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Implications of health professionals' awareness and involvement in oropharyngeal dysphagia management on inpatient outcomes in a National Hospital in Kenya: a case study

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ABSTRACT

Introduction The complex, multifaceted nature of oropharyngeal dysphagia calls for all health professionals to be aware and involved in its management. Drawing on the WHO's Interprofessional Collaboration model, this study assessed the implications of health professionals' awareness and involvement in the management of oropharyngeal dysphagia among inpatients in the acute care facility of a national (level-six) hospital in Kenya. The research questions were (1) what roles do health professionals play in the management of oropharyngeal dysphagia among adult inpatients in the acute care facility of a Kenyan national hospital? (2) what implications do health professionals' awareness and involvement in oropharyngeal dysphagia management have on the outcomes of inpatients in the acute care facility of a Kenyan national hospital diagnosed with this condition?

Methods This study adopted a cross-sectional, descriptive design. Data collection involved semistructured interviews with 15 health professionals handling dysphagia inpatients in the facility. The resulting data were transcribed verbatim, analysed thematically and presented through narrations.

Results The analysis revealed that health professionals perform several oropharyngeal dysphagia management roles that fall into two broad complementary categories: those contributing directly to oropharyngeal dysphagia management and those supporting patients with the condition. However, some participants were uncertain of their roles in dysphagia management. The analysis also identified several potential implications of health professionals' awareness/non-awareness and involvement/non-involvement in oropharyngeal dysphagia management. The implications were grouped into three themes: patient outcomes, professionalism and the healthcare system.

Conclusions Increased involvement of all health professionals in the facility in oropharyngeal dysphagia management may result in improved patient outcomes and professionalism. As a recommendation, the hospital's management should implement programmes emphasising holistic collaboration among health professionals working in its acute care facility to facilitate oropharyngeal dysphagia management and enhance patient outcomes.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Interprofessional education and collaborative practice among healthcare professionals (HPs) may result in improved clinical outcomes for patients diagnosed with oropharyngeal dysphagia (OPD). Such collaboration, in turn, requires all HPs in a healthcare facility have adequate OPD awareness and high involvement in its management. This study was motivated by the high presence of OPD diagnoses in the acute-care facility (ACF) of a level-six hospital in Kenya. Yet, no study on HPs' awareness and involvement in OPD management had been conducted in the ACF.

WHAT THIS STUDY ADDS

⇒ Health professionals' perspectives of their role and involvement in OPD management among adult inpatients in the hospital.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ The findings will establish needed resources, training and practice frameworks in OPD management to ease the weight on affected patients. It will also solidify Inter-Professional Collaboration as a core among HPs for better healthcare.

INTRODUCTION

Oropharyngeal dysphagia (OPD), characterised by difficulties moving boluses in the upper gastrointestinal tract, is a prevalent condition, especially in senior adults.[1 2] It is approximated that over 40% of the world's population has OPD, with Africa accounting for the largest share of reported cases globally.[1] OPD can have grave physical, psychosocial and mental impacts on patients, their families and social circles.[3 4] The disorder also increases patients' financial burden and dependence on caretakers through extended hospital stays, readmission rates

and institutionalisation.[5 6] Hence, there is an ongoing need for reliable strategies to combat OPD and its associated complications. There is no consolidated data on the occurrence of OPD in Kenya, where the present study was based. Nevertheless, many persons in Kenya are diagnosed with swallowing difficulties and associated complications, a situation that highlights the importance of effective OPD management strategies in the country.[7]

Disease management is a multifacilitated term encompassing multiple dimensions, and several definitions exist in the literature.[8] Schrijvers[9] proposed a broad definition that integrates the various dimensions emphasised by various authors. According to Schrijvers,[9] disease management comprises a set of coherent interventions to prevent and manage at least one chronic condition through a multidisciplinary approach, with the goal of maximising clinical outcomes efficiently and effectively. This definition is applied in this study. Hence, OPD management entails a set of interventions and strategies designed to maximise clinical outcomes with respect to this condition. The dimensions include, but not limited to, risk identification and intervention matching, prevention and treatment, outcome measurement and evaluation, tracking and monitoring and promoting patient self-management.[9]

