

Teaching African Traditional Health Knowledge and Practices in Undergraduate Nursing Education: A National Survey of South African Nurse Educators

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Abstract

Background

African traditional health knowledge and practices (ATHKPs) remain widely used alongside biomedical services in South Africa. Nurses routinely care for patients whose health beliefs and practices are informed by Indigenous knowledge systems, yet concerns persist regarding the limited preparation of nurses to engage with ATHKPs in a culturally responsive and ethically sound manner. Although policy and educational discourse increasingly call for curriculum transformation, there is limited national-level evidence on how ATHKPs are currently taught within undergraduate nursing education.

Methods

A quantitative, cross-sectional descriptive survey was conducted among nurse educators employed at accredited public nursing education institutions (NEIs) in South Africa. The study reports on Phase 2 of an exploratory sequential mixed-methods design, with Phase 1 informing questionnaire development. Using purposive and clustered sampling, data were collected from 408 nurse educators across universities, universities of technology, and public nursing colleges. The survey assessed curriculum structure, content related to ATHKPs, teaching and assessment approaches, and educators' perceptions of the importance of ATHKP teaching. Data were analysed using descriptive statistics.

Results

Most respondents reported that ATHKPs are minimally and inconsistently integrated into undergraduate nursing curricula. Over half indicated that ATHKPs are not taught at any level of the programme, and few reported the presence of dedicated modules. Content relating to foundational ATHKP concepts, values and belief systems, regulation of traditional health practitioners, and professional roles was largely absent. Teaching approaches were predominantly theoretical, with negligible use of practical or experiential methods, and formal assessment of ATHKP content was uncommon. Despite this limited curricular inclusion, most nurse educators perceived ATHKP teaching as important and identified the need for educator training, clearer regulatory guidance, and structured curriculum support.

Conclusion

The study demonstrates a substantial gap between nurse educators' recognition of the importance of ATHKPs and their meaningful integration into undergraduate nursing education in South Africa. Strengthening curriculum structure, pedagogical approaches, and assessment practices related to ATHKPs is essential to enhance culturally responsive nursing education and better prepare graduates for practice in pluralistic health systems.

Background

The World Health Organization has increasingly emphasised that health-professional education must prepare graduates to deliver people-centred, culturally responsive care within pluralistic health systems where biomedical and traditional forms of care coexist [1, 2]. Within such systems, the preparation of nurses requires more than clinical competence; it necessitates the ability to engage ethically and safely with patients whose health beliefs and practices are shaped by Indigenous knowledge systems. Consequently, nursing education is positioned as a critical site for shaping how future nurses understand, negotiate, and respond to traditional health knowledge in everyday practice.

Traditional health knowledge and practices remain central to health-seeking behaviour across sub-Saharan Africa, including South Africa, where a substantial proportion of the population consults traditional health practitioners alongside biomedical services [3, 1]. Nurses, as the largest and most patient-proximal health workforce, routinely encounter patients who integrate traditional remedies, rituals, and consultations into their illness experiences. When nurses lack adequate preparation to engage with these practices, patient–provider relationships may be strained, communication may be compromised, and care may be perceived as culturally insensitive or dismissive. This underscores the importance of embedding culturally grounded knowledge within foundational nursing education rather than relying on ad hoc learning in clinical practice.

Recent scholarship in nursing education highlights decolonisation, epistemic justice, and cultural competence as essential dimensions of contemporary curricula, particularly in Global South contexts [4, 5]. These perspectives critique the enduring dominance of Eurocentric biomedical paradigms in nursing education and argue that the marginalisation of Indigenous knowledge systems perpetuates structural inequities in healthcare delivery. From this standpoint, the exclusion of African traditional health knowledge from nursing curricula represents not merely an educational omission, but a disciplinary failure to align training with the sociocultural realities of nursing practice.

Empirical evidence from South Africa suggests that both nursing students and practising nurses often report limited knowledge of African traditional health knowledge and practices (ATHKPs), coupled with uncertainty when caring for patients who use or value such practices [6, 7]. These findings indicate that gaps in understanding are not solely attributable to individual attitudes but reflect broader curricular and institutional shortcomings. Where ATHKPs are addressed, they are frequently introduced informally or implicitly, resulting in inconsistent exposure and minimal opportunities for applied learning [8]. This pattern highlights the need to examine curricular structures rather than focusing exclusively on learner dispositions.

Evidence from complementary and integrative health education demonstrates that superficial or tokenistic inclusion of traditional or complementary health content is insufficient for developing meaningful competence, confidence, or safe clinical engagement among healthcare professionals [9]. A systematic review of nursing students' knowledge and attitudes toward complementary and alternative medicine found that fragmented or elective-based curricula were associated with low confidence and

limited application in practice, despite positive learner interest [10]. Similarly, trend analyses of nursing research show that educational frameworks often lag the realities of practice, with limited pedagogical integration and weak alignment with evidence-based nursing competencies [11]. These findings suggest that the effectiveness of traditional health education lies not in curricular presence alone, but in how content is sequenced, assessed, and supported within professional programmes.

