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Research Article

Empowering Nurses on Empathy: A Quasi-Experimental Study at Kenyatta National Hospital

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Abstract

Empathy is a life skill and a trainable competence. In nursing profession, empathy is highly associated with observed caring characteristics of nurses. Whenever empathy was offered to the patients, there was improved health outcomes for the clientele. Regardless of the actual benefits of empathy, inconsistencies in developing and sustaining empathy were reported. The study conducted a needs analysis and implemented an intervention intended in promoting development and sustainability of empathy among nurses in Kenyatta National Hospital. A multi-stage mixed method study design was used: explanatory sequential approach (needs assessment) and quasi-experimental design (pre/post intervention) were applied. The study samples were; a stratified random sample of 189 nurses and a purposive sample of 16 nurses for two focused group discussions. A training intervention was implemented and pre/post scores compared. Knowledge on observable characteristics related to empathy was low during baseline (20%) however, an increase to high (90%) was reported after the training intervention. The knowledge scores on the factors that favoured development of empathy improved significantly following training ($M_b = 0.50$, $M_e = 0.87$), $t(385), = -12.80$, $p < 0.05$. Similar improvements in knowledge scores were attained on the factors that hinder development ($M_b = 0.48$, $M_e = 0.88$), $t(385), = -14.13$, $p < 0.05$; factors that favour sustainability ($M_b = 0.66$, $M_e = 0.83$), $t(385), = -6.23$, $p < 0.05$ and factors that hinder sustainability of empathy among nurses ($M_b = 0.34$, $M_e = 0.66$), $t(385), = -9.75$, $p < 0.05$. Knowledge on developing and sustaining empathy ranged between very low to average before interventional training. This achievement suggests that empathy is a learnable competence. Training empathy skills can empower nurses to practice through offering training opportunities. This underscores the need to integrate empathy as a core course in both pre and in service for nurse training.

Keywords: Altruism; Competence; Development; Empathy; Nursing; Sustainability

Introduction

The concept of empathy in nursing

Nursing profession seeks to empower nurses to continue showing and offering empathy to all; sick or well. Nursing forms the basis of structuring healthcare, preventive and survival strategies in across all life stages. Through empowering nurses, the basis of caring, socialisation and identity for individuals is established. Due to the reputation that nurses have developed over the years, nursing practice can be used as a symbol of a functional family. Within a functional family, "family empathy" ensues that family members embrace the art of caring for one another as a shared responsibility. In nursing, a stranger (nurse) is entrusted in the care and continuity of family empathy due to mutually trusting relationships nurses establish with patients and families. Outside own family, people tend to identify much easier with those persons who can evoke our caring tenets.

Whether a family structure is functional or not illustrated by how people view themselves and others. The value they attach to the relationships they make and how willing they are to caring. Em-

pathy is initiated as a developmental milestone early in life; usually learned in our families as 'good manners' and finally translated into etiquette. The reason why progressivism in empathy is severely deficient is because it is emotionally and psychologically tasking. Many families and professions, in this context, do not translate the demands of its members from emotional burden that comes with developing and sustaining the empathy traits. The reason here is because caring is a value that is related to a form of communicating our concern to other persons in a gentle way. The texture of social gentleness greatly leans on the social environment within which such communication takes place. Communication within the context of a family helps to achieve the desired chemistry amongst members of such an emotional intense structure [1]. Carelessness is not an option to anyone who owes to a functional family; we have to care for one another at all times. The caring values of our society reflects the caring statuses of our families. If we don't care, we may have a challenge in our empathetic ability or focus. Caring attitudes and practices have been heavily linked with empathy. Empathy characterises the values in caring regardless of whether the care is offered by the family member or a nurse.

Stueber (2011) recognizes that one of the most useful ways to look at empathy for the purpose of the life and work of nurses may be to take empathy not as a feeling or an instinct but as a practice, a competence and a life-skill. The perspectives of caring the body include: knowing, understanding and empathy. Caring involves displaying kindness and concern for others while knowing is the state of being aware or informed [2]. Anecdotes indicate that, people do not care how much we know until they know how much we care about them. This phrase is from works of John Maxwell who got it from Howard Hendricks who got it from Theodore Roosevelt who internalized it from Jesus Christ when he washed his disciple's feet.

