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**Future Intentions of First and Final-Year Nursing Students at Kenya Medical Training College**


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### Future Intentions of First and Final-Year Nursing Students at Kenya Medical Training College

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#### Abstract

**Purpose:** To explore the nursing students' future intentions upon graduation.

**Methodology:** The study adopted a comparative cross-sectional survey of first-year nursing students and final-year nursing students on their future intentions upon graduation. The sample size was determined using Fisher et al., formula. Participants were selected through simple random sampling and those who met the eligibility criteria were included in the study. An online questionnaire was administered using a free Open Data Kit (ODK). The summary sheet from ODK software was downloaded, and data was cleaned, coded, and entered into R statistical package for analysis. Descriptive frequencies were generated for demographic and social characteristics; chi-square tests and proportion tests were used to determine significance when appropriate. Frequency counts, median, and percentages were tabulated for categorical variables.

**Findings:** The study revealed that 99% (224/226) of the students would like to pursue a career in nursing after completing the diploma training. A higher proportion 69.1% (155/224) of the students who intend to pursue a career in nursing would prefer to pursue their nursing career outside of Kenya. There is a significant ( $P=0.004$ ) difference since between the two groups as a higher proportion 77.5% (100/129) of Students in their first year of the study indicated they would prefer to pursue their career outside Kenya compared to 56.7% (55/97) students in their final year of the study. The study also revealed that 98.2% (222/226) of the students intend to pursue a degree in nursing upon completion of the KRCHN training.

**Unique Contribution to Theory, Practice, and Policy:** Regarding policy, this study suggests that the government collaborate with other nations to develop regulations that allow nurses to pursue education and employment abroad. After completing their training, nurses should be required to stay in Kenya for a predetermined period of time and should as most student nurses would wish to emigrate; thus, this will help alleviate the shortage.

**Keywords:** *Final-Year Nursing Students, First-Year Nursing Student, Future Intentions, Kenya Registered Community Health Nursing*

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## **INTRODUCTION**

Half of all health professionals worldwide are nurses and midwives. This cadre which is very critical in healthcare delivery unfortunately accounts for 50% of the global healthcare workforce shortfall; with the largest deficit being felt in Africa and East Asia according to the World Health Organisation, [WHO] (2020). According to Kenya's Ministry of Health [MOH] (2015) health workforce report, the nursing shortage is contributed by, among other factors, the death of staff and the emigration of recent graduates to other countries. The report reckons that out of the 41,367-nursing workforce that was in Kenya between 1999 and 2007, 6% of them expressed interest to work out of the country; with the most preferred destinations being Canada, the United States of America, United Kingdom, Namibia, and Australia. In the recent past, there has been massive emigration of nurses to other western countries. Apart from emigration upon completion of the nursing training, study findings will show what the nursing students intend to do upon completion of the nursing training. Literature articulating what diploma candidates want to do after completing their foundational education is lacking. The study findings shall also contribute to the health sector, Human resource strategy which addresses attrition and migration of health worker's migration of health workers where migration can take place within the health sector or exit completely from health sector into non-health sector or completely from labor force (MOH, 2015)

## **LITERATURE REVIEW**

This study is also fashioned around the person-environment fit model by French and Khan (1962). This model describes the interaction between the environment and personal characteristics and their effects on each other to keep a given level of adjustment. An imbalance occurs when there is mismatch between the individual attributes and environmental characteristics (Takase et al., 2001).

This theory finds credence in findings from previous enquiries on how person-environment issues shape students views of the profession, and the intention to remain in nursing. For example, when nursing students enroll into the nursing program, they come in with unshaped or unclear beliefs that change over the years of training (Al Jarrah, 2013). Sometimes, the differences between clinical environment and the learner's preconceived perceptions of what nursing practice ought to be may be so irreconcilable that the learner drops from training or changes career (Last & Fulbrook, 2003; Swarna, 2015). Fortunately, research shows that a number of learners align their interests with the demands and exigencies of the profession, complete their course and enjoy practice (Mkala, 2013; Safadi et al., 2011)

The prospects for job and academic progression is particularly useful in not only shaping and motivating potential learners to pursue the career but also retaining nurses in the profession (Matheka et al., 2015).