The Inter-Professional Collaboration (IPC) framework, recommended by the WHO, offers a plausible model for effective OPD management. The IPC is a team-led process that advocates for interprofessional learning and collaboration to ensure the delivery of effective and comprehensive care to patients and communities. Its core tenets are interprofessional education and collaborative practice. Interprofessional education occurs when at least two students, trainees or professionals from different professions learn with, from and about each other.[10] This form of learning is foundational to collaborative practice, which entails healthcare professionals (HPs) from different professions working together with patients, their families and communities to ensure the highest quality of care possible.[10] The emphasis is on analysing, synthesising and harmonising links between different professions into a coherent and coordinated whole. Combining interprofessional education and collaborative practice allows HPs to optimise each other's competence, share case management and actively engage any professional whose skills can help enhance patient outcomes.[10 11] The IPC model may, thus, be a valuable tool for delivering high-quality care, especially when dealing complex health issues, such as OPD.

Both interprofessional education and collaborative practice, as defined by the IPC framework, are relevant to OPD management. With respect to the latter, IPC implies that HPs from different professions work together with patients diagnosed with OPD, their families and communities to optimise care outcomes. Dysphagia management is a complex process, given that the condition is associated with several risk factors and comorbid conditions that cut across multiple healthcare professions, including speech-language therapy (SLT), nursing, radiology, gastroenterology, pulmonology, nutrition and others.[5 6] Consequently, there have been increasing calls for HPs from these fields to work closely together to help enrich the experiences of individuals with this condition.[12] Empirical studies linking inter-professional collaboration to improved patient outcomes further stress the relevance of the IPC model in OPD management.[12 13] By promoting coordinated, interprofessional team efforts among HPs, the framework could facilitate effective OPD management and, ultimately, improve patient outcomes. Effective collaborative practice towards OPD management is, in turn, contingent on interprofessional education. By creating a platform in which HPs learn with, from and about each other, interprofessional education could promote a shared understanding of OPD, which is critical for interprofessional collaborative care of patients with this disorder.[14]

For successful implementation of the IPC framework with respect OPD, all HPs in a healthcare facility should be aware of their roles in managing the condition. Bharadwaj *et al*[15] point out that a holistic approach to management, which accounts for a person's physical, psychological, social and spiritual needs, is essential for a comprehensive care of patients with dysphagia. Such care, in turn, requires inputs from practitioners from multiple professions. In general, OPD assessment and management is primarily the responsibility of speech-language therapists. However, given the diverse nature of risk factors and associated complications, comprehensive care of patients with OPD requires inputs from a range of other professionals. Thus, in addition to speech-language therapists, an OPD management team may, for instance, include physiotherapists (to assess and advise on physical positioning and impairments), occupational therapists (to evaluate and advise on physical and cognitive functioning), nutritionists (to assess a patient's nutritional status and support the provision of thickeners and modified diets), medical staff (to make recommendations on needed medication) and nurses (for day-to-day assessment and care of patients). Others, such as dentists, social workers, psychologists, may be involved, depending on emerging complications and risk factors. Each of these HPs need to understand their roles in OPD management to allow them work together in a coherent and coordinated manner.

To understand and fulfil their roles coherently and efficiently, all HPs working with persons diagnosed with OPD should have adequate awareness levels of the disorder. Indeed, various empirical studies have demonstrated that HPs' awareness and training on OPD are vital predictors of their capacity to handle patients with this condition.[16 17] Nielsen *et al*,[18] for example, found that interprofessional collaboration for dysphagia management is highly dependent on HPs' practical skills and knowledge. Yet, there are concerns that in many places globally, many HPs have low or only moderate OPD awareness levels.[19–21] In Spain, for instance, Sanchez *et al*[22] found that only 62.3% of HPs

understood dysphagia as a swallowing disorder, while up to almost half did not know about dysphagia screenings, vital assessments and diagnoses.

Comparable findings are reported in other places.[17 23] Lima *et al*,[24] who explored the perspectives of physicians and speech-language therapists on the management of dysphagia in hospitalised patients in America, found that while physicians recognised the importance of dysphagia management, they often lacked the knowledge and training to manage it effectively. Low OPD awareness levels may compromise HP's ability to provide optimal care to patients with this condition. In South Africa, Knight *et al*[25] reported that nurses had, on average, only moderate awareness stroke-related OPD signs/symptoms and management strategies, and low awareness of OPD-associated complications.