Critical nursing education literature further cautions that the symbolic inclusion of Indigenous knowledge without faculty development, clear learning outcomes, or institutional accountability may inadvertently reinforce epistemic marginalisation rather than challenge it [5]. Educators who are themselves insufficiently prepared or supported may struggle to translate Indigenous health concepts into pedagogically meaningful content, resulting in variability across institutions and disciplines. This points to the central role of nurse educators as curricular gatekeepers whose perspectives and capacities strongly influence how ATHKPs are represented in undergraduate programmes.

International experiences illustrate both opportunities and challenges in integrating traditional health knowledge into health-professional education. Initiatives in Ghana and parts of Southeast Asia demonstrate that structured exposure to traditional medicine can enhance intercultural competence and communication when curricula are contextually grounded and aligned with professional standards [12, 13]. However, these experiences also caution that integration without regulatory clarity and pedagogical coherence risks superficial engagement and potential safety concerns. Such lessons are particularly salient for nursing education, where professional accountability and patient safety remain paramount.

Despite increasing policy discourse on health-systems integration and curriculum transformation in South Africa, there remains a notable paucity of national, discipline-specific quantitative evidence on how African traditional health knowledge and practices are taught within undergraduate nursing programmes. Existing studies have focused largely on students' or practitioners' attitudes, while limited attention has been paid to educators' reports on curriculum structure, content, and teaching approaches across institutions [6, 14]. This gap constrains evidence-based curriculum reform and limits the ability of regulatory and educational bodies to respond systematically to identified educational needs.

Understanding how nurse educators conceptualise and report the teaching of ATHKPs is therefore essential for advancing culturally responsive nursing education. By examining the level and content of ATHKP teaching across public nursing education institutions, this study addresses a critical gap at the intersection of Indigenous knowledge, curriculum design, and nursing pedagogy. In doing so, it contributes empirical evidence required to support curriculum reform that is responsive to both disciplinary standards and the lived realities of healthcare practice in South Africa.

Study Objectives

The study aimed to:

- Identify the level at which African traditional health knowledge and practices are taught within undergraduate nursing curriculum in South African public nursing education institutions.
- Determine the content related to ATHKPs included in undergraduate nursing curricula, as reported by nurse educators.
- To assess methods of teaching and assessment of ATHKPs in public NEIs.

Methods

Study design

A quantitative, cross-sectional descriptive survey design was employed to assess the teaching of African traditional health knowledge and practices (ATHKPs) in undergraduate nursing curricula across public nursing education institutions (NEIs) in South Africa. This paper reports on Phase 2 of a larger exploratory sequential mixed-methods study. Phase 1 utilised qualitative methods to generate data from nurse educators, Indigenous knowledge holders, and traditional health practitioners (THPs) regarding ATHKP content appropriate for inclusion in nursing education. Findings from Phase 1 informed the development of the structured questionnaire used in Phase 2.

Study setting

Nursing education in South Africa is provided through public and private nursing colleges, universities, and universities of technology located in both urban and rural contexts. All NEIs are accredited by the South African Nursing Council (SANC) to offer undergraduate and postgraduate nursing programmes. At the time of the study, 26 public NEIs were accredited to offer undergraduate nursing programmes, comprising universities, universities of technology, and public nursing colleges. Nurse educators employed within these institutions are responsible for curriculum development and teaching within their areas of nursing specialisation. The study aimed to include educators representing all major nursing disciplines, including general nursing, midwifery, mental health nursing, community nursing, and basic medical sciences.

Participants and sampling

All nurse educators employed at accredited public NEIs and involved in undergraduate nursing education were eligible to participate. The total study population consisted of 2 141 nurse educators across the 26 institutions. Institutions were categorised into three clusters: universities (n = 303 educators), universities of technology (n = 50 educators), and public nursing colleges (n = 1 788 educators). Using Yamane's sample-size formula for a finite population, a minimum sample of 337 educators was calculated.

Inclusion criteria required that participants be employed at an accredited public NEI for more than one year and actively teaching in an undergraduate nursing programme. Institutions were contacted via email, and those expressing interest facilitated recruitment by distributing study information to eligible educators.

Survey instrument development and validation

The questionnaire used in this study was developed specifically for the study by the research team. The instrument was informed by findings from Phase 1 of the exploratory sequential mixed-methods study, expert consultation, and a review of relevant literature. Development followed a systematic process guided by Mamabolo and Myres [15]. First, qualitative data from Phase 1 were analysed, with codes and categories clearly defined. These were subsequently transformed into measurable variables aligned to the quantitative research objectives. Descriptions, definitions, and selected quotations from the qualitative findings informed the construction of questionnaire items.

An initial draft questionnaire was subjected to expert review to establish face and content validity. A pilot study was then conducted with 22 nurse educators representing different institutional clusters. Feedback from the pilot informed refinement of item wording, scale clarity, and clustering of related variables. Reliability testing of pilot data yielded a Cronbach's alpha coefficient of 0.869. Following full data collection, the instrument demonstrated excellent internal consistency, with an overall Cronbach's alpha of 0.9589, classified as "marvellous" according to Kaiser's criteria [16].