### **Education Advancement**

Attaining further credentials not only enhances technical competencies for the career progression of nurses but also their professional recognition (Gunawan et al., 2018). It is imperative to note that the career expectations of freshmen and finalists may be dissimilar according to Sari (2019). Swarna (2015) in a study reported that students who were positive toward nursing were likely to pursue higher education. McLaughlin et al., (2010) also reported that after completing their initial nursing training, most nursing students intended to continue their studies at a higher level.

## **Career Advancement**

Future intention as regards the place of work has been noted to vary among nursing students. Gunawan et al (2018) conducted a qualitative inquiry on students' career plans after a course competition in Indonesia. Because of assurances of relatively better remuneration in the public sector compared to other employers, more than half of the respondents had a strong desire to work in the public service. According to a study by Gunawan et al (2018), it is the wish of most ex-students in Indonesia to remain bedside nurses so that they gain adequate exposure before venturing in something else, apply the knowledge learnt in direct care, and for altruistic reasons of making a difference in patients' lives. A study conducted in India arrived at similar conclusions (Patidar, et al., 2011). Contrary to the above findings, less than 25% of new graduates in Australia want to continue to work in primary care settings (Bloomfield et al., 2015). Likewise, a systematic literature review (Calma et al., 2019) exploring the impact of training environment on undergraduates' willingness to work in primary health care reported that most respondents had because of their misperceptions of primary healthcare, many were unwilling to work in this field.

Consequently, in jurisdictions where nurses have fewer opportunities for career progression, it has been observed that smaller number people are interested to pursue the profession or make it a lifelong occupation (Liaw et al., 2017).

## **Emigration**

It has also been noted that most students from Asia and African countries intend to work abroad (Silvestri et al., 2016). In Africa, there are a number of studies on the subject matter. A study done in South African exploring the aspirations of nurses observed that most nurses have huge financial burden and social well-being expectations. These are the drivers to migrate and seek for better terms out of South Africa (Mabuda, 2017). According to a descriptive study on the migration intentions of nursing students after graduation, recent graduates wish to leave the country either to avoid being sent to rural areas or in search of higher salaries (Abuosi & Abor, 2015). Abuosi & Abor (2015) also identified career progression and quest for better education of their children as key determinants for nurses to move out of Ghana. A similar study in Uganda (Nguyen et al., 2008) mentioned salary as the key consideration for new graduates in deciding where they would want to work.

In a study done by Silvestri et al (2015) in 16 institutions in 8 countries of sub Saharan Africa (Kenya included) and south East Asia showed that less than a fifth of students who spent more time in rural areas were more likely to practice in their own nation, while 28% of all students who took part in the study said they were highly likely to choose to work overseas within the first five years of completing training. The study's findings revealed that students' aspirations to work overseas before matriculating may continue into their final year of training. (Silvestri et al., 2015)

## **METHODOLOGY**

This was a comparative cross-sectional study of first year nursing students and final year nursing students on their professional and educational aspirations upon graduation. The study was conducted in four constituent colleges of KMTC: Siaya, Bondo, Lake Victoria and Kisumu campuses. Siaya and Bondo campuses are found in the County of Siaya, while Lake Victoria and Kisumu are in Kisumu County. Siaya and Kisumu counties are located in the now defunct Nyanza Province. For that reason, the campuses are comparable geographically and share most

