

Specialization In Physical Therapy- A Case Of Busia County, Kenya

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ABSTRACT

Study Background: Specialization in Physical Therapy is part of physical therapy's continued professional development, with the aim of improving quality of healthcare and knowledge of the respective fields. The skills of an expert clinician are based on the application of knowledge, thinking and reasoning that occurs with experience. In a study in Ontario Canada, respondents indicated that their primary motivation to pursue such roles was to enhance clinical reasoning skills with the goal of improving client outcome. Respondents supported the involvement of academic institutions in the process. In Kenya, however, very few institutions of higher learning are offering specialization opportunities for physical therapists. Physiotherapists may practice in direct access or act as primary care practitioners who necessitate patient screening and management for all clinical flags.

Objectives: To assess the availability and utilization of clinically specialized physical therapists in Busia County.

Methods: A cross-sectional survey was conducted; census sampling was used to recruit 14 research respondents who eventually met the inclusion criteria. Data was collected using structured questionnaires and analyzed using Microsoft excel.

Results: Of the physical therapists who completed all the sections of the survey, 21% were specialized physiotherapists while 78.6% were non-specialized. Most fields of specialization recorded only 7%, which represented only one physical therapist. Most nonspecialized physical therapists preferred to specialize in pediatrics, cardiovascular and pulmonary and orthopedic manual techniques, with all these fields scoring 36%. All (100%) of the specialized physical therapists were not employed as specialized physical therapists. Most (78.6%) of the respondents agreed that specialized physical therapists performed better than general physical therapists, while 14.3% did not agree. Majority (78.6%) of the total respondents considered recognition in employment as the greatest challenge in specialization, while 21.4% reported a lack of motivation.

Conclusion: Most physical therapists at Busia County were not specialized and even though some of them would like to specialize, the main concern was why would they want to specialize, when no one was employing specialized physiotherapists? The county government was underutilizing the resource of specialized physical therapists.

Recommendation: Institutions of higher learning should consider offering specialization opportunities to all physical therapists to improve the general availability of specialized physical therapists. The national and county governments should improve the employment rate of specialized physical therapists to guarantee quality healthcare, patient satisfaction and motivation of physical therapists to pursue various fields of specialization

Key words: Availability, Challenges, Characteristics, Physical therapist, Specialization, Utilization.

INTRODUCTION

Specialization in Physical Therapy is part of physical therapy's continued professional development, with the aim of improving quality of healthcare and knowledge of the respective fields. Physical Therapy dates to the year 1813 (Brodin, 2008) when it was considered a branch of nursing in Sweden. It was later given an official registration by the Swedish National Board of Health and Welfare in the year 1887, and it has since evolved with little discussion on how specialization is related to the development of professional expertise. The skills of an expert clinician are based on the application of knowledge, thinking and reasoning that occurs with experience.

In a study in Ontario Canada by Yardley *et al.*, (2008) respondents indicated that their primary motivation to pursue such specialization fields was to enhance clinical reasoning skills with the goal of improving client outcome. Respondents supported the involvement of academic institutions in the process. In this study, only 33% of the physical therapists (PTs) considered themselves clinical specialists. Milidonis *et al.*, (1999) suggested that the attributes that characterize an expert physical therapist practitioner involve clinical reasoning and the ability to teach patients.

According to Van de Meene, (1988), specialist physiotherapist is one who has achieved a required standard of practical and theoretical expertise within a required area of special need or interest. In an in-depth analysis of clinical specialization in physical therapy, Van de Meene, (1988) in her study concluded that specialized physical therapists practicing as general physical therapists are only wasting their skills. Which would have been otherwise utilized and exploited fully, were they employed in the respective fields. Ladeira, (2018) discussed that in general, PTs with specialization performed better than those not specialized.

A study on management of burns in sub-Saharan Africa (nine Rwandan hospitals) concluded that even though many hospitals were theoretically equipped to effectively manage burns, none of the hospitals could deliver comprehensive care due to gaps in equipment, personnel, protocols, and training (Calland *et al.*, 2014). Accordingly, steps to improve capacity to care for those with thermal injury should include training of specialized healthcare providers. Physical therapists, equipped with the right expertise play a significant role in burns unit such as prevention of keloids and contractures as well as speeding up wound healing through electrotherapeutic modalities and therapeutic exercises. Keloids can defined as a benign dermal fibroproliferative disorder with no malignant potential characterized by abnormal deposition of collagen within a wound. They tend to occur following trivial trauma or any form of trauma in genetically predisposed individuals (Nangole & Agak 2019). Contracture on the other hand causes loss of passive joint range of motion (Dudek & Trudel 2008).

In Kenya, the total number of registered physical therapists is estimated to be two thousand (2000), with an estimated physical therapist to patient’s ratio of 1: 1000. This clearly shows that physical therapy is still growing. Often, it is easy to ignore the roles of a physical therapist, until there is no physical therapist. In an analysis of the health workforce in Kenya, Okoroafor *et al.*, (2022) found out that only a small percentage of graduates into health professionals were physical therapists. This clearly shows a deficit in basic physical therapy training, as a result, even if physical therapists in Kenya were all specialized, then the country will have just one or two in each field in most hospitals.

Very few institutions of higher learning in Kenya are offering specialization opportunities for physical therapists, let alone basic training. This therefore has led to situation where most physical therapists are practicing as general physiotherapists. With respect to this, there is a need to get data to objectively show the availability of clinically specialized physical therapists and their utilization in Busia County. It is anticipated that these findings would contribute to emerging research focused on enhancing patient– centered service delivery at national and county level, and improve physiotherapy education.