Survey instrument

The final questionnaire comprised four sections and 54 questionnaire items: demographic characteristics of participants; structural inclusion of African Traditional Health Knowledge and Practices (ATHKPs) within undergraduate nursing curricula; ATHKP content taught, including aspects related to traditional health practitioners and complementary and alternative medicine; and teaching and assessment methods used for ATHKPs. The complete questionnaire is available as Supplementary File 1.

Most items were measured using Likert-type scales assessing levels of agreement or disagreement, with selected open-ended questions included to capture elaborative responses. Respondents were not provided with preparatory information prior to completing the questionnaire. Table 1 summarises the internal consistency and sampling adequacy of each instrument section.

Table 1
Internal consistency and sampling adequacy of each instrument section

Items	Description	No of Items	Reliability Coefficient	Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser [16])
	Demographic data	6	0,8138	Meritorious
	Assess the structure of the module/s for teaching ATHKPs	5	0,7082	Middling
	Evaluating content of ATHKPs taught in the module/s	12	0,9207	Marvellous
	Training and regulation of THPs	7	0,8136	Meritorious
	Roles of THPs	10	0,9412	Marvellous
	Categories of THPs and Teaching of CAM	13	0,9179	Marvellous
Overall	All Items		0,9589	Marvellous

Although the questionnaire may not have captured the full breadth of ATHKP curriculum content, the constructs assessed represent key domains central to understanding the teaching of ATHKPs within nursing education.

Data collection procedure

Ethical clearance was obtained from the Faculty of Health Sciences Research Ethics Committee at the University of Pretoria prior to data collection. Heads of departments at eligible NEIs were contacted telephonically and via email, informed of the study, and requested to disseminate recruitment information to nurse educators. Data were collected using both hard-copy and electronic questionnaires. Hard copies were distributed at selected institutions and during onsite or virtual meetings where the study was explained.

The electronic version of the questionnaire was administered using Qualtrics®, with unique links issued to prevent multiple submissions. Completion time was estimated at 30–40 minutes. Participation was voluntary, and reminder communications were sent through departmental channels to encourage response. Data collection took place over four months (April–August 2022). Table 2 below highlights the mode of response and frequency.

Table 2
Mode of response and frequency

Mode of response	Frequency	Percentage (%)
Hard-copy	316	77
Email	24	6
Qualtrics®	68	17
Total	408	100

Data analysis

Quantitative data were coded and analysed using the Statistical Analysis System (SAS). Descriptive statistics, including frequencies, percentages, and graphical representations, were generated to describe respondent demographics and the extent to which ATHKPs were integrated into undergraduate nursing curricula across institutions.

Results

Demographic data

A total of 408 nurse educators from nursing education institutions participated in the study. A total of 408 responses were received, exceeding the minimum required sample size of 337.. Of the 408 responses that were received, 86% (n = 353) were from nursing colleges, while 11% (n = 43) from universities and 3% (n = 12) from universities of technology. In total, 94% (n = 383) respondents identified as female and 6(n = 25) as males. Of all respondents in this study, 42% (n = 170) were teaching general nursing, 23% (n = 96) mental health, 17% (n = 69) community nursing and 15% (n = 61) taught midwifery and the remainder were other disciplines such as pharmacology, anatomy and sociology. Further, the disciplines were regrouped into two, namely, General Nursing versus Others, where some assessment of association in their responses were done. The difference between the two groups was not statistically significant ($p > 0.05$). This therefore implies that the level of study of ATHKPs is effectively non-affected. Table 3 below shows the frequency distribution across demographic data.

Table 3
Frequency distribution across demographic data (n = 408)

Variable	Frequency	Percentage%
Institution type		
Nursing college	353	86
Universities	43	11
Universities of Technology	12	3
Age groups		
25–34	82	20
35–44	118	29
45–54	106	26
> 55	102	25
Gender		
Females	385	94
Males	23	6
Discipline taught		
General nursing	170	42
Mental health	96	23
Community nursing	69	17
Midwifery	61	15
Other	12	3
Total	408	100%

In this study, the Chi square analysis was not performed to determine association between teaching of ATHKPs and demographic variables. The study endeavored to determine the level of agreement among nurse educators with items on content included in their curriculum.

Structure of modules and level of study for teaching ATHKPs

The purpose of this section was to assess the level of study at which ATHKPs is being taught by respondents at the NEIs in the disciplines they teach. About 71% (n = 288) of respondents indicated that the discipline in which they teach does not have a module that covers ATHKPs. Furthermore, 65% (n = 264) confirmed that there are clear objectives on how the module is assessed. This may mean that

teaching of ATHKPs remains unstructured, or nurse educators do not necessarily know what needs to be taught and how it should be taught. Table 4 below highlights the responses on the structure of modules being taught on ATHKPs.

Table 4
Responses on structure of module being taught

The following content is included in the module/s:			
Item	Yes	No	Not Sure
Does the discipline in which you teach have a module that covers ATHKPs?	80(20%)	288 (71)	40 (10)
There are clear objectives outlining how the module is taught	256(63)	49 (12)	103 (25)
There are clear objectives on how the module is assessed	264(65)	49 (12)	95 (23)

Level of teaching for ATHKPs in NEIs

About 57% (n = 231), which is most of the respondents, indicated that ATHKPs is not taught at any level of the nursing programme in their disciplines. However, about 20% (n = 82) indicated that content on ATHKPs is taught at level 3 of their programme, 11% (n = 44) at level 4, 9% (n = 36) at level 1. See Fig. 1 below.