of the clinical placement facilities. Thus, the training environment is similar. Students' admission is centrally done from the Headquarters in Nairobi before they are distributed to various campuses. To reflect the face of Kenya, deliberate steps are taken to recruit candidates from diverse backgrounds. Students included in the study are direct entry first and final year nursing students taking up KRCHN course at KMTC in the four campuses of interest. A sample population of 347 students was arrived at. Simple random sampling and proportionate sampling were utilized to select the students individually who made up the sample. An online questionnaire was administered using a free Open Data Kit (ODK). A pre-test of the data collection tools was done at KMTC Siaya campus, among 35 KRCHN students (10% of the study population). Appropriate dates for data collection were sought from the respective campuses after obtaining the necessary approvals from the KMTC Chief executive office. On the scheduled dates, respondents were contacted physically in one sitting where the researcher discussed the research in detail to them. The summary sheet from ODK software was downloaded. The data was then cleaned, coded, and entered into R statistical package (R version 4.2.2, Foundation for Statistical Computing, Vienna, Austria).

## **FINDINGS**

As shown on table 1, participants in the study included 226 nursing students who were eligible and gave their consent. This represented a 65% response rate. In both First year and Final year of study majority 73.6% (95/129) and 89.7% (87/97) of the students are aged 20-29 years respectively. Female students form 55% (71/129) of the first year students and 55.7% (54/97) of final year students. First year students had more 64.3% (83/129) students who scored grade B in their O-Levels exams compared to Final year students 44.3% (43/97). Students in their final year had more 78.4% (76/97) relatives in the nursing profession compared to students in their first year 69.8% (90/129).

**Table 1: Individual, Social and Nursing Training Characteristics of the Respondents**

Characteristics	N	Overall	First Year	Final year
		<b>n</b>	<b>n (%)</b>	<b>n (%)</b>
<b>Individual</b>	<b>Age</b>			
	<20	31	29 (22.5)	2 (2.1)
	20-29	182	95 (73.6)	87 (89.7)
	30-39	13	5 (3.9)	8 (8.2)
	<b>Gender</b>			
	Females	125	71 (55.0)	54 (55.7)
	Males	101	58 (45.0)	43 (44.3)
	<b>KCSE Grade</b>			
	A	7	3 (2.3)	4 (4.1)
	B	133	83 (64.3)	50 (51.5)
	C	86	43 (33.3)	43 (44.3)
<b>Social</b>	<b>Have Nurse Relative</b>			
	No	60	39 (30.2)	21 (21.6)
	Yes	166	90 (69.8)	76 (78.4)
<b>Training</b>	<b>Have Mentor</b>			
	No	21	16 (12.4)	5 (5.2)
	Yes	205	113 (87.6)	92 (94.8)
	<b>Mentor engagement</b>			
	Daily	24	9 (7.0)	15 (15.5)
	Monthly	54	32 (24.8)	22 (22.7)
	Rarely	81	53 (41.1)	28 (28.9)
	Weekly	67	35 (27.1)	32 (33.0)

### Future Intentions of the Nursing Students

#### Future Intentions of Nursing Students in Pursuing Nursing Career

Table 1 shows the students' intentions to pursue a nursing career. The findings show that 99% (224/226) of the students want to pursue a nursing career after completing their training. More than half, 69.1% (155/224), of the students who plan to pursue the nursing career intend to work outside of Kenya. Comparing the first and final-year students, there is a significant ( $P=0.004$ ) difference since a higher proportion 77.5% (100/129) of Students in their first year of the study indicated they would prefer to pursue their career outside Kenya compared to 56.7% (55/97) students in their final year of the study as shown on Table 1.

**Table 1: Future intentions of nursing students to pursue a career in nursing.**

Factor	Overall	In Kenya	Not Sure	Outside Kenya	P-Value
N	N	<b>69</b> n (%)	<b>2</b> n (%)	<b>155</b> n (%)	
<b>Year of Study</b>					
Finalist	97	41(42.3)	1(1.0)	55(56.7)	<b>0.004</b>
First years	129	28(21.7)	1(0.8)	100(77.5)	

The results build on existing evidence of (Zhang, et al., 2022). Where in their study, they found out that in the future, most nursing students (77.6%) intend to work as nurses. Another study noted that most students from Asia and African countries intend to work abroad (Silvestri et

al., 2016). A descriptive study on the migration intentions of nursing students upon graduation identified that new graduates want to out-migrate either as a protest to being posted to rural areas, or in search of better pay (Abuosi & Abor, 2015).

