contra-indicated, patients initially have access only to PD [22].

Two contextual and culturally appropriate health literacy tests were identified in South Africa: the Health Literacy Test for Limited Literacy [23] and the Sesotho Health Literacy Test (SHLT) [24]. The Health Literacy Test for Limited Literacy was translated into isiXhosa for use in the Eastern Cape province of South Africa and excluded those with any form of tertiary education; it focused only on patients within the public sector of South Africa [23]. The SHLT is a comprehensive, general health literacy test that was developed, conceptualised and validated to measure

the general health literacy of the Sesotho-speaking population of the Free State province of South Africa [17] (Appendix 1). Thus, the SHLT was deemed appropriate for measuring the general health literacy levels of Sesotho-speaking ESKD patients.

In the absence of health literacy-based data for ESKD patients in the private and public sectors of South Africa, the primary objective of this study was to assess the general health literacy levels of Sesotho first-language ESKD patients in the Free State. The secondary objectives were to compare health literacy levels in those on haemodialysis (HD) versus peritoneal dialysis (PD) and those dialysing at private and public dialysis centres using the parameters in the test.

METHODOLOGY

Study setting
South Africa has 11 official languages, each spoken as a first language by a distinct cultural group. The majority (72%) of the population of the Free State are indigenous Sesotho first-language speakers [25]. The Free State is the second-least-populated of the nine provinces in South Africa [18], and 13.9% of the province's population has had no schooling; another 10.9% completed only primary school [25]. Thus, at least 20% of this population has the potential for low health literacy levels, due to their poor education [26]. Furthermore, the Renal Registry of South Africa reports that this province has the third-highest prevalence of patients on RRT in this country [18].

Sample calculation
A cross-sectional study was conducted from August to October 2019 in four towns in the Free State. The South African Renal Registry of 2018 [18] reported 560 ESKD patients in the province, which has 23 dialysis centres [18], among which four towns were conveniently identified for data collection. Ten of the 13 dialysis centres in these four towns permitted researchers to approach patients. Four of these facilities are public centres, and six are privately owned with 420 patients in total receiving dialysis. The researcher could access more than 50% of the total population of ESKD patients in the Free State [18], encompassing both private and public dialysis centres, thereby reaching the biggest possible sample within logistical and financial constraints. However, the total number of Sesotho-speaking ESKD patients was unknown. The researcher consulted with the different dialysis centres to learn how many Sesotho-speaking patients to expect per HD dialysis shift. The private sector treated only 37 patients on PD in the six centres, whereas the public sector treated 130 Sesotho-speaking patients on PD in two of their centres.

Inclusion criteria

Respondents were included in this study if they were:

- Sesotho first-language speakers;

- diagnosed with ESKD, and being treated on HD or PD;

- at least 18 years old;

- provided written consent.

Exclusion criteria

Respondents were excluded from this study if they:

- did not meet the above criteria;

- did not give consent; or

- were blind.

A total of 263 Sesotho-speaking ESKD patients were conveniently selected to participate in the study.

Data collection

A structured questionnaire, the SHLT, was used to measure health literacy levels of the Sesotho-speaking ESKD patients. The user-friendly SHLT was developed and validated locally for testing general health literacy within the context of a developing country, specifically that of Sesotho-speaking respondents [24]. The test has good reliability (Cronbach's α = 0.77) and convergent and predictive validity; the development of the SHLT is based on internationally used health literacy questionnaires, such as the Health Insurance Literacy Measure, the Cancer Health Literacy test, the High Blood Pressure Health Literacy Scale, and the Patient Health Questionnaire-9 [24]. The SHLT consists of ten comprehensive multiple-choice questions assessing appraisal (1–6) and understanding (7–10) of health information (Appendix 1). Each of the ten questions (Appendix 1) has a predefined correct answer, and health literacy levels are interpreted as follows: low health literacy (<6), moderate health literacy (6–7), and high health literacy (≥8). All ten questions are specifically contextualised to the South African public healthcare system [24]. Face-to-face interviews were conducted by two trained Sesotho first-language-speaking fieldworkers under supervision of the first author.