The present study assessed HPs' awareness of OPD and involvement in its management in Kenya. Kenya is a middle-income country in East Africa. The country is averagely industrialised and has an emerging market, with an annual gross domestic product growth of about 5.6%, as of March 2024.[26] With a population of over 50 million, it is the most populated country in East Africa.[26] Health services in Kenya are provided by a network of public and private facilities countrywide, at the apex of which are level-six hospitals. According to the Kenya Essential Package for Health classification, a level-six hospital is a national or tertiary (public or private) referral hospital.[27] They are equipped with resources and staff to offer specialised care to patients, including sophisticated diagnostic, rehabilitative and therapeutic services.

There have been unprecedented achievements in healthcare delivery in Kenya over the last two decades. Still, morbidity and mortality rates remain high, while chronic diseases are a fast-growing problem in the country.[28–30] Among several other challenges, such as inadequate financing, availability of skilled HPs constitutes a major bottleneck to improving healthcare quality in Kenya. In addition to their low number, relative to the demand, HPs' knowledge and abilities to deliver quality services and specialised care remain low.[29] The low knowledge and skills among HPs in Kenya brings to question the extent to which they are prepared to deliver quality services to patients. Presently, there is limited research on HPs' awareness and involvement in OPD management in the country and the implications that their awareness and involvement have on patient outcomes. Addressing this knowledge gap is critical to providing evidence-based care to patients diagnosed with swallowing problems in the country.

In attempt to narrow this gap, the present study investigated the implications of HPs' OPD awareness (or unawareness) and involvement (or non-involvement) in OPD management in the ACF of a level-six hospital in Kenya. The hospital in question is among the leading facilities offering specialised care for patients with swallowing disorders in the country. A previous survey conducted in the hospital revealed a high number of adult inpatients seeking SLT services in the ACF. Among the initial SLT consultations reviewed, 62.1% had OPD diagnoses, with 88.9% of those with OPD having at least one comorbid condition.[7] The high presence of OPD among patients in the facility emphasises the importance of high awareness levels, while the high comorbidity calls for high-level collaboration among HPs from different professions working in the facility.

Statement of the problem

OPD has a high presence among adult populations in different settings. Individuals with OPD experience multiple problems that expose them to several health conditions and compromise their well-being. Given its complex, multifaceted nature, there are increasing calls for high-level collaboration between HPs from different professions to guarantee optimal care for patients diagnosed with OPD. Such a collaboration, in turn, requires all HPs to be aware and involved in OPD management. However, there are concerns that HPs in many places have only low or moderate OPD awareness levels. This low awareness makes it problematic for them to be actively involved in OPD management. Low awareness and involvement may have severe implications for the treatment and care of individuals diagnosed with OPD. Yet, there is limited research on HPs' awareness and involvement in OPD management in Kenya as well as the link between awareness/involvement and patient outcomes. Therefore, the present study investigated the implications of HPs' awareness and involvement in OPD management among inpatients at the ACF of a Kenyan level-six national hospital. No similar research had been conducted in the facility previously.

Research questions

The study aimed to assess the implications of HP's awareness and involvement in OPD management on the outcomes of patients diagnosed with this condition. The following research questions were addressed:

1. What roles do health professionals (medical officers and specialists, nurses, nutritionists, physiotherapists and speech-language therapists) play in the management of OPD among adult inpatients in the acute care facility of a Kenyan national hospital?
2. What implications do health professionals' awareness and involvement in OPD management have on the outcomes of inpatients in the acute care facility of a Kenyan national hospital diagnosed with this condition?

METHODOLOGY

This case study followed a descriptive, cross-sectional design using qualitative methods. The location was the ACF of a level-six teaching, referral and research hospital in Nairobi City County, Kenya. The hospital is equipped to provide various acute care services, including specialised rehabilitation medicine, oncology, trauma, orthopaedics, renal, accident and emergency services. A previous

survey conducted in the facility showed several inpatients seeking SLT services in the ACF.[7] The high number of inpatients seeking SLT services in the facility motivated the interest in this study and the choice of the hospital as the study location. All the authors had training and experience in SLT. At the time of the study, the first author was in a clinical training in dysphagia management in an ACF as part of a Masters in Speech-Language Pathology (M.SLP) programme, while the other two authors were lecturers and clinical supervisors of research projects in M.SLP programme in a Kenyan university.