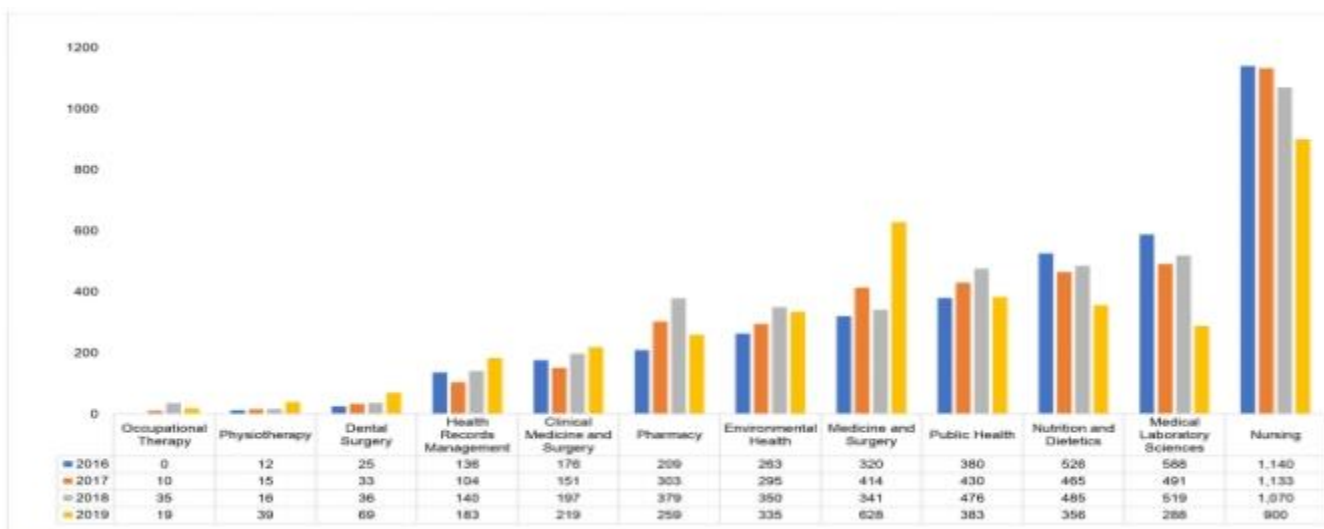


Figure 9 Trend in graduates into health professions in Kenya, 2016–2019.

Figure 1: Trends in graduates into health professions in Kenya 2016 to 2019

Concerning the utilization of specialized physical therapists, the American Physical Therapy Association (APTA) has lobbied at both the state and the national levels to change laws and practice acts so that physical therapists can obtain direct access, allowing them to manage patients and clients without referral from a physician or other health care practitioner (Crout *et al.*, 1998) as the ability of a physical therapist to assess and treat a patient would be limited if they had no sufficient knowledge on the said field.

Childs *et al.*, (2005) studied the knowledge of experienced physical therapists in the United States uniformed health services and physical therapist students in managing musculoskeletal conditions. The authors concluded that the knowledge of experienced physical therapists was greater than that of medical students, physician interns and residents, and all physician specialists except for orthopedists. Physical therapists who were board certified in orthopedic or sports physical therapy achieved significantly higher scores and passing rates than non-board-certified professionals. They concluded that the health and public policy decisions regarding the suitability of utilizing physical therapists to provide direct access care for patients with musculoskeletal conditions will be cost effective.

A study conducted by Ladeira *et al.*, (2017) concluded that physiotherapists with both fellowship and orthopedic specialization (PTFO) and Orthopaedic Clinical Specialists adhered better to the Clinical Practice Guidelines (CPG) than did Nonspecialized physical therapist and further education in the CPG for Low Back Pain (LBP) management was needed particularly for managing LBP with coordination impairment and with fear avoidance behavior. Ladeira *et al.*, (2017) further discussed that in general, physical therapists with specialization performed significantly better than those not specialized. Physical therapists' ability to manage patients with warning signs was low-further education on physical therapists is needed.

Daley and Miller, (2013) discussed that physical therapy specialization in occupational health may benefit workers and employers through injury and reduction and improved and sustained abilities of the work force following injury as well as help promote consistency within the field of physical therapy for external stakeholder recognition of skills while also promoting knowledge transfer and diffusion of best practice.

Yardley *et al.*, (2008) concluded that physical therapists and physical therapist employers are supportive of the roles of clinical specialist and advanced practitioner, within the profession even though there is currently no formal recognition of either role in Canada. Both groups had substantial interest in pursuing formal recognition of advanced practitioners and clinical specialists' stations.

Physical therapists in their places of work have expressed concern about factors affecting specialization. The greatest challenge in specialization in physical therapy would be formal recognition in employment. Various researches have proved that specialized physical therapists perform better than non-specialized physical therapists (Childs *et al.*, 2005). In that regard, all employers and ministries of health should be challenged to formally recognize and employ not only specialized physical therapists, but other health professions as well. The future of health professions should be specialization because health sciences are extremely broad, and only through specialization does one get to learn the finer details of the respective fields.

Unemployment in Kenya leads to brain drain. Many professions utilize the country's resources to study and then proceed to practice in foreign countries, which have been said to have more employment opportunities and better pay, which only reduces the number of professionals, which is already low as shown by a study by Okoroafor *et al.*, 2022. Physical therapists are a resource that should be used through active employment and better pay.