The pilot study was conducted on two HD and one PD patient, allowing confirmation of fieldworker expertise; the data were included in the study. Data collection took place during the HD patients' scheduled dialysis appointments. The data of PD patients from the public sector were collected during scheduled PD clinic days and the researcher was informed when a PD patient visited the private sector. Only three of the private sector's PD patients could be reached. Ten Sesotho-speaking patients were approached but rejected, as Sesotho was not their first language.

Definitions

Based on several studies, low or limited health literacy refers to those patients that misread or miscalculate medication prescriptions and appointment information. Those with moderate health literacy are able to understand simple instructions, but can misinterpret medical instructions such as "do not take medication on an empty stomach". Adequate or high health literacy refers to patients who are able to comprehend most instructions regarding their treatment, but may be unable to understand financial details or information that expect certain calculations [27].

Data analysis

The data analysis for this paper was generated using SAS software (copyright, SAS Institute Inc., Cary, NC, USA). Frequencies and percentages were calculated per group for categorical data using the chi-squared or Fisher's exact tests (when more than one-fifth of cells had expected frequencies less than 5, we used Fisher's exact test because applying the approximation method was inadequate) and medians and percentiles for numerical data (as the numerical data were distributed skew) using the Kruskal–Wallis test. A P value of <0.05 was considered statistically significant.

Ethical considerations

Ethics approval was obtained from the University of the Free State's Health Sciences Research Ethics Committee (reference UFS-HSD2019/0398/2506). Permission was also obtained from the Department of Health of the Free State province and each participating dialysis clinic. All respondents provided written informed consent.

RESULTS

Respondent demographics

Questionnaires were completed by 263 adult Sesotho first-language-speaking ESKD respondents. A 98% response rate was obtained, with only 5 of those selected declining participation. Table 1 summarises the demographic information of the study population.

Of the 263 ESKD respondents, 197 received HD and 66 received PD. Statistically significantly more private (86%) than public (58%) respondents received HD (P < 0.001). Sixty percent of respondents were male (P = 0.007). The majority (72%) were between 31 and 60 years of age. Notably, the respondents on PD in the public healthcare sector group were significantly younger than those on HD in the private sector group (P < 0.001).

The educational levels of the respondents ranged from that of no formal education (2.3%) to postgraduate (3.5%) level,

Table 1. Demographic information of ESKD respondents.

Variable		Total respondents n = 263 (%)	Treatment modality		P value	Healthcare sector		P value
			HD (197)	PD (66)		Private (112)	Public (151)	
Gender[1]	Male	158 (60.3)	128 (65)	30 (46.2)	0.007	73 (65.2)	85 (56.7)	0.164
	Female	104 (39.7)	69 (35)	35 (53.9)		39 (34.8)	65 (43.3)	
Age (years)[2]	18–30	33 (12.5)	19 (9.6)	14 (21)	<0.001	5 (44.6)	28 (18.5)	<0.001
	31–50	114 (43.3)	70 (35.7)	44 (66.7)		31 (27.9)	83 (55)	
	51–65	98 (37.4)	90 (45.9)	8 (8.3)		61 (55)	37 (24.5)	
	>65	17 (6.5)	17 (8.7)	0		14 (12.6)	3 (2)	
Education level[3]	No formal education	6 (2.3)	4 (2)	2 (3)	0.052	1 (0.8)	5 (3.3)	<0.001
	Primary level	45 (17.9)	40 (20.3)	5 (7.5)		15 (4.5)	30 (20)	
	Secondary level	153 (58.4)	108 (54.8)	45 (68)		56 (50)	97 (64.2)	
	Tertiary education	49 (18.7))	36 (18.3)	13 (19.7)		33 (29.5)	16 (10.7)	
	Postgraduate	9 (3.5)	8 (4.1)	1 (1.5)		7 (6.3)	2 (1.4)	
Co-morbidities	Hypertension	240 (91.3)	180 (91.4)	60 (90.9)	0.909	105 (94.7)	135 (89.4)	0.217
	Diabetes mellitus	70 (26.6)	63 (23)	7 (10.6)	<0.001	60 (53.6)	10 (6.6)	<0.001
	HIV	15 (5.7)	10 (5.1)	5 (7.6)	0.539	6 (5.4)	9 (6)	0.835
	Cancer	2 (0.8)	2 (0.8)	0	1.0	2 (0.9)	0	0.032
	Auto-immune/other	13 (5.1)	11 (5.6)	2 (3.0)	1.0	8 (7.1)	4 (4)	1.0
	Unknown	14 (5.3)	11 (5.6)	3 (4.6)	1.0	2 (1.8)	12 (8)	0.028
Years on dialysis[4]	<1	41	24 (12.2)	17 (25.8)	0.04	20 (18)	21 (13.9)	<0.001
	1–4	101	77 (39.3)	24 (36.4)		55 (54.5)	46 (45.5)	
	>4	120	95 (48.5)	25 (37.9)		36 (30)	84 (70)	
Reading problems	Yes	123 (46.8)	101 (51.3)	22 (33.3)	0.012	60 (53.6)	63 (41.7)	0.057
	No	140 (53.2)	96 (48.7)	44 (76.7)		52 (46.4)	88 (58.3)	