Cumulatively, 43% of respondents indicated that ATHKPs is taught.

Content of African Traditional Health Knowledge and Practices (ATHKPs) Taught

This section examined the extent and nature of ATHKP content included in undergraduate nursing modules, based on themes identified in Phase 1 of the study. Content items were grouped into six domains: overview of ATHKPs; values and beliefs; training and regulation of traditional health practitioners (THPs); roles of THPs; categories of THPs; practical teaching of ATHKPs; and teaching of complementary and alternative medicine (CAM). Respondents indicated whether specific content areas were included in the modules they teach. Overall agreement levels across domains are presented in Table 5.

Table 5
Summary of agreement levels across ATHKP content domains

Content domain	Overall agreement (%)
Overview of ATHKPs	35
Values and beliefs	16.4
Training and regulation of THPs	11.8
Roles of THPs	14.1
Categories of THPs	23
Practical teaching of ATHKPs	3.3
Teaching of CAM	19

Overview of ATHKPs

Overall, respondents indicated limited inclusion of foundational ATHKP content within nursing modules. For all items addressing the general overview of ATHKPs, including origin and history, African philosophies such as Ubuntu, definitions of health from a traditional healing perspective, and approaches to illness, levels of disagreement exceeded 56%. The highest level of agreement related to the evolution of traditional medicine (37.3%, $n = 152$), while agreement was lowest for definitions of health from a traditional healing perspective (16.4%, $n = 67$). Cumulatively, the overall agreement score for this domain was 35%, indicating minimal formal teaching of ATHKPs at a conceptual level .

Values and beliefs underpinning ATHKPs

Responses related to the teaching of values and beliefs associated with ATHKPs reflected very low levels of inclusion. Across all items, disagreement rates ranged from 57.6% to 92.9%. Content related to ancestral calling showed the highest level of disagreement (92.9%, $n = 379$). Levels of uncertainty (“not sure”) were notable for several items, particularly those addressing underlying values and African food practices. The overall agreement score for this domain was 16.4%, suggesting that values and belief systems central to ATHKPs are largely absent from undergraduate nursing teaching.

Training and regulation of traditional health practitioners

Teaching on the training, governance, and legal regulation of THPs was reported to be limited. For most items in this domain, more than 70% of respondents indicated disagreement that such content was included in their modules. Slightly higher agreement was observed for content comparing similarities between ATHKPs and Western health systems (27.0%, $n = 110$). Substantial uncertainty was reported for items relating to laws and policies governing traditional medicine (23.0%, $n = 94$). The overall agreement score for this domain was 11.8%, indicating very limited curricular engagement with regulatory and training aspects of traditional healing.

Roles of traditional health practitioners

Content addressing the clinical and supportive roles of THPs was also reported as largely absent. Most respondents disagreed that topics such as diagnosis, herbal preparation, referral writing, collaboration with nurses, and exorcism were included in nursing modules, with disagreement levels frequently exceeding 80%. The highest agreement was reported for physical assessment (24.3%, $n = 99$) and history-taking (21.6%, $n = 88$). The overall agreement score for this domain was 14.1%, indicating limited exposure to the professional roles of THPs within nursing curricula.

Categories of THPs

Teaching on the different categories of THPs was reported to be minimal. While some respondents indicated inclusion of content relating to sangomas (24.8%, $n = 101$), herbalists (20.8%, $n = 85$), and diviners (20.3%, $n = 83$), agreement levels remained low overall. Content related to traditional surgeons and traditional birth attendants showed particularly low agreement. The cumulative agreement score for this domain was 23%, suggesting uneven and limited coverage of THP categories.

Practical teaching of ATHKPs

Respondents overwhelmingly reported that practical teaching methods related to ATHKPs are largely absent. The majority disagreed that students engage in visits to THPs or traditional healing sites, or that THPs are invited to institutions for teaching. Agreement levels did not exceed 5.4% for any item. Although some uncertainty was expressed regarding teaching ethics related to collaboration with THPs (15.7%, $n = 64$), the overall agreement score for practical instruction was 3.3%, indicating a near-total absence of experiential learning approaches.

Teaching of complementary and alternative medicine (CAM)

Responses regarding CAM content indicated moderate levels of uncertainty but continued low formal inclusion. While disagreement exceeded 58% for all CAM items, agreement was relatively higher for herbal medicine and natural products (32.8%, $n = 134$). Elevated “not sure” responses across several CAM items suggest possible informal or inconsistent exposure rather than structured teaching. The overall agreement score for CAM content was 19%, reflecting limited integration within nursing curricula.

Overall assessment of content of African Traditional Health Knowledge and Practices (ATHKPs) taught

Across all content domains, agreement scores ranged from 3.3% to 35%, indicating that ATHKP content is minimally integrated, inconsistently taught, and largely absent from formal undergraduate nursing modules. Figure 2 summarises average agreement levels across items on content of ATHKPs taught, illustrating the formative nature of ATHKP curriculum inclusion.