The study targeted HPs attending to inpatients at the hospital's medical and or surgical wards (ACF). They were contacted following a face-to-face meeting with them at the ACF. The HPs involved in dysphagia management in government ACFs are from three specific professional groups: medical (medical officers, including specialists like in oncology, radiology, gastroenterology and neurology), allied health professionals (speech therapists, physiotherapists and nutritionists) and nursing.[23] The facility had 61 HPs in these professions at the time of the study. According to Mugenda and Mugenda,[31] for small populations (less than 10 000 subjects), 10–30% of the population size is an adequate sample. Therefore, for this study, 30% of the 61 HPs was drawn from the population, making up a sample of 19 individuals

The 19 HPs were selected purposively to include only those who attended to OPD inpatients in the facility, while also representing all the HP categories present (table 1). Prior to the study, no relationship had been established between the researchers and participants and no participant had personal information about the researchers. The sample distribution across the categories was proportionate based on the number of professionals in a category relative to the total population size.

Data collection involved semistructured interviews with the HPs by the first author. An interview schedule with two main questions adapted from Rhoda and Pickel-Voight[23] was used. A pilot study was conducted in a referral hospital in Kenya to assess the validity and credibility of the interview schedule. Additionally, two experts in research methods were constantly consulted to evaluate the schedule's relevance, clarity and adequacy. The original schedule had five items. However, during piloting, some participants complained that the questions were many, leading to lengthy interviews. Following consultations between the researchers, with respondents in the pilot, and with other experts, the questions were reduced to two to minimise the schedule's length while also ensuring that the research questions were covered adequately. The two questions were stated as follows:

1. What is/are your role(s) as a health professional in impaired swallowing management among adult inpatients in the acute care facility?
2. How do you think HPs' knowledge and involvement in caring for swallowing disorders among adult inpatients in acute care facility affect patient outcomes?

The interviews were conducted virtually through the Google Meet platform, with no one present other than the interviewees. All the respondents were at their workplaces during the interviews. The first question was used to generate data on the various roles involved in OPD management from the perspectives of HP in the facility. The responses to the second question helped explore the implications of their awareness and involvement in OPD management on client outcomes. While the two general items guided the interview, additional probing questions were asked to explore the respondents' views and generate rich data about the research topic. The study also obtained data on selected demographic and general characteristics that may be relevant to HPs' awareness and involvement in OPD management. Each interview lasted 15–20 min and all the interviews were completed in 10 days. The interviews were recorded word-for-word in a notebook and transferred to an MS Word document for later analyses. Respondents verified whether whatever they said was captured accurately in the notes.

Data from the interviews were analysed manually and thematically. They were first transcribed verbatim, coded inductively by the first author and then key themes allowed to emerge from the codes. After reading the raw data multiple times, initial codes were generated by systematically breaking down the data into meaningful elements. The codes were then collated and grouped into major themes. The codes, resulting themes and their interpretation were subjected to further scrutiny by the second and third authors. The results were presented through tables and narrations. The study adhered to the ethical regulations and standards stipulated by the Ethics Review Board of Kenyatta University, Kenya.

Table 1 Initial sample distribution across health professional categories

Category	Population size (N)	Sample size (n)
Medical officers and specialists	12	4
Nurses	18	6
Nutritionists	4	1
Physiotherapists	25	7
Speech–language therapists	2	1
Total	**61**	**19**

RESULTS

Participant characteristics

The study initially sampled 19 HPs working at the hospital's ACF and involved in the treatment and management of OPD. However, only 15 were available for the interviews due to conflicting time schedules during the data collection period. They included speech-language therapists, medical officers and specialists, nurses, physiotherapists and nutritionists. Thus, although the sample size reduced slightly, the five categories in table 1 were

Table 2 Participant demographic and general characteristics

Characteristic	Category	n
	Male	7
Gender	Female	8
Age group	25–30 years	6
	31–35 years	4
	36–40 years	5
Educational attainment	Diploma	4
	Bachelor	7
	Master's	3
	Other	1
	4–6 years	5
	7–9 years	4
Experience	>9 years	6
	Neurologist	1
	Oncologist	1
	Nurse	5
	Physiotherapist	6
	Nutritionist	1
	Speech therapist	1
Specialisation	Yes	15
	No	1
Pathologist present	Yes	14
	No	9
Swallowing disorder training	Yes	6
	No	1
Want training	Yes	14
	No	11
Satisfied with training	Yes	5

all represented. The interviews were conducted within 11 days. No unique difficulty was encountered during the data collection exercise. In addition to the two questions addressing the research questions, participants' demographic data were also collected, including gender, age, education attainment, work experience and area of specialisation (work units). Participants were also asked to indicate whether they had ever observed or had to use another a language other than Kiswahili or English with an inpatient to facilitate service delivery. Their responses are presented in table 2.