[1]One PD respondent in the public sector's data regarding gender was omitted during survey. [2]One HD respondent in the private sector did not indicate age.
[3]One HD respondent in the public sector did not report education level. [4]One HD respondent in the private sector did not report years on dialysis.

with the majority (58%) reporting a secondary education. A statistical difference (P < 0.001) was found between the educational levels of the private and public sectors, but not between the HD and PD groups (P = 0.052).

More HD respondents (23%) had diabetes mellitus compared to only 10.6% treated on PD (P = 0.001). More than half (53.6%) of the study population in the private sector had diabetes, compared to only 6.6% in the public sector (P < 0.001). The two respondents who reported cancer as comorbidity were both on HD (P = 1.00) and were dialysed in the private sector (P = 0.032).

Respondents were treated for longer periods on HD than on PD (P = 0.04) and significantly longer in the public than in the private sector (P < 0.001). As health literacy could be influenced by a patient's reading ability, our subjects were asked if they had a problem reading when they self-reported inadequate eyesight. The HD respondents' (51%) reading ability was significantly worse than that of PD respondents (33%) (P < 0.012). In the private sector, respondents were more likely to have difficulty reading than in the public sector (P = 0.057).

SHLT health literacy questions

Table 2 describes respondents' answers to SHLT questions (Appendix 1) according to the treatment groups and healthcare sectors. An indication is provided for the content covered by each of the questions.

A quarter (26%) of the respondents did not know what to do in an emergency, as assessed by question 1, with statistically significant (P < 0.001) differences observed between modality and health sector groups. Question 3, which assessed knowledge of measurement, was answered correctly by only 54% of the study population, with a significant difference (P = 0.003) between the HD and PD groups. Similarly, question 4, which assessed respondents' knowledge of health and nutrition, could be answered correctly by only 55% of the sample. Almost 44% of the patients did not know the answer to question 9, that assessed the application of and understanding a prescription for medication. Although 88% of the respondents knew how to measure medication according to a prescription (question 10), a significant difference (P = 0.032) was found between HD and PD respondents.

Table 2. Frequencies and percentages of SHLT answers and P values of treatment modalities within healthcare sector.

SHLT Question number	Correct answer n = 263 (%)	Treatment modality HD/PD P value	Healthcare sectors Private/Public P value
1 (appraising knowledge in case of an emergency)	195 (74.1)	<0.001*	<0.001*
2 (appraising knowledge regarding TB)	242 (93.1)	0.063	0.107
3 (appraising knowledge about measurement)	142 (54)	0.003*	0.015*
4 (appraising knowledge about health and nutrition)	144 (54.8)	0.342	0.399
5 (appraising knowledge about medication side effects)	238 (90.5)	1.00	0.263
6 (appraising if respondent can read and interpret medication label)	248 (94.3)	0.253	0.298
7 (understanding of a medication label)	243 (92.4)	0.379	0.543
8 (understanding of TB)	248 (94.3)	0.678	0.139
9 (application and understanding of medication prescriptions)	148 (56.3)	0.148	0.132
10 (understanding of measuring medication according to prescription)	232 (88.2)	0.032*	0.701

*Statistically significant.