This study seeks to explore the availability and utilization of specialized physical therapists and find out their motivation and challenges. The significance of this study is to point out the niche, highlight the milestones in physical therapy as far as advancement in education and specialization is concerned. This study will also point out the need for the Government of Kenya to channel more resources in physical therapy education and employment. In that regard, it will provide information on specialization in physical therapists to institutions of higher learning, hence they will recognize the most suitable fields to invest in depending on the frequency of occurrence of the said fields as 'fields of interest' by the study respondents. This study will also reflect how academically advanced physiotherapy is in Kenya, without which there will be insufficient proof of advancement in knowledge.

METHODOLOGY

Study Design: This study made use of qualitative methods for data collection and analysis. This was a cross-sectional study which used a qualitative approach. This method was found to be efficient considering the time limitations and financial constraints. Using qualitative methods allowed participants to express themselves fully and the researcher can get rich information with respect to participants own perspectives (Howit & Cramer 2011).

Study Site /Setting: The study was conducted in Busia County, in Kenya. Busia County is situated to the east of Uganda, and has a total population of approximately 893,681 (KNBS, 2019). It is divided into six sub counties namely: Nambale, Samia, Teso South, Teso North, Bunyala, Matayos and Butula. Busia County has a total of 18 government employed physical therapists.

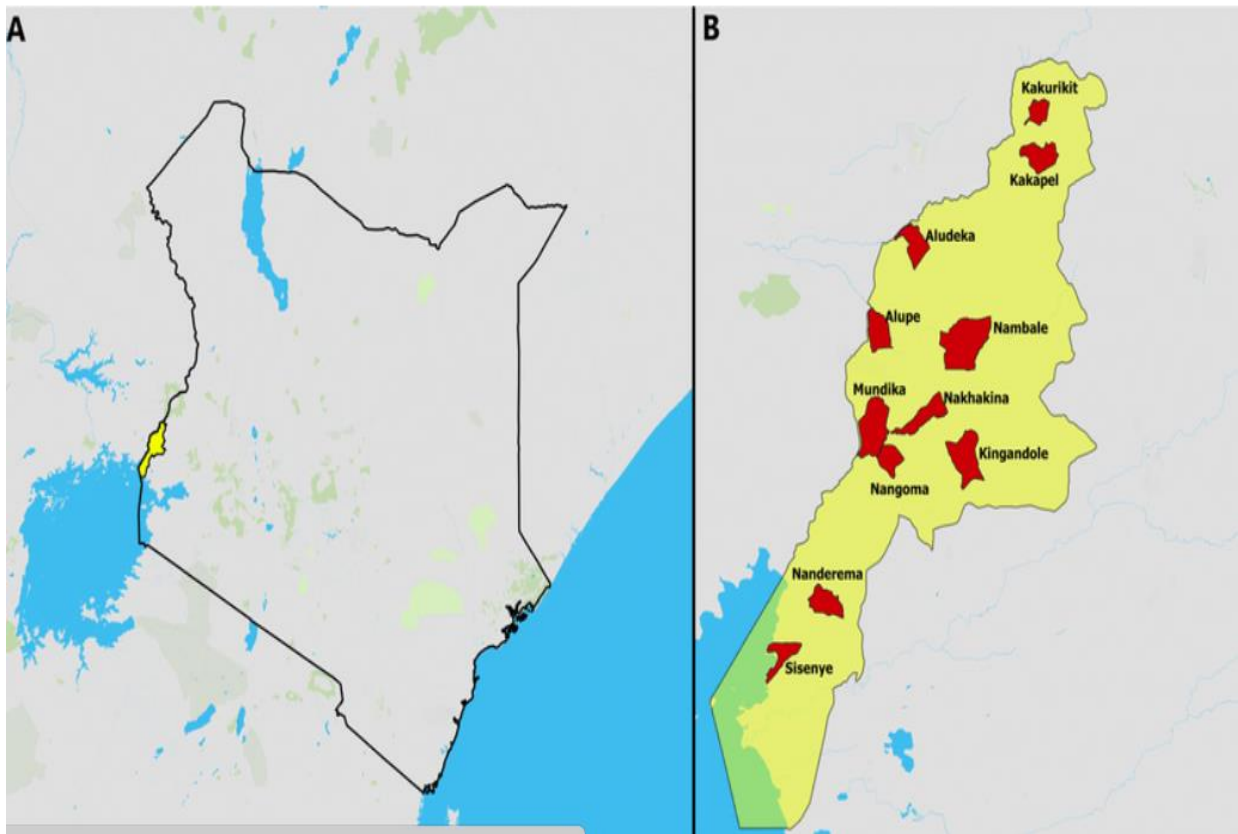


Figure 2: Map showing Busia County in Kenya where the study was conducted

Study Population: This included all government employed physical therapists who met inclusion criteria in Busia County. Census of these participants yielded total of fourteen (14).

Eligibility criteria: Included were physical therapists working in Busia County, and must be a government employee. Excluded were physical therapists who did not wish to take part for any reason whatsoever, did not consent to participate, and those not in a good mental or physical state to take part in the study.

Study Period: The pilot study was conducted in April 2022 while the main study was conducted during the 21/2022 academic year, 20th June 2022 to 29th July 2022.

Data Management: Data collection procedure was undertaken by the Researcher who collected details from physiotherapists on the following areas: level of study, specialization, employment and perceived challenges, using researcher administered structured questionnaires. The questionnaires were self-developed, and were administered during the period of study. Data was stored in flash discs, hard and soft copy data extraction tools and goggle drives. Microsoft excel was used to analyze data, presented in pie charts, bar graphs, texts, and narrations. Data was only being made available to authorized personnel.