The sample had a near-equal number of male and female participants. Their ages ranged between 25 and 40 years and were almost equally distributed across three age groups: 25–30, 31–35 and 36–40 years. Half had a bachelor's degree, a quarter had at least a master's degree and the remaining quarter had a diploma certificate. All had been practising as HPs for at least 4 years, with 6 having been a practitioner for over a decade. Approximately three-quarters were physiotherapists and nurses, while the rest were a neurologist, oncologist, nutritionist and speech therapist. All but one indicated that they were aware of the presence of a speech-language pathologist or therapist within the ACF. The analysis also revealed inadequate OPD training opportunities for HPs at the Kenyan National Hospital attending to patients in the medical or surgical wards. As shown in table 1, only a slight majority had attended a training course, workshop or any education on swallowing disorders since joining the hospital. Less than a third, however, were satisfied with the received training.

Health professionals' roles in OPD management

The first research question sought to identify HP's perspectives of their roles in OPD management in the hospital's ACF. Interviewees were asked about their roles in impaired swallowing management. The rationale for this question was that understanding HPs' roles in OPD management would help appreciate the need for their awareness and involvement. Thematic analysis isolated several codes that were grouped into three broad themes: disorder management, patient support and role uncertainty (online supplemental appendix).

The theme 'disorder management' encompassed roles that contribute directly to OPD treatment. They included referrals, assessment, diagnosis, and identification, disorder treatment as well as post-treatment complication management. Most participants were involved in at least one of these roles, as shown in online supplemental appendix. The second theme comprised roles that support patients and ensure quality care. They include risk assessment, nutrition, assistive feeding, guidance and counselling, safety and comfort. Several participants were involved in these roles (online supplemental appendix). In highlighting the importance of these roles, one interviewee said,

> I help in decision-making about the best for my patients, counselling them and encouraging them on their disease process (Interviewee G).

The third theme was about role uncertainty. When asked about their roles in OPD management, one participant responded, 'I really do not understand my role in the management of impaired swallowing' (Interviewee A). This interviewee could represent some HPs in the ACF who may not be aware of their role or potential contribution to OPD management.

Implications of health professionals' awareness and involvement on patient outcomes

The study also assessed the implications that HP's awareness and involvement would have in the management of OPD. Interviewees were asked to explain how HPs knowledge and involvement in caring for adult swallowing disorder inpatients in an ACF could affect patient outcomes. Participants approached this question from two contrasting perspectives. While some discussed the potential positive influence of HPs' awareness or

involvement, others focused on the negative implications of non-awareness and non-involvement. Thematic analysis of the responses generated several codes that could be discussed around three themes: patient outcomes, professionalism and healthcare system. The first theme was about direct implications of HPs' awareness and involvement on patient outcomes. Interviewees identified several areas, the most being risk of complication, identification/detection, referrals and mortality/morbidity. Many felt that increased/reduced awareness and involvement would improve/compromise patient outcomes in these areas. One interviewee also highlighted the effects of HPs' awareness and involvement on prognosis. The following responses capture this theme:

> With proper knowledge, chances of complications brought by the disorder are minimized, hence, reduced rate of mortality among adult patients in acute care (Interviewee A).

> With education we can identify [risks of complications] early and refer on time (Interviewee D).

> [Non-awareness] may lead to lack of proper recognition which may hinder needed considerations on time for the clinician to perform effectively (Interviewee K).

The theme 'professionalism' included the professional implications of HPs' involvement on their ability to handle patients with OPD and improve quality outcomes for such individuals. Participants highlighted multiple ways in which high or low involvement could enhance or hinder HPs' ability to provide optimal care to patients. They included continuous professional development, knowledge and skills to manage OPD, ability to advice and educate patients, staying updated with relevant and most current information and collaborations among HPs. The following responses captured this theme:

> With [knowledge and involvement], … physiotherapists will also gain continuous professional development with inclusion of speech therapists (Interviewee D).