### Future Intentions of Nursing Students to Pursue a Nursing Degree

The majority, 98.2% (222/226), of the students, intend to pursue a degree in nursing upon completion of the KRCHN training as shown on table 2. Almost half of the students in their final year of study and first year of study would prefer to pursue their nursing degree within Kenya 47.4% (46/97) and 48.1% (62/129) respectively. Comparing the first and final-year students, a higher proportion 77.5% (100/129) of Students in their first year of the study indicated they would prefer to pursue their career outside Kenya compared to 56.7% (55/97) students in their final year of the study as shown on Table 2

**Table 2: Future Intentions of the Diploma Nursing Students to Pursue a Degree in Nursing**

Factor	Overall	In Kenya	Not Sure	Outside Kenya	P-Value
N		<b>108</b>	<b>4</b>	<b>114</b>	
	<b>n</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>	
<b>Year of Study</b>					
Finalist	97	46(47.4)	1(1.0)	50(51.5)	0.752
First years	129	62(48.1)	3(2.3)	64(49.6)	

There are studies that show that nursing students upon completion of the current training would like to pursue higher education. According to a study by Swarna (2015), students who had a favorable attitude toward nursing were more likely to seek higher education. McLaughlin et al (2010) and Chris et al (2011) also reported that majority of the nursing students had ambitions to pursue higher education after completion of the basic nursing training.

On the contrary, other study findings show that nursing students wouldn't want to advance their education. According to a study by Gunawan et al. (2018) it is the wish of most ex-students in Indonesia to remain bedside nurses so that they gain adequate exposure before venturing in something else, apply the knowledge learnt in direct care, and for altruistic reasons of making a difference in patients' lives. A study conducted in India arrived at similar conclusions (Patidar et al., 2011a). Less than 25% of new graduates in Australia, in contrast to the data above, wish to continue working in primary health care settings (Bloomfield et al., 2015). Other contradicting findings show that consequently, in jurisdictions where nurses have fewer opportunities for career progression, it has been observed that smaller number people are interested to pursue the profession or make it a lifelong occupation (Liaw et al., 2017).

### Discussion of Future Intentions of the Nursing Students

In this research, majority of the students intend to emigrate to either pursue a nursing degree or a career in Nursing after completion of the KRCHN training. There are studies that show that nursing students upon completion of the current training would like to pursue higher education. According to a study by Swarna (2015), students who had a favorable attitude toward nursing were more likely to seek higher education. McLaughlin, Muldoon, & Moutray, (2010) and Chris, Martin, & Marianne, (2011) also reported that majority of the nursing students had ambitions to pursue higher education after completion of the basic nursing training. In line with the findings on emigration, one study had similar findings, It was noted that most students from Asia and African countries intend to work abroad (Silvestri et al.,

2016). A descriptive study on the migration intentions of nursing students upon graduation identified that new graduates want to out-migrate either as a protest to being posted to rural areas, or in search of better pay (Abuosi & Abor, 2015).

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## **CONCLUSION AND RECOMMENDATION**

### **Conclusion**

After completing the nursing diploma program, the nation will continue to lose nurses to emigration because, according to the survey, most students want to continue their studies or find employment and advance their education outside of Kenya. The study's conclusions give the health ministry insight into the fact that over half of today's nursing students will graduate and not want to practice in Kenya in the future. Therefore, even with the large number of nursing students receiving training, shortages will still exist.

### **Recommendation**

To the Kenya government through the Ministry of Health, this study recommends that the government create a positive working environment that also focuses on building the career of registered nurses through education advancement. This will help ensure that the nurse workforce in Kenya is not affected by emigration. It also recommends that the government works in collaboration with other countries to create policies for nurses to study and work out of the country to make the movements easy and also to regulate the number of health professionals moving out of Kenya.



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