Ethical considerations: Approval to conduct the study was sought from the Medical Superintendent of Busia County Referral Hospital. A team composed of three (3) supervisors from College of Health Sciences of Moi University also approved the study and gave guidance. Voluntary participation, where informed written and oral consent was obtained from the respondents. Participants were explained to all the procedures involved in a language they understood. Participants / respondents had the freedom to opt out of the study whenever they felt uncomfortable. Privacy and confidentiality were observed; all data collected excluded specific names and data was handled with utmost confidentiality. This study will benefit the participants and researchers by improving knowledge and awareness on pertinent issues around clinical specialization in physical therapy in Busia, Kenya. No risks were anticipated. There were no reimbursements in this study.

Study Assumptions: This study was based on the following assumptions: that there were few specialized physical therapists in Busia County and Kenya at large; that there was no formal recognition of specialized physical therapist in Kenya; and that there were loads of challenges facing specialization in physical therapy. The challenges included, but not limited to the cost of specialization versus its benefit and lack of motivation.

Study Limitations: As it was anticipated challenges might arise from the data collection tools. Challenges would have included internet failure or hacking. These were to be mitigated by performing pilot study and the revelation put into practice during main study. For one to hack the data collection tool, they would have to hack goggle first.

Another challenge arose from getting to all physical therapists in Busia County as most of them worked in distant Subcounties, with only six of them working in BCRH. The virtual data collection tool came in very handy and was cost effective.

RESULTS

Response Rate: A response rate of 77.78% was recorded as shown below. Out of the total (18) questionnaires administered, 14 were returned, meeting inclusion criteria.

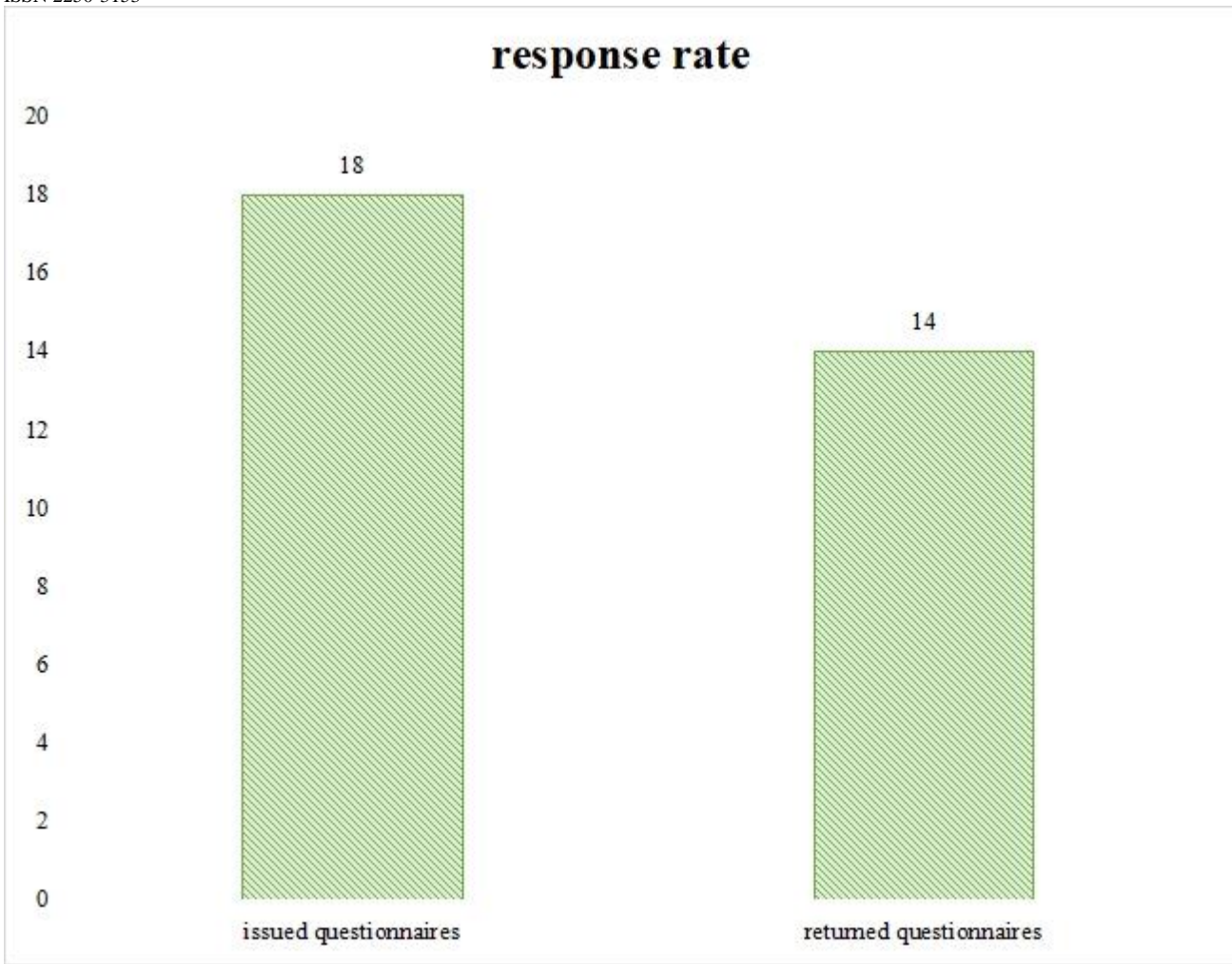


Figure 3: Response rate

Demographic Information

Age: Over half (57.1%) of the total respondents were between the ages of 26 and 35 years while 14.3% were between the ages of 56 and 65 years. Another 14.3% were above 65 years old.