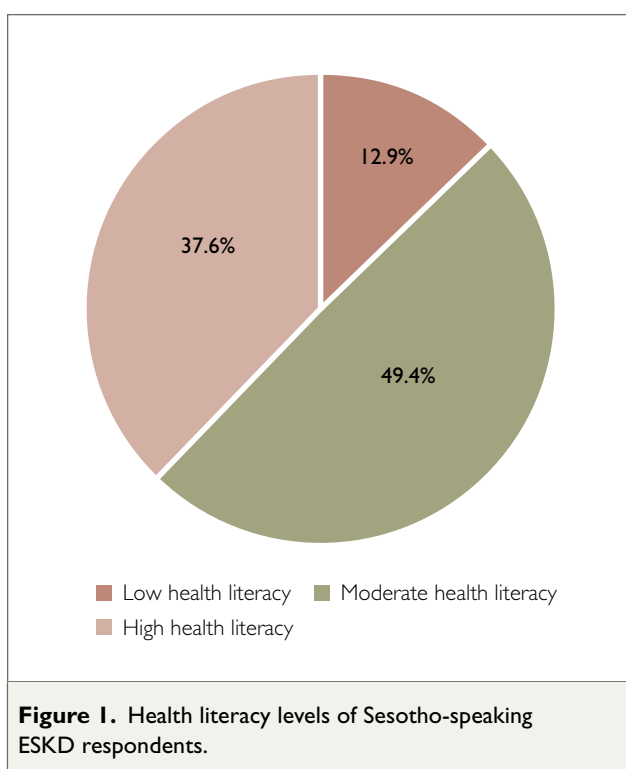**Figure 1.** Health literacy levels of Sesotho-speaking ESKD respondents.

Figure 1 indicates that the health literacy levels of the majority of Sesotho-speaking ESKD respondents in the Free State fell in the low (12.9%) and moderate (49.4%) health literacy level groups.

Table 3 describes the associations between the health literacy levels of respondents and their treatment modalities, healthcare sector groups, demographic variables, and appraisal and understanding of questions. In this study, neither treatment modality (P = 0.801) nor healthcare sector group (P = 0.584) was associated with lower health literacy levels, and age (P = 0.059) was only marginally associated with relatively low health literacy levels. How-

ever, respondents with poorer education were significantly (P < 0.001) associated with lower health literacy levels. Similarly, the lower their health literacy levels, the worse the respondents scored on appraisal and understanding (P < 0.001) of information.

DISCUSSION

The majority of health literacy levels of Sesotho-speaking ESKD respondents fell in the low and moderate health literacy level groups. Those patients with lower educational levels were significantly associated with poorer health literacy, and the lower their health literacy, the worse they scored on appraisal and understanding of information.

We found that most Sesotho-speaking ESKD respondents in the Free State expressed low (12.9 %) or moderate (49.4 %) health literacy. In a systematic review exploring the health literacy and patient outcomes for chronic kidney disease, limited health literacy was reported for ESKD patients in various high-income countries: 21%, 29%, 32% and 33.3% in studies conducted in the USA; and 18% in the UK [2]. In a smaller study among 42 dialysis patients in Brasília, 80.9% of dialysis patients had limited health literacy levels, and scored less than 66/100 in the Brazilian version of the Short Test of Functional Health Literacy [28]. All these studies mostly assessed the reading and writing skills of patients, and if a multidimensional tool was used, the health literacy of these patients could potentially present a worse picture. In the Eastern Cape of South Africa, Marimwe and Dowse used the validated multidimensional Health Literacy Test for Limited Literacy, and found that 82.5% of isiXhosa-speakers among the general public displayed limited health literacy [23]. Being diagnosed with ESKD forces a patient to take informed decisions and to adapt to a new, complicated lifestyle [28].

Table 3. Associations between health literacy levels and treatment modalities, healthcare sectors, demographic variables and appraisal of and understanding questions of SHLT.