The role of empathy in nursing care

Empathy related behaviours have been implicated with functional patient-nurse interaction and better patient health outcomes. Despite its importance, empathy has not been well understood and explored in the perspectives of it as a trainable skill or as a competence that needs to be developed and sustained. Inconsistencies of empathy characteristics in nursing practice have been reported in Kenya. Such inconsistencies have negative effects in the overall perception of nurses by the public.

Nursing encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings [3]. Empathy helps the nursing profession retain its uniqueness and nurses in application of professionalism in situations prescribed as essential or related to the expected performance of an individual nurse. Such a nurse is believed to be ready; emotionally, socially, and therefore empathetic. Nursing profession is an emotionally intense profession. Nursing practice must inculcate responsible professionalism by development of empathetic competence through development of positive emotions, good behaviour, effective communication, and rational leadership. To survive the intensity of the daily activities of a nurse, she surely has emotional intelligence and social preparation. Emotional Intelligence is the ability of an individual to perceive, assess and manage emotions of his own self and of other people [4].

Nursing has been identified as a profession of caring and a scientific journey into achieving the primary call to provide high quality and socially acceptable nursing care. Nurses are altruistic. Nursing practice has been described as a call; what nurses do, only nurses can. In the current nursing practice, it is a professional expectation that a qualified nurse has reached age and wisdom and should not be limited in their thinking (Karani and Kang'ethe, 2008).

Empathy and caring are pairs, which provoke response to a need for those who are sick, suffering or needy. In most occasions, whenever pain comes our way, we yearn to be cared for. Pain is not exclusively physiological but also includes spiritual, emotional and psychosocial dimensions (Board of Nursing, 2010). The goal of pain management throughout the life cycle is the same - to address the dimensions of pain and to provide maximum pain relief with minimal side effects. Review of the literature, anecdotal reports and dialogue with colleagues reveals that the majority of patients do not receive adequate pain management [5]. Caring involves, having the right information at the right time (understanding) and using that information correctly to alleviate suffering (empathy) for the benefits of self and others in the current advances in science and technology.

Therefore, to provide a high quality nursing care, nurses need to make it known to patients and significant others that nurses know when, where, why and how to care for those in need of nursing care. The scope of this type of understanding is cognitive empathy - we cannot just teach and preach at people, we have to show them care as well (Equip, 2010). This perspective would promote a desire to know how to care, and actually provide care to people at all times.

Statement of the problem

Challenges associated with inadequate empathy status and practice have been reported [6]. A healthcare provider's own level of empathy is positively correlated with client's health outcomes [7]. In Africa, minimal investment on empowering nurses on empathy has shown that either empathy is misunderstood, ignored or is not considered as a competence priority. No resources were allocated to empowering the public and professionals on developing and sustaining empathy in our societies [8]. In Kenya, studies on development and sustainability of empathy are lacking. Minimal resources were allocated to empowering nurses on empathy. It was observed that the nursing curriculum and professional development plans are not aimed at empowering nurses on empathy traits among trainees. This shows a significant lack of priority to train nurses on empathy. Therefore, there is need to empower nurses on empathy

Justification for the study

Empathy as an outcome is an essential competence that requires consistent adaptability to promote and sustain vitality of nurses in social and therapeutic relationships. It also strives to promote client satisfaction while in healthcare environment. Developing and sustaining empathy is core in nursing practice. Caring and quality of care in nursing is reliant on empathy, altruistic commitment in development and application of care protocols for patients as individuals or groups.

Nursing is an emotionally intense profession that involves nurse-patient relationships; social, therapeutic or both. Research shows that contemporary nursing practice is becoming a more intense and emotionally demanding profession. Empathy is important because it prevents nurses from a stressful, emotionally exhausting work environment leading to burnout, disability, stress and high absenteeism.

Nursing education and administration recognizes that nursing roles are multidimensional and an on-going commitment to develop and maintain professional competence in the nursing practice is essential. Nurse training institutions should develop their own policies and mechanisms that actively advocate for inclusion of empathy in the training curriculum to ensure that empathy is an exit competence.

The nurses who have social skills and competence are easily able to recognize the needs of the patients, listen, hear, understand and interact with individuals; sick or well, on a more sophisticated level to improve the perception of patients regarding the quality of healthcare experience. Nurses whose practice is informed by empathy skills assist their patients to achieve desirable health, emotional and social outcomes. They are easy to work with, they are friendly and more sociable.