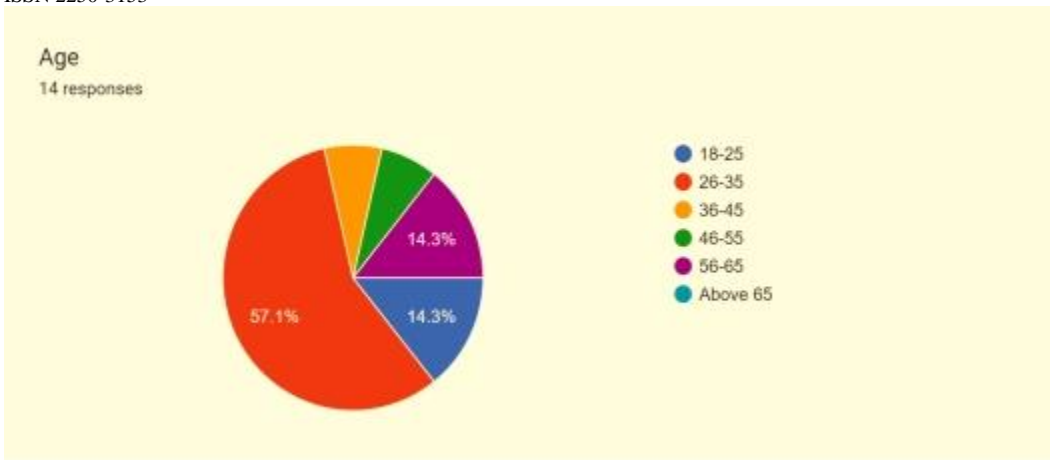


Figure 4: Age of participants

Gender: There were more male respondents (64.3%) than there were female respondents (35.7%) as shown below.

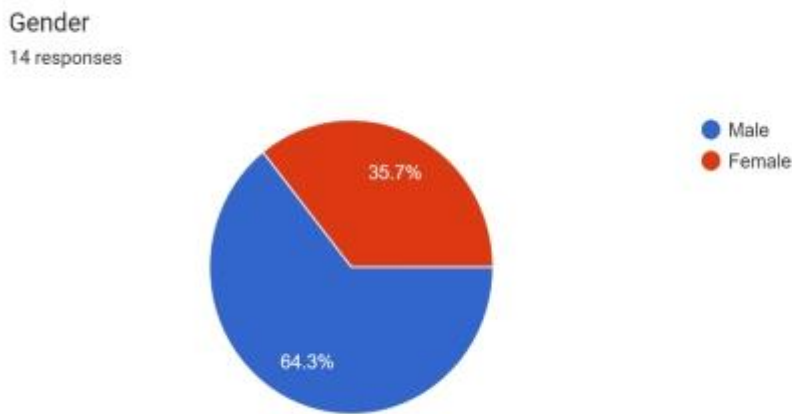


Figure 5: Gender of participants

Professional Expertise: Majority of physical therapists (28.6%) who took part in this study had practiced physical therapy for 7-10 years. 21.4% had practiced for more than 20 years, 21.4% for 3-5 years, 7.1% had practiced for 1-3 years, 5-7 years, less than a year and 10-15 years as shown below.

Years of experience

How long have you worked as a physical therapist
14 responses

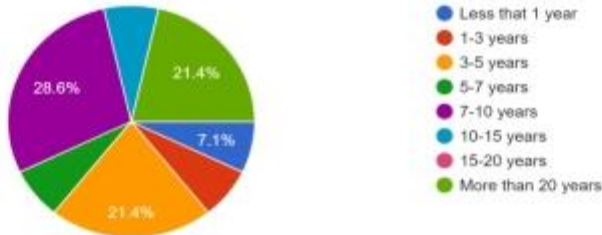


Figure 6: Years of experience

Level of study: Half (50%) of participants had attained a bachelor's degree in the field, while 35.7% had a diploma. Only 14.3% had a Master of Science, while neither had neither a PhD nor a certificate.

What is your level of study in the field?
14 responses

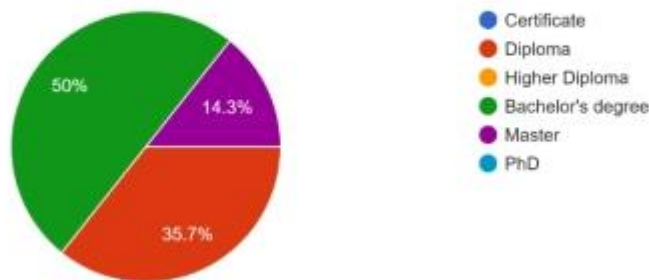


Figure 7: Level of study of participants

Specialization in physical therapy: Only 21.4% of respondents were specialized in the field while 78.6% were nonspecialized.