Variable		Low health literacy levels	Moderate health literacy levels	High health literacy levels	P value
Treatment modality	HD – n (%)	27 (13.7)	97 (49.2)	73 (37.1)	0.801
	PD – n (%)	7 (10.6)	33 (50)	26 (39.4)	
Healthcare sector	Private – n (%)	12 (10.7)	55 (49.1)	45 (40.2)	0.584
	Public – n (%)	22 (14.6)	75 (49.7)	54 (35.8)	
Gender (Female) – n (%)		13 (38.2%)	58 (44.9%)	33 (33.3%)	0.202
Reading problems due to inadequate eyesight (Yes) – n (%)		17 (50.0%)	64 (49.2%)	59 (59.6%)	0.274
Age (median, IQR)		52 (40–60)	51 (38–56)	47 (38–53)	0.059
Years on dialysis – median (IQR)		4.5 (1–10)	4.0 (1–8)	4.0 (2–9)	0.502
Number of Co-morbidities – median (IQR)		1 (1–2)	1 (1–2)	1 (1–2)	0.816
Education – median (IQR)		3 (2–3)	3 (3–3)	3 (3–5)	<0.001*
Appraisal questions – median (IQR)		3.0 (3–4)	4.0 (4–5)	5.0 (5–6)	<0.001*
Understanding questions – median (IQR)		3 (2–3)	3 (3–4)	4 (4–4)	<0.001*

Abbreviation: IQR, interquartile range.

Although there is a dearth of health literacy studies on dialysis patients, Taylor illustrates in a systematic review of 19 studies involving chronic kidney disease patients in the United States and one in the UK that lower levels of education consistently have an influence on a patient's health literacy [11]. In our study, 22% of Sesotho-speaking ESKD patients had less than a secondary education, of whom 23.3% are dialysing in the public sector and 5.3% in the private sector..

Appraising, understanding and using health information empowers patients in their chronic disease journey [1]. These essential health literacy competencies [24] are critical for an ESKD patient to successfully manage and adapt to their diagnosis. In our study, appraising health information was found to be insufficient in three of the six appraising questions.

Our study suggests also that almost 44% of patients had difficulty understanding a medication prescription, and a significant difference was found between HD and PD patients' ability to measure medication according to a prescription. Similarly, in a large Slovakian study, an inability to appraise and understand information by dialysis patients was associated with non-adherence to dietary and fluid intake recommendations [9]. In New Zealand, limited health literacy influenced medication adherence by dialysis patients [8], and in the US, limited health literacy predicted missed or abbreviated haemodialysis sessions [29].

In a study in Tehran, Iran, understanding and assessing information were significantly associated with the limited health literacy of haemodialysis patients [30], which agrees with our finding for Sesotho-speaking ESKD patients. The inability to understand a medication prescription and to measure fluid intake could result in critical medical complications for an ESKD patient, such as leading to high serum phosphate levels and fluid overload [9]. Our findings could imply also that Sesotho-speaking ESKD patients do not fully understand their treatment and dietary prescriptions, and their lower health literacy levels could adversely influence their adherence to their treatment.

LIMITATIONS

The major limitation of this study was that the SHLT is not an ESKD-specific health literacy test. Still, the validated, contextualised general health literacy test proved helpful for use with our Sesotho-speaking dialysis patients. Only a snapshot of the health literacy of these patients was captured through this research. However, with no South African health literacy research having been done on ESKD patients, the results gave insight into the health literacy levels of this specific language group of patients. Although studying the health literacy of transplant patients was not the objective of this study, our results could have been biased by their exclusion from the study group, as they form part of the ESKD population. Researchers could include the health literacy of transplant patients in their future studies.

Because the number of Sesotho first-language-speaking ESKD patients was unknown to the researcher, as well as their proximity, convenience sampling was used, which could have introduced bias. Although most (85%) of South

Africa's population relies on the public sector for health services, 81% of patients who started RRT in 2018 were treated in the private sector [18]. More PD patients in the public sector were conveniently available to the researcher and, therefore, do not present a true reflection of patients on RRT in the country's two healthcare sectors. Even though this is a limitation of the study, no description has been given before.

Four images, used to disseminate information in the South African public healthcare sector, were used to simulate the South African training material in the SHLT. The self-reporting of patients' eyesight could be a limitation in this study. Since not being able to see the images clearly, could negatively influence interpretation of these images and could have impacted the measurement of the health literacy results of this group of patients.

Although this study involved a select group of South African ESKD patients, it is the first to describe the health literacy levels of Sesotho-speaking ESKD patients in this country.