> With low awareness and involvement, health professionals lack courage towards the intervention (Interviewee G)

> [Knowledge and involvement] may help plan for intra-development, having more speech therapists, hence, better collaborations with other health professionals (Interviewee K)

> The HCW (healthcare worker) needs more information on how to do more for the patients (Interviewee L)

The final theme encompassed the possible influence that HPs' awareness and involvement could have on the entire healthcare system. It should be noted that the first two themes—patient outcome and professionalism—are linked directly to this theme. This relationship was highlighted by one participant who said, 'When we cannot identify (complications risks) early we risk more health burden' (interviewee D). This response emphasises the adverse implications that non-awareness among HPs could have, not only on individual patients but also an entire healthcare system, by increasing burden of care.

DISCUSSION

The study drew on data from 15 HPs to assess the implications of their awareness and involvement in the management of OPD among inpatients in the acute care facility of a national (level-six) hospital in Kenya. The analysis of participants' demographic and general characteristics established that overall, most were well-educated and experienced practitioners. Besides, all worked in professions that required them to interact regularly with patients with OPD. Hence, they were expected to have high awareness and involvement in OPD management. When asked if they had ever observed or had to use another language with an inpatient other than Kiswahili or English when dealing with a patient with swallowing difficulties, all were affirmative. The implication is that working with OPD inpatients at the ACF requires HPs to have high cultural awareness and, if needed, a translator to minimise misinformation or misinterpretations that may arise due to language or cultural differences.[21] It was outside the study's scope to establish cultural awareness among the HPs or whether the facility had language interpretation services.

The analysis also revealed limited training opportunities for the hospital's staff. Only a slight majority had attended a training programme, while less than a third were satisfied with the received training. Thus, even some who had been part of a training programme were not content with the training they received. A possible reason could be that the training did not meet their needs. In that case, HPs may have low motivation to participate in such programmes.[32] In either case, these results are consistent with findings from various parts of the world, indicating that many HPs do not receive training or are trained inadequately on dysphagia management.[33–36] They also support those of a previous study in Kenya showing that many HPs in the country have low knowledge or skills needed to provide high-quality care to patients.[29]

The IPC model emphasises ongoing HP training.[10] Regular training equips HPs with the knowledge and skills to manage OPD.[35] Additionally, research shows that regular training is a vital predictor of HP's involvement and participation in OPD management.[17 23 36] Adequate training also prepares HPs to assess and diagnose patients effectively for OPD and make appropriate referrals.[36] The limited training opportunities reported in this study may suggest that many HPs working at ACF are inadequately prepared to manage OPD. Low OPD training may also indicate that many OPD inpatients at the hospital may be at risk of going unidentified and missing timely referral or treatment opportunities. On a positive note, all but one stated that they would want additional training (table 1), which further confirms the low training opportunities at the facility but also reveals a high willingness to participate in training programmes. The hospital's management could capitalise on this willingness and implement regular training programmes.

Dysphagia management is an intricate, multifaceted process that calls for high-level coordination between

HPs from different fields. Thematic analyses of the interviews confirmed that participants played diverse treatment and support roles, all of which were considered critical for effective OPD management. This observation is consistent with the IPC framework, which stresses the need for HPs from various professions to collaborate efficiently to ensure effective and comprehensive care for patients with OPD.[10 11] Specific strategies that could be used to promote interprofessional collaboration in the ACF include creating and promoting shared goals among HPs regarding OPD management, develop platforms for effective and respectful communication between HPs, engaging in shared decision-making and problem-solving, proving opportunities for interprofessional education and training (such as regular workshops, case studies or coaching), and appreciating and recognising diversity.[12 13] Such collaborations, in turn, require that each team member be aware of their specific roles.[37]

The analysis also revealed a major concern. As implied by the third theme under HPs' roles, some practitioners in the AFC may not be aware of their role or potential contribution to OPD management. Sharma *et al*[38] observed that HPs' lack of appreciation of their role in caring for patients with OPD results in suboptimal referrals and an overburdened healthcare system. The WHO[10] recommends that HPs comprehend their roles as unique and distinct but equal in value and contribute to the collective goal of patient progress. Various studies have also reported that in facilities where each team member is aware of and understands their roles, the quality of patient care is improved.[37 39] The fact that some HPs at the hospital's medical and surgical wards may not be conversant with their contribution to OPD management could be hampering the delivery of comprehensive care to patients with this disorder.