Are you a specialist physical therapist
14 responses

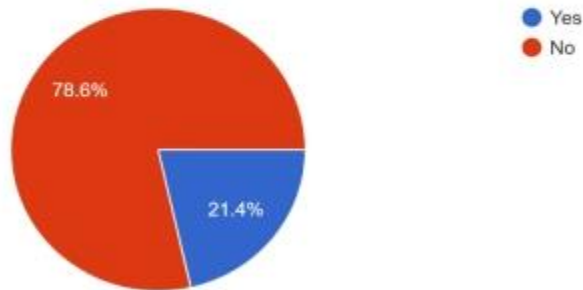


Figure 8: Specialization in physical therapy

Fields of specialization: Of the 21.4% specialized physical therapists, the following table shows the frequency of occurrence of the various fields

Table 1: Fields of specialization

Fields of specialization	Frequency of occurrence
Neuro- rehabilitation	1
Orthopaedic manual therapy	1
Sports physiotherapy	2
Geriatrics	1
Paediatric	1
Orthopaedic	1

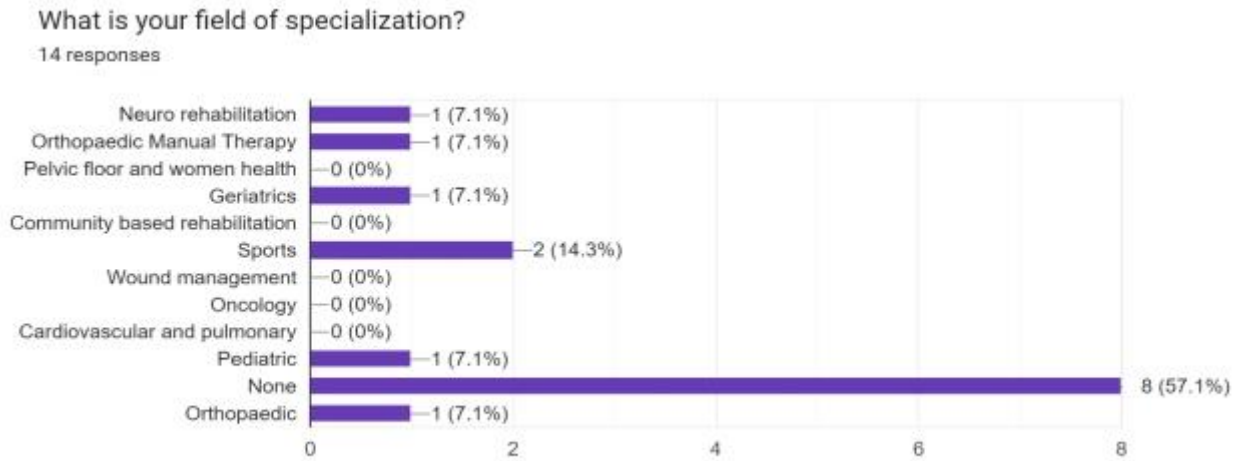


Figure 9: Fields of specialization

Desired fields of specialization: Most respondents desired to specialize in orthopedic manual therapy, cardiovascular and pulmonary, and pediatrics each with a frequency of 36.4%. Only 18.2% desired neuro- rehabilitation, while only 9.1% desired geriatrics and women health and pelvic floor rehabilitation. None of the respondents desired sports, Community Based Rehabilitation (CBR), oncology and wound management, as shown in figure 10 below.

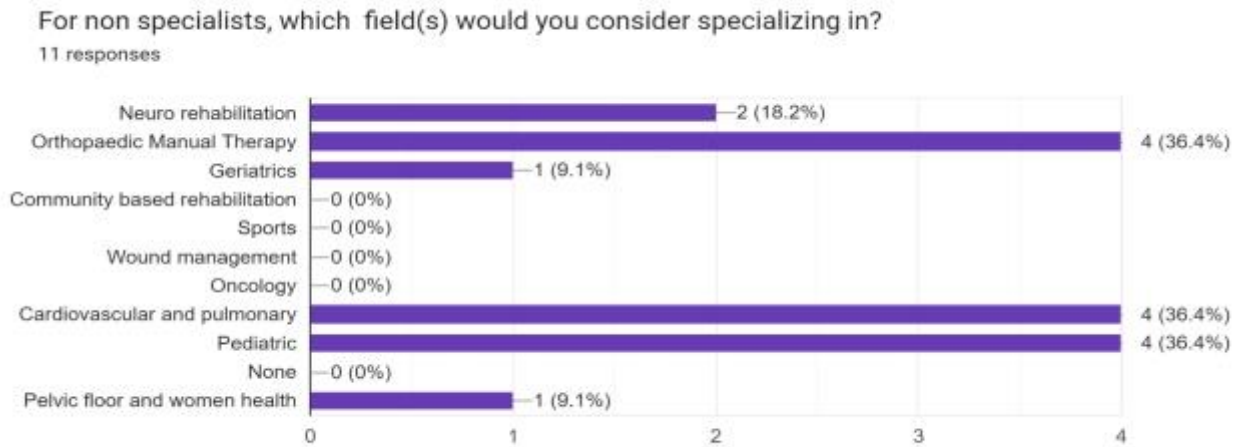


Figure 10:

Desired fields of specialization

Aims of specialization: Most (90 %) of the respondents specialized to improve quality of care and patient satisfaction. In this field, respondents were allowed more than one response.

What was / would be your (individual) aim of specialization in the above field?