Literature Review

Practicing empathy in everyday nursing-patients' interactions

Studies suggest that all learning; social or scientific, has an emotional base [9]. Emotional basis of learning involves some degree of intelligence. Emotional intelligence and social competence are better understood as indicators of emotional management. Social relationships rely on emotional communication of needs, care and ability to thrive in a peaceful environment. Emotional intelligence is conceptualised as someone's ability to: understand own feelings, listen to others and to hear them, and express own emotions in a productive manner [10].

Emotional intelligence has been an area of interest over the last two decades with many authors and scholars arguing whether it is different from Intelligence Quotient (IQ). The difference is, EI is involves the will and capacity to control own wishes of an individual and delay their accomplishment so as to accommodate thoughts and feelings of other person's perspective. Also, it includes a range of skills such as self-control, persistence, zeal and ability to motivate others [11]. According to Goleman [12], emotional intelligence involves the elements of self-awareness, empathy, effective handling of emotions, relationships, managing feelings, and finding stable sources of individual and social group motivation.

Empathy and emotional burden in nursing practice

Pursuing empathy is essential and vital competence in nursing is an interesting process. Empathy builds on a likened emotional believe that humans have the capacity to develop empathy within self and demonstrate it to other people. Emotions rule our daily lives. In daily life perspectives, empathy involves the organized humanistic social values and empowering experiences [13]. Capacity to show empathy is limited by persistence in negative emotionality (fear, anxiety, anger, distress and hopelessness) and pursuing untoward social characteristics.

Mayer., *et al.* [13] define emotions as organized and short-term responses to stimuli, crossing the boundaries of many psychological subsystems, including the physiological, cognitive, motivation-

al, and experiential systems. The decisions made impact us and to others in a considerable emotional measure. Empathizing means we leave our comfort zones and delve into our clients' phenomena and socialize with them within their imaginary and actual realms. This zone is almost always vulnerable for nurses. Evidence suggest that empathy and altruistic motivation may lead to nurses becoming more likely to persist in helping patients [14]. The persistence may be due to tolerance, kindness, understanding and selflessness. Nurses persist to help and care for the patients even when patients are difficult, hospital managements are oppressive and even when the nurse is socially and emotionally fatigued.

Relationship management

Empathy has a diversified and highly specialized modulation of human responses to constantly yield a functional relationship especially in nursing care delivery and social wellness of patients. While emotions are organized responses to immediate stimuli, human beings have demonstrated capacity to develop skills to show empathy to others. Every humanistic interaction has emotional load and social perspectives. Empathy is closely related to special motivational values of altruism and empathetic responses. Humans are well described as self-determining their actions and behaviours. Positive and negative emotionality have an impact on empathy and empathy related behaviour towards self or others. Socialization as a process requires empathy to be a founding feature and value for forming relationships amongst humans.

The indicators for a well developing profession are so distinct and specific to the profession, however, the beauty of professionalism is that all those with these qualities have a positive and a supportive attitude towards self, others and the environment where they live and work. Empathy has a lifelong endeavour; to keep improving. While providing additional training for nurses, it should be recognized that training materials, guides and mentors are not for mere transfer of knowledge, but organized to provide caring experiences and capabilities that help achieve outstanding empathy in nurse role performance [15]. Research has indicated that self-awareness and affective social competence determines sustainability of nursing empathy [16]. The processes involved in preparing nurses for professional practice are effective listening skills [17]. Effort to train those who can listen and feel another's emotions is changing. It is important to know whether the trainees have the ability to accurately identify self and another person's emotions and respond professionally and accurately to health needs that demand such responses. The road map to continual intelligence and competence development is entirely based on professional collaboration between nurses, teachers and the clinical mentors. In nursing, a continuous quality assurance, an evidence-based approach to teaching and practice, continued competency development and sustenance aimed to improved.

Self-management is highly considered as a precursor for higher professional competence and performance. Examples of self-management are enlisted in the society leadership and managerial excellence which involves rational expense, taking calculated risks, reducing the frequency of complaining and engaging into intellectual bargaining and listening to others (Morrison, 2012). Those with these competences are better placed to take the responsibility of developing their empathetic competence, improving the quality of their guesses and developing social competence [18].

Aim of the Study

The aim of the study was to analyze empathy needs and implement a rationale based intervention in promoting empathy among nurses.

Methodology

Study design

A mixed method research design was applied in a multi-phase study. Phase one involved interactive needs assessment on empathy. An explanatory sequential approach was used. This approach allows the study variables to be described in detail, their relationships established and compared statistically [19]. The process involved conducting a quantitative phase, followed by a qualitative phase. The sequence of information in numerical phase was complimented by focused group discussions