CONCLUSION

ESKD patients with relatively low levels of education reveal relatively poor health literacy and may need special attention. Appraisal and understanding of health information are critical aspects for those on dialysis who have limited health literacy, as the lack of this ability could imply that they do not fully understand their treatment and dietary prescriptions. Their low health literacy could also imply that they have difficulty engaging with healthcare professionals. This research gives healthcare personnel a better perspective to identify vulnerable ESKD patients and to develop interventions to improve these patients' ability to access, understand, appraise, and use information. If the health literacy levels of ESKD patients are known, healthcare professionals could respond more effectively to assist those individuals to improve their health literacy and, eventually, improve their self-management and health outcomes.

Conflicts of interest
None

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APPENDIX 1: SESOTHO HEALTH LITERACY TEST

(Only the Sesotho version was used in the study)

Only interview respondents where the following is applicable / Bankakarolo ba puisano ena kabathobae kgetheleng.

Consent document signed	☐ Yes ☐ No	Foromo ya tumellano e tekenwe
Older than 18 years	☐ Yes ☐ No	Ka hodima leshome le metso e robedi
Sesotho first-language-speaking patient with ESKD	☐ Yes ☐ No	Mokudi ya nang le ESKD eo Puo ya lapeng e leng Sesotho
Information leaflet given to respondent	☐ Yes ☐ No	Monkakarolo o fumane lengolo la tlhahiso leseding
1.1 Date questionnaire is completed	____/____/____ dd mm yy	1.1 Letsatsi la getelloya teko
1.2 Name of the dialysis centre		1.2 Sebakase hlatswang diphio ka motjhine

Instructions – Read the questions out loud to the respondent and circle the appropriate answer. Do not rephrase any question to a respondent.

Ditaelo – Balla monkakarolo dipotso o etse sedikadikwe karabong e nepahetseng. O se behe potso ka mokgwa o mong.

PART 1			
DEMOGRAPHIC INFORMATION		DATA YA BABAPTSI	
2.1 Gender	☐ Male ☐ Female	2.1 Tekano	☐ Monna ☐ Mosadi
2.2 How old are you in years?		2.2 Dilemo tse kae?	
2.3 What is the highest grade you have passed in school?		2.3 Grade eo felletseng ho yona sekolong ke efe?	
2.4 If matric was the highest grade you passed, did you obtain any degree/diploma/certificate?		2.4 Ha e ba o na le lengolo la degree/certificate ngola mofuta wa le ngolo e sebaka mo o le fumaneg teng?	
2.5 Which treatment option are you being treated with?	☐ Haemodialysis ☐ Peritoneal dialysis	2.5 Ke mefuta e feng ya ho fodisa eo e kgethang?	☐ Haemodialysis ☐ Peritoneal dialysis
2.6 List the chronic diseases you are diagnosed with		2.6 Mefuta ya mafu eo o nang le yona e sa foleng	
2.7 How many years have you been on dialysis?		2.7 Ke dilemo tse ka oleng sebak-eng seo sa ho hlokisa diphio?	
2.8 Do you have problems reading because you cannot see?	☐ Yes ☐ No	2.8 O na le bothatha ba ho bala hobane o sa bone	☐ Yes ☐ No

Correct answer highlighted in bold.

PART 2
SESOTHO HEALTH LITERACY TEST

1. If I break my leg, I must go to the a) Clinic b) **Hospital** c) I don't know	1. Ha nka robeha leoto, ke tlameha ho ya a) Tliliniking b) **Sepetlele** c) Ha ke tsebe
2. If my brother who stays with me has TB, I must a) Do nothing b) **Go to the clinic for TB testing** c) I don't know	2. Ha moholwane wa ka ya dulang le nna a na le TB, ke tlameha ho a) Sa etse letho b) **Ho ya tliliniking bakeng sa diteko tsa TB** c) Ha ke tsebe

= 1 standard cup

Note: 1 teaspoon of sugar = 5ml or 4.2g
1 cup of sugar = 250ml or 212g

3. Look at the sugar measurements. A cup of sugar equals a) 5 ml b) **250 ml** c) I don't know	3. Sheba ditekanyetso tsa tswekere. Kopi ya tswekere e lekana le a) 5 ml b) **250 ml** c) Ha ke tsebe
4. Your friend is overweight. She does not have money. Appropriate advice you can give her to lose weight is to: a) To go to a gym b) **Take long fast walks** c) don't know	4. Motswalle wa hao o nonne. Ha a na tjhelete. Keletso e tshwanelehang eo o ka mo fang yona ho theola boima ba mmele ke a) Ho lefa ho ya boikwetlisong b) **Ho tsamaya ka potlako nako e telele** c) Ha ke tsebe
5. A person taking a medication for the first time and presents with a skin rash must a) Finish the medication b) **Go back to doctor/clinic** c) I don't know	5. Motho a nwang moriana lekgetlo la pele ha a ba le lekgopo o tlameha ho a) Ho qeta moriana b) **Ho kgutlela ngakeng/tliliniking** c) Ha ke tsebe