11 responses

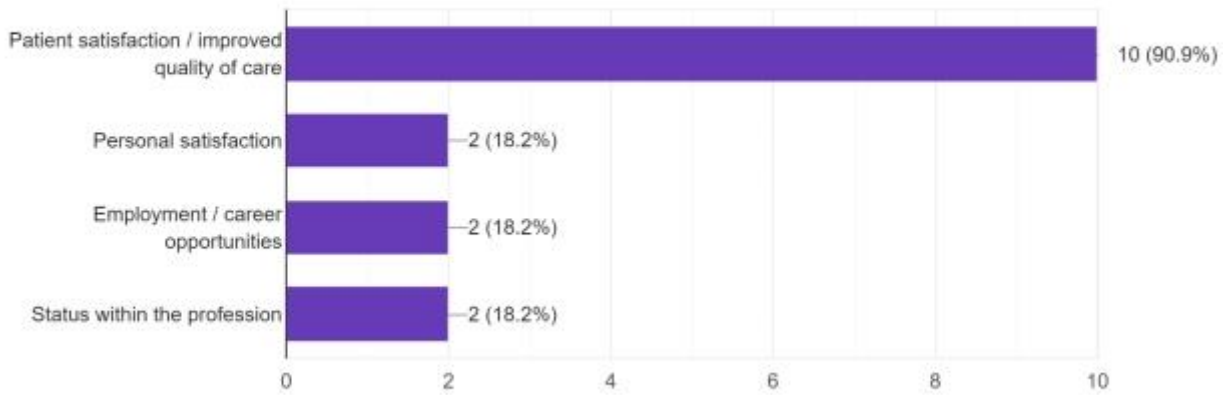


Figure 11a: Individual aims of specialization

Aim for the profession

11 responses

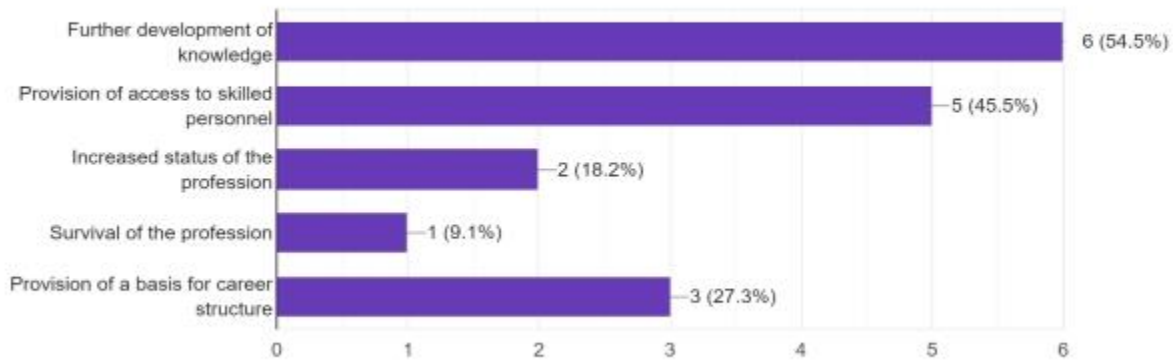


Figure 11b: Aims of specialization

Employment: None of the specialized physical therapists was employed as a specialist as shown in the figure below.

(For specialists) Have you been employed as specialist physical therapist?

7 responses

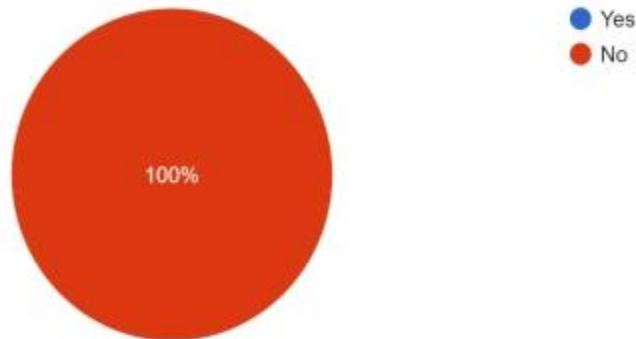


Figure 12: Employment

Consequently, none of the respondents has worked as a specialist.

If your above answer is "yes" ,How long have you worked as a specialist physical therapist?

1 response



Figure 13: Employment

Skills and service provision: Majority (78.6%) of the respondents felt that there is a notable difference in the skills and services of specialized physical therapists, while 14.3% did not see any differences.

In your opinion / field experience, is there a difference in skills and service provision between a specialist physical therapist and a general physical therapist?

14 responses

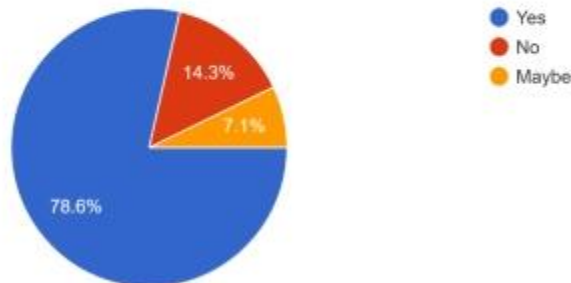


Figure 14: Skills and services

Challenges facing specialization in physical therapy: Majority (78.6%) of respondents felt that the greatest demotivation in specialization is the lack of recognition in employment while 21.4% felt less motivated specialize because of cost versus benefit.

In your opinion, what are the challenges around clinical specialization in physical therapy?