Methods of Teaching and Assessment of ATHKPs

This section presents findings on the methods used to teach and assess ATHKPs within undergraduate nursing modules. Specifically, it examines the instructional approaches employed by nurse educators, the extent to which practical teaching is incorporated, and the assessment strategies used to evaluate student learning related to ATHKPs. In addition, this section reports nurse educators’ perceptions of the importance of teaching ATHKPs and their suggestions for curriculum content and module development. These findings provide insight into how ATHKPs are operationalised within nursing education and the extent to which teaching and assessment practices align with reported curriculum inclusion.

Course content descriptions

More than half of respondents (54.2%, $n = 221$) did not provide a description of ATHKP content taught, while an additional 23.3% ($n = 95$) indicated that no ATHKP content was taught. Among respondents who provided descriptions, the most reported topics were beliefs about ATHKPs (5.0%, $n = 19$) and use of herbal medicine (3.7%, $n = 15$). All other topics were reported by fewer than 3% of respondents, indicating limited scope and depth of content inclusion.

Teaching approaches for ATHKPs

Nurse educators reported **very limited use of structured teaching approaches** for ATHKPs. Teaching was predominantly theoretical, with 17.6% ($n = 72$) indicating that ATHKPs were taught through lectures only and 7.4% ($n = 30$) reporting the use of projects. Practical teaching approaches were almost entirely absent, with 99.8% ($n = 400$) indicating that ATHKPs were not taught through practical or experiential methods. These findings indicate that where ATHKPs are included, teaching is largely classroom-based and lacks applied learning components (Table 6).

Table 6
Approaches to teaching ATHKPs

Which of the following best describes the approach to teaching ATHKPs in your discipline?			
Item	Yes n (%)	No n (%)	Non-Response n (%)
Theory only	72(17.64)	335(82.10)	1(0.24)
Practical only	1(0.24)	407(99.75)	0(0.0)
Problem based learning	4(0.98)	404(99.01)	0(0.0)
Projects	30(7.35)	378(92.64)	0(0.0)
Others	8(1.96)	400(98.03)	0(0.0)

Examples of teaching approaches

Consistent with previous findings, a high proportion of respondents either provided no examples (44.4%, $n = 181$) or reported that no teaching occurs (34.3%, $n = 140$). Among the few examples reported, lectures (8.0%, $n = 32$) and projects (5.3%, $n = 24$) were most common. Visits to THPs or CAM settings were rarely reported.

Assessment practices for ATHKPs

Formal assessment of ATHKPs was reported to be minimal. Only 16.7% ($n = 68$) of respondents indicated that assessment tasks related to ATHKPs were used within their modules. Among those who reported assessment practices, tests and examinations were the most commonly used methods (11.7%, $n = 47$), while alternative or formative assessment approaches were rarely reported. Nearly half of respondents (46.8%, $n = 191$) indicated that no assessment tasks were used for ATHKPs, suggesting limited alignment between teaching activities and assessment strategies (Table 7).

Table 7
Assessment tasks used for ATHKPs

Examples of assessment tasks	Frequency	Percent
Assignment portfolios	14	3.43
Test and examinations	47	11.74
Research Projects	10	2.45
None	191	46.81
No response	146	35.76

Perceived importance of ATHKPs and curriculum development needs

Despite limited teaching and assessment practices, most nurse educators (61.0%, $n = 249$) indicated that it is important to teach ATHKPs within undergraduate nursing programmes. A further 30.6% ($n = 125$) were uncertain, while only a small proportion indicated that such teaching was not important. Respondents who provided suggestions for curriculum development highlighted priorities related to training of nurse educators and THPs, clarification of regulatory and scope-of-practice issues, collaboration strategies, and the development of guidelines and resources to support teaching. These responses underscore both educator support for ATHKP inclusion and the need for structural and pedagogical enablement (Table 8).

Table 8
Perceived importance of teaching nursing students about ATHKPs

Importance of teaching nursing students about ATHKPs	Frequency	Percent
Not important	35	8.53
Not sure	125	30.64
Important	249	61.03
	408	100

Suggestions for curriculum content and development

Responses to open-ended questions showed low completion rates but highlighted priority areas for curriculum development. The most suggested content areas included approaches to disease management within ATHKPs (9.6%, $n = 39$) and regulation and training of THPs (8.6%, $n = 36$). Suggested strategies to support curriculum development included training of nurse educators and THPs (13.3%, $n = 53$), clearer regulation and scope of practice (6.1%, $n = 25$), and stakeholder support.

Summary of Results

Overall, the results demonstrate that while nurse educators recognise the importance of African traditional health knowledge and practices in nursing education, the formal inclusion, pedagogical delivery, and assessment of ATHKPs remain limited and inconsistent across public nursing education institutions. Teaching is predominantly theoretical, practical exposure is largely absent, and assessment practices are minimal, indicating a significant gap between educator support for ATHKPs and their meaningful integration into undergraduate nursing curricula.

Discussion

This study examined the extent to which African traditional health knowledge and practices (ATHKPs) are incorporated into undergraduate nursing education in South Africa, with specific attention to curriculum content, teaching approaches, and assessment practices. The findings provide novel national-level quantitative evidence demonstrating a persistent gap between nurse educators' expressed support for ATHKP teaching and its formal integration into nursing curricula, highlighting structural and pedagogical barriers within nursing education systems.

ATHKPs as marginal rather than foundational nursing knowledge

The findings indicate that ATHKPs are largely positioned at the margins of undergraduate nursing curricula, with limited inclusion across programme levels and disciplines. This pattern aligns with

broader scholarship suggesting that nursing education globally continues to prioritise biomedical paradigms over pluralistic models of care, even in culturally diverse settings [17, 14]. When Indigenous or complementary health knowledge is included, it is frequently treated as supplementary rather than essential, reinforcing its peripheral status in professional training.

From a curriculum design perspective, core nursing competencies are shaped by what is formally assessed, structured, and sequenced across programmes [18]. The limited and inconsistent inclusion of ATHKPs identified in this study suggests that such knowledge is not recognised as foundational to nursing competence, despite its relevance to everyday clinical encounters. This disconnect may contribute to graduates' lack of confidence when engaging with patients who integrate traditional and biomedical health practices.

Conceptual exclusion and the erosion of cultural competence

ATHKP domains relating to values, belief systems, and epistemological foundations showed particularly low levels of inclusion. Nursing education research has consistently demonstrated that cultural competence cannot be achieved through technical knowledge alone, but requires engagement with patients' worldviews, explanatory models of illness, and sociocultural meanings of health [19]. Excluding these dimensions limits nurses' ability to provide relationally sensitive and ethically grounded care.

The absence of conceptual grounding in ATHKPs reflects what curriculum scholars describe as the "silent curriculum", where certain forms of knowledge are systematically omitted, thereby shaping professional identities and practice norms [20]. Within nursing, such omissions risk reinforcing culturally narrow models of care that are misaligned with patients' lived realities, particularly in African contexts where traditional health systems remain influential.

Limited treatment of regulation and professional boundaries

This study also found minimal inclusion of content addressing the regulation, governance, and professional roles of traditional health practitioners. Similar findings have been reported in nursing regulation and workforce studies, which highlight uncertainty among nurses regarding scope of practice, accountability, and referral when traditional medicine is involved [21]. Without formal education on legal and ethical frameworks, nurses may adopt avoidance strategies rather than engage safely and constructively with traditional health practices.

From an educational standpoint, this represents a missed opportunity to develop nurses' regulatory literacy and interprofessional competence. Professional education literature emphasises that understanding parallel and complementary health systems is essential for ethical practice and patient advocacy, particularly where national policies recognise multiple forms of health care [22]. Embedding such content within undergraduate curricula could support safer patient navigation across health systems.

Pedagogical and assessment gaps as indicators of curriculum value

The dominance of theory-only approaches and the near absence of experiential learning reflect broader trends in CAM and global health education, where practical engagement is often constrained by institutional uncertainty and limited faculty training [23, 24]. Educational research consistently shows that experiential and reflective pedagogies enhance students' ability to integrate culturally situated knowledge into clinical reasoning [25].

Assessment practices observed in this study further reinforce ATHKPs' marginal status. In nursing education, assessment functions as a key signal of curricular value; content that is rarely assessed is often perceived by students as optional or non-essential [26]. The limited use of ATHKP-related assessment tasks identified here suggests misalignment between nurse educators' stated support for ATHKP teaching and institutional mechanisms that sustain learning and accountability.

Educator support and the need for structural enablement

Despite limited curriculum integration, most nurse educators viewed ATHKP teaching as important, echoing findings from studies in other low- and middle-income countries where educators express readiness for culturally responsive curricula but lack institutional frameworks to support implementation [27]. This misalignment underscores the importance of system-level interventions, including faculty development, curriculum guidelines, and regulatory clarity.

Educational change literature cautions against attributing curriculum gaps solely to educator attitudes or motivation [28]. Instead, sustainable curriculum reform requires institutional commitment, shared pedagogical resources, and alignment between education policy and practice environments. The suggestions offered by educators in this study, such as training, collaboration, and guideline development, reflect an awareness of these broader enablers.

Implications for nursing education

The findings suggest that ATHKPs remain at a formative and fragmented stage within undergraduate nursing education in South Africa. Addressing this gap requires moving beyond symbolic inclusion toward structured, assessed, and pedagogically coherent curriculum integration. Nursing education scholarship increasingly emphasises culturally responsive education as a workforce preparation strategy rather than a cultural add-on [17, 19]. The evidence generated by this study provides a foundation for evidence-based curriculum review and reform within nursing education institutions and regulatory bodies.

Conclusion

This study provides the first national quantitative evidence on how African traditional health knowledge and practices are positioned within undergraduate nursing education in South Africa from the

perspective of nurse educators. The findings indicate that, despite strong educator support for the inclusion of ATHKPs, formal curriculum integration remains limited, fragmented, and largely theoretical, with minimal assessment and practical engagement. Core dimensions of ATHKPs, including epistemological foundations, regulatory frameworks, and the professional roles of traditional health practitioners, are insufficiently addressed in current curricula.

These gaps suggest a misalignment between the realities of nursing practice in culturally pluralistic health systems and the preparation of nurses through undergraduate education. Addressing this misalignment requires moving beyond symbolic inclusion toward structured, competency-based curriculum reform supported by educator development, regulatory guidance, and institutional commitment. Strengthening the teaching and assessment of ATHKPs within nursing education has the potential to enhance culturally responsive care, patient safety, and professional accountability, thereby better preparing nurses to meet the health needs of diverse communities in South Africa.

Strengths and limitations

Strengths

This study has several strengths. First, it provides national-level quantitative evidence on the teaching of African traditional health knowledge and practices within undergraduate nursing education in South Africa, addressing a notable gap in the nursing education literature. The inclusion of nurse educators from all categories of public nursing education institutions, universities, universities of technology, and nursing colleges, enhances the breadth and relevance of the findings across diverse educational contexts.

Second, the study employed a rigorously developed and validated survey instrument, informed by an exploratory qualitative phase and reviewed by experts in nursing education and Indigenous knowledge systems. The high internal consistency of the questionnaire supports the credibility and reliability of the findings. Third, the focus on educators' perspectives is a key strength, as nurse educators play a central role in curriculum design, implementation, and assessment, yet their voices are often underrepresented in studies on curriculum reform and cultural competence.

Collectively, these strengths position the study as a meaningful contribution to debates on culturally responsive, contextually relevant nursing education in pluralistic health systems.

Limitations

Several limitations should be considered when interpreting the findings. Although the study achieved a large sample size, participation was limited to public nursing education institutions, and the findings may not fully reflect teaching practices within private institutions. In addition, the use of a cross-sectional survey design captures educators' reports at a single point in time and does not allow for assessment of changes in curriculum practices over time.

The study relied on self-reported data, which may be subject to recall bias or variation in educators' awareness of curriculum content beyond the modules they directly teach. Furthermore, while selected open-ended items were included, the study was not designed to explore in depth the contextual or institutional reasons underlying reported curriculum gaps. Finally, the study did not include the perspectives of nursing students or curriculum regulators, which may have provided additional insights into curricular alignment and implementation.

Despite these limitations, the study offers robust, practice-relevant evidence that can inform curriculum review, educator development, and future multi-stakeholder research.

Abbreviations

ATHKPs

African Traditional Health Knowledge and Practices

CAM

Complementary and Alternative Medicine

KMO

Kaiser–Meyer–Olkin

NEIs

Nursing Education Institutions

SANC

South African Nursing Council

THP

Traditional Health Practitioner

WHO

World Health Organization

Declarations

Ethics approval and consent to participate

Ethical approval for this study was obtained from the Faculty of Health Sciences Research Ethics Committee at the University of Pretoria (Reference ID: 812/2019). All procedures involving human participants were performed in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Participation in the study was voluntary, and informed consent was obtained from all respondents prior to data collection. For the online survey, consent was indicated by selecting the option labelled “Agree” before proceeding with the questionnaire.

Consent for publication

Not applicable. No identifying personal data are reported in this study.

Availability of data and materials

The datasets generated and analysed during the current study are not publicly available due to ethical restrictions but are available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

Moeta ME and Mulaudzi FM contributed equally to the conception and design of the study, data collection, data analysis and interpretation, and drafting and critical revision of the manuscript. Both authors read and approved the final manuscript.

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Figures

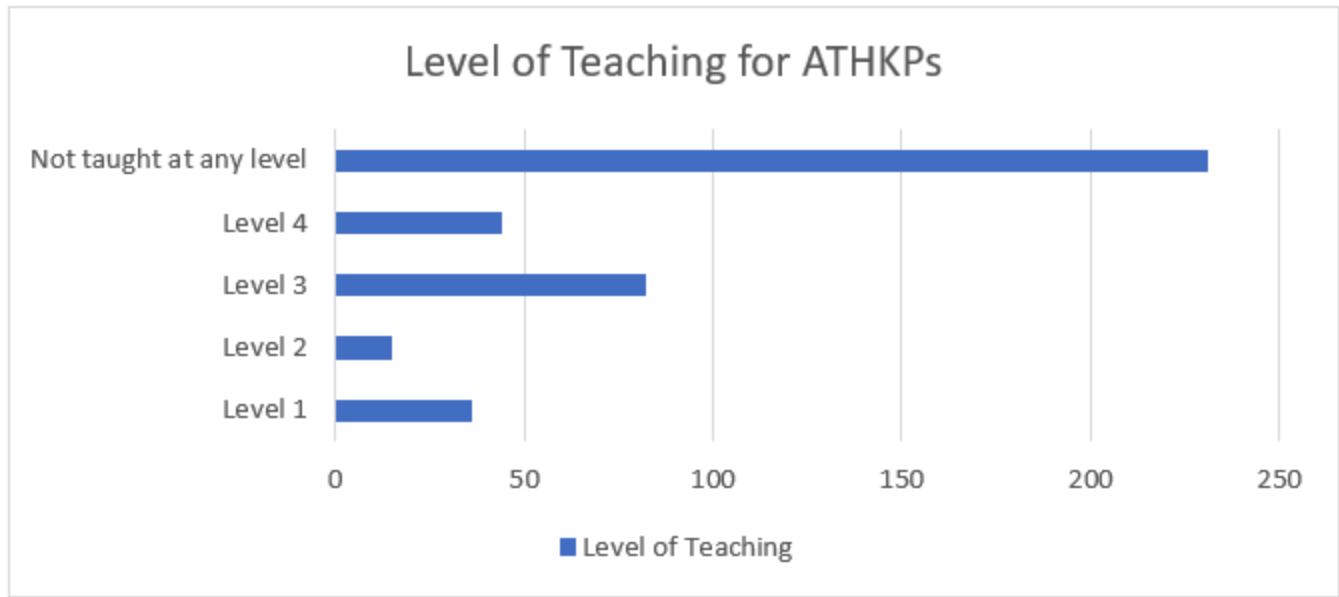


Figure 1

Level of teaching for ATHKPs

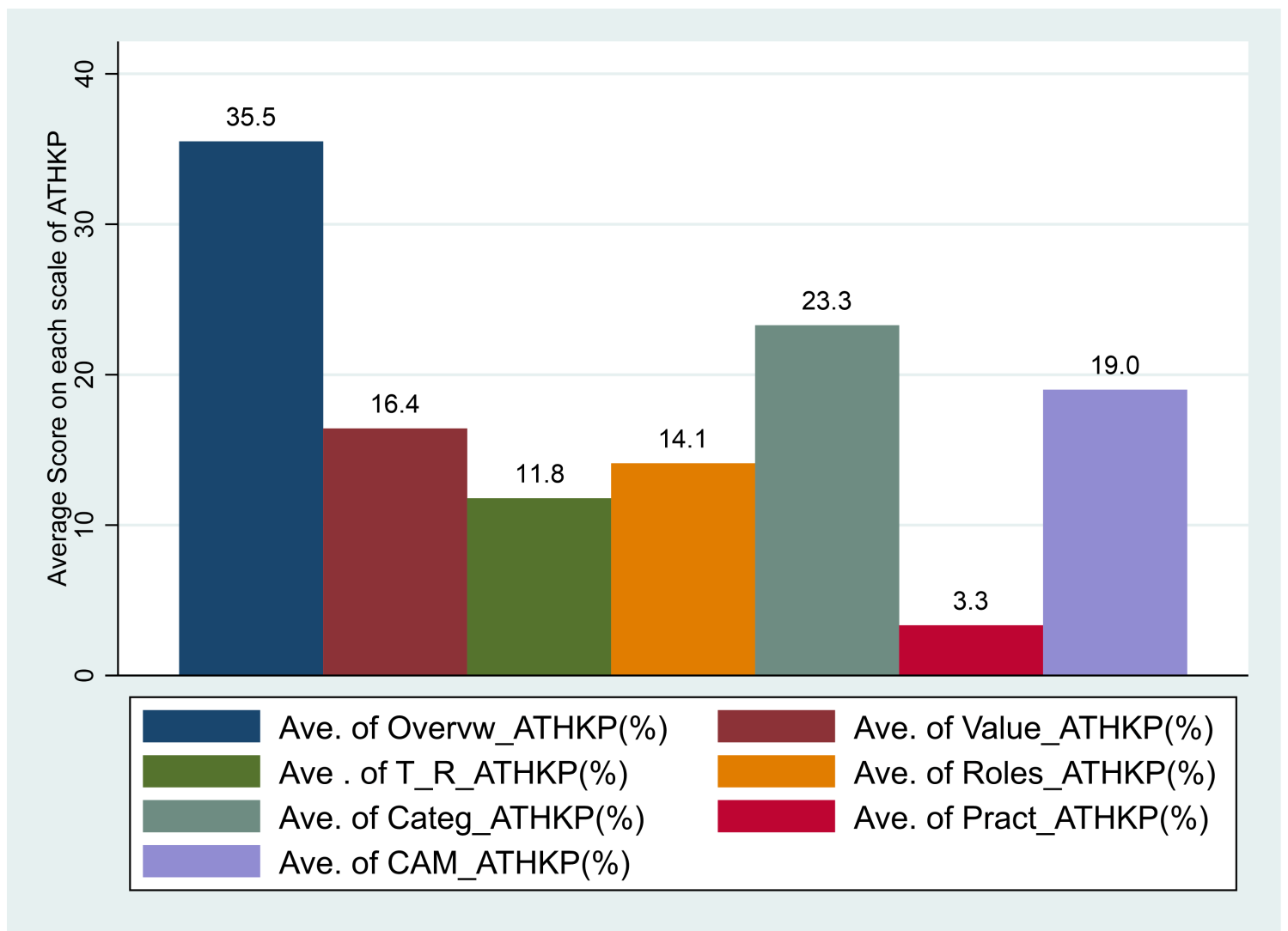


Figure 2

Average agreement levels across items

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