PAIN TABLETS
Per Tablet: paracetamol 500mg; Potassium sorbate 0.12% m/m Sugar free
Warning: Do not use continuously for longer than 7 days (adults) or 5 days (children) without consulting your doctor. Store below 25°C in a well-closed container protected from light and air.
KEEP OUT OF REACH OF CHILDREN

6. You have been taking pain pills for 7 days and still have pain. Look at the instructions on the pain tablet label and decide what you have to do: a) Take 2 pills b) **Go to the doctor/clinic** c) I don't know	6. O nwele dipilisi tsa mahlaba matsatsi a 7 empa o ntse o opelwa. Sheba ditaelo tsena mme o etse qeto ka seo o tlamehang ho se etsa a) Enwa dipilisi tse 2 b) **E ya ngakeng/tliliniking** c) Ha ke tsebe

PART 2 cont.
SESOTHO HEALTH LITERACY TEST cont.

BEA HOLE LE BANA ·MAING

ANELE EZINGANELI · BEKA KUDE EBANTWANENI · KEEP OUT OF CHILDREN'S REACH

It is dangerous to exceed the stated dose.

Hoef/Qty   Produk/Product

MULTI-VITAMIN SYRUP

2   Teaspoons   2   TIMES PER DAY
                                             MAKGETLO KA LETSATSI
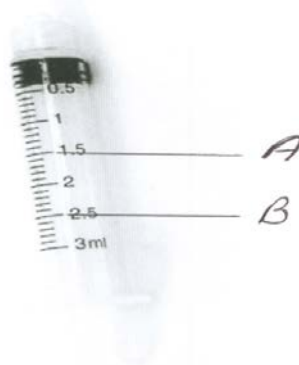
NA ETES / AFTER MEALS / MORAHO HA DIJO

Lot/Batch: Verval/Expiry:

NAME: *Tumelo*   No:

PRIMARY HEALTH CARE

FREE STATE

7. Look at the instruction on medication bottle. How many times does Tumelo have to take his multivitamin syrup a day? a) **2 times per day** b) 4 times per day c) I don't know	7. Sheba ditaelo tse botlolong ya moriana. Tumelo o tlameha ho nwa moriana wa di-aha mmele ha kae ka letsatsi? a) **2 ka letsatsi** b) 4 ka letsatsi c) Ha ke tsebe
8. When we read the following word, which option is best associated with the word: **TB** a) **Cough** b) Weight gain c) I don't know	8. Ha re bala mantswe a latelang, kgetho nyallanang le lentswe leo ke e fe: **TB** a) **Ho hohlola** b) Ho eketseha mmele c) Ha ke tsebe
9. If you take your first dosage of pain medication at 8 o'clock and the nurse tells you to take the pain medication every 6 hours, when can you take your next dosage? a) **2 o'clock in the afternoon** b) 6 o'clock in the evening c) I don't know	9. Ha o nwa tekanyetso ya pele ya moriana wa mahlaba ka 8 hoseng mme mooki a o bollela ho nwa moriana wa mahlaba ka mora hora tse 6, o ka nwa neng tekanyetso e latelang? a) **Hora ya bobedi motshehare** b) Hora ya botshelela mantsiboya c) Ha ke tsebe

10. Thabo has to give 2,5ml of cough syrup to his sister. Choose an option that will indicate that there is 2,5ml of syrup in the syringe a) Choice A b) **Choice B** c) I don't know	10. Thabo o tlameha ho nwesa kgaitsedi ya hae moriana wa sefuba wa 2.5ml. Etsa kgetho ho bontsha 2.5ml sepeiting a) Kgetho A b) **Kgetho B** c) Ha ke tsebe