14 responses

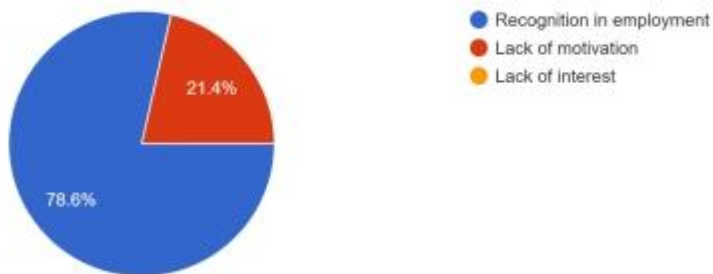


Figure 15: Challenges facing specialization

DISCUSSION

Characteristics of physical therapists: Busia County, with a total population of approximately 893,681 people according to KNBS (2019), is only served by eighteen physical therapists. That gives an average ratio of 1:49,648, which is against the Ministry of Health recommended ratio of 1:5. Each Subcounty hospital is served by one physical therapist all year round, while the County Referral Hospital has six physical therapists. Most physical therapists were below 35 years old, with males being majority. Most have worked for 7- 10 years, and half of physical therapists the county had were of bachelor level of education. Whereas a few had specialized, majority were of sports category. Majority if given chance to specialize in order to gain more knowledge and skills necessary for quality patient care will prefer orthopaedic manual therapy, cardiovascular and pulmonary, and paediatrics. Going by the above ratio of one physical therapist taking care of 49,648 clients, this could be an indicator of burn out amongst physical therapists, which impedes service delivery. This has however not stopped some of the physical therapists from going back to school and pursuing specialized fields. Some of the Physical therapists (PTs) gave an interest in the fields as their main reason for specialization, while others reported a passion in helping patients. The idea of going to pursue specialization so as not to be seen to be wasting the opportunity concurs with what several other authors have expressed (Calland *et al.*, 2014; Childs *et al.*, 2005; Crout *et al.*, 1998; Daley & Miller, 2013; Ladeira, 2018; Milidonis *et al.*, 1999; Van de Meene, 1988; Yardley *et al.*, 2008).

Availability of specialized physical therapists: The number of specialized physical therapists is still as low as the number of all physical therapists in the county. This number, if extrapolated, might just show the status of specialization in physical therapy in the country at large. Some PTs cited their reasons for not specializing being lack of opportunities. Literature shows that there are few institutions of higher learning offering basic education in physical therapy (Okoroafor *et al.*, 2022) let alone specialization; other respondents even reported having never heard of any training provisions for specialized fields. Equally, government scholarships are mostly given to basic training and less often to specialization. Some PTs had just recently completed their undergraduate studies and were planning to get into specialization eventually depending on how easy it would be to get the opportunities. Some thought of applying for scholarships overseas, which would increase the already existing shortage of PTs.

Utilization of specialized physical therapists: Specialization is a recent development in physical therapy, and it is commendable that some PTs have taken various fields by storm. It is however unfortunate that the government is not employing specialized physical therapists since there is no formal recognition of the same in the country. Literature supports that specialized physical therapists perform better in their said fields (Ladeira *et al.*, 2017). These skills go down the drain if not put to beneficial use. This also raises the question of cost versus benefit of specialization, as no one would want to use their time and other resources to finance specialization, only to work as a general physical therapist. Employment in the various fields also keeps improving the knowledge and skills of specialists as the medical field is fluid and it keeps changing as new research discovers better ways of doing things. Most countries have embraced the use of specialized physical therapists and Kenya could benefit if a lot of emphasis is put on specialization and improvement of knowledge and skills

Factors affecting clinical specialization: Some respondents considered specialization very costly; there is however no research supporting that, while others cited that the greatest challenge is the formal recognition in employment. The future of specialization in Kenya relies on formal recognition in employment among other factors. These findings are in agreement with the research assumptions that the Government of Kenya and its County Governments do not employ specialist physical therapists (Okoroafor *et al.*, 2022), and this is paving way for brain drain the country is experiencing.

CONCLUSION

The current number of specialized physical therapists would never meet the demand. Lack of employment opportunities for specialized physical therapists consequently leads to brain drain as some physical therapists are seeking employment overseas, in countries that recognize specialized physical therapist.

There is currently no formal recognition of specialized physical therapists, which was a demotivation factor, and physical therapists were considering working in other countries that recognize specialized physical therapists.

The cost of specialization was high since only a few institutions offered specialization courses. PTs must travel to the big cities like Nairobi to get training and thereafter, look for a specialized job in the private health facilities, which were often in the big cities as well.

RECOMMENDATIONS

The number of specialized PTs is very low and physical therapists should always take the initiative of searching for training provisions because some institutions in the country offer specialized training. County government of Busia should employ more physical therapists, to reduce the work load, and promote higher education and specialization. Government of Kenya in liaison with Kenya Society of Physiotherapist and Physiotherapy council of Kenya should roll out guidelines where one does not have to enroll in a university to get specialization, rather, work in the said field for a certain number of years and fulfill a certain number of set objectives. It is particularly important that physiotherapists keep themselves updated on the current trends and evidence-based approaches to best manage respective conditions. It is equally important for them to narrow down their fields of practice by undergoing specialized training. This critical thinking together with years of practice produces an advanced practitioner.

Government of Kenya in conjunction with county governments should be challenged to provide scholarships for various fields of specialization depending on the demand in the field of health sciences. Government should provide employment opportunities for specialized physical therapists because it is a total waste of resources to specialize and proceed to practice as a general physical therapist, as well as improve employment opportunities for general profession, as so many young physical therapists are spending so much time in job hunting, that they immediately lose interest in further studies.

The government in liaison with the ministry of health should include physical therapy specialization in all health-related institutions of higher learning, to improve convenience as specialization opportunities would be available in all counties. This would also cut travelling and accommodation costs for all interested physical therapist.

The county government of Busia should employ more physical therapy staff, to reduce the work load on the current staff, to enable them time for further studies and specialization. Every effort should be made to employ those who have specialized so as to minimize or stop brain drain.

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