The analysis also identified three major ways that HPs' awareness/non-awareness and involvement/non-involvement in OPD management could influence patient outcomes: direct effects on patient outcomes, professional development and reduced healthcare burden. Direct effects included reduced/increased complications, improved/reduced disorder identification and detection, enhanced/compromised referrals and increased/decreased mortality and morbidity. These results are in agreement with past research that emphasises the importance of a multidisciplinary approach to dysphagia management.[35 37 40] Such an approach may enable HPs to provide optimal care to patients and minimise the effects of this condition on patients' well-being.

The findings also revealed that increased HP involvement could lead to professional growth. It was beyond the study's scope to explore how this growth comes about. However, much of the effects of increased involvement of professionalism could be due to shared knowledge that results from interprofessional collaboration. Past research has demonstrated that shared knowledge and collaboration between HPs may enhance their capacity to improve patient outcomes.[16 17] Knowledge sharing may also promote a culture of safety in an organisation. The combination of these factors could produce ripple effects on the entire healthcare system.

The above findings are subjected to various methodological limitations, notably the focus on one hospital, the small sample size and reliance on descriptive analyses only. The use of a single hospital provided the researchers opportunities to focus their attention on the experiences of HPs in its ACF, making it possible to generate detailed data on their awareness and involvement in OPD management. Still, there may be little ground to apply these findings to other level-six hospitals in Kenya and elsewhere. This drawback notwithstanding, issues with HPs' knowledge, skills and abilities are reported in many facilities across the country.[29] Besides, similar studies conducted in other countries suggest that, in many places, HPs have, on average, moderate or low OPD awareness and involvement in its management, which are, in turn, associated with compromised quality of care.[33–36 38] Thus, while the authors acknowledge the difficulties of generalising the present findings to other contexts outside the ACF, there is sufficient evidence in Kenya and elsewhere supporting such transferability.

The sample size used in the study was small and was purposively selected. These factors may have introduced biases in the results. Still, the sample size was adequate relative to the number of HPs attending to patients with OPD in the facility. Finally, the research design used did not allow the researchers to establish causal links between the study variables.

Conclusions

The IPC framework emphasises the importance of a multidisciplinary approach to managing OPD and optimise patient outcomes. Implementing this model requires all HPs in a healthcare facility to have high OPD awareness and be actively involved in its management. The present study assessed the implications of HP's awareness and involvement in OPD management among adult inpatients in the ACF of a level-six national hospital in Kenya. Thematic analysis of interviews with HPs working in the hospital's medical and surgical wards revealed that HPs perform several roles related to OPD management. These roles can be broadly categorised as those contributing directly to OPD treatment and management and those supporting patients with OPD and ensuring quality care. However, some participants were uncertain of their roles in OPD management. The analysis also identified several potential effects of HPs' awareness and involvement in OPD management. Emerging codes were grouped around three themes: patient outcomes, professionalism and the healthcare system. Interviewees indicated that increased/decreased awareness and involvement could improve/compromise patient outcomes, professional growth and the

entire healthcare system. From the findings, it can be concluded that increased involvement of HPs in OPD management may result in improved patient outcomes and high professionalism among HPs.

The above findings are limited by the small sample size and the reliance on descriptive analyses only. Future studies could replicate the present findings using large sample and highly controlled designs. The limitations notwithstanding, the study, for the first time, offers detailed insights into HP's perspectives of their role and involvement in OPD management among adult inpatients in the hospital. Overall, the results emphasise the ongoing calls for a collaborative, interprofessional approach to OPD treatment. As a recommendation, the hospital's management should develop appropriate policies, training and mobilisation programmes to ensure all HPs in the ACF are aware of their roles in OPD treatment and are involved in its management. The IPC model is vital in this regard. Such an approach could promote holistic care customised according to individual patient needs.

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Contributors DCN (guarantor) conceptualised, developed the research proposal, collected data, reported findings and submitted the final research project. TOA critically supervised and edited the entire research process. KM was a validator of the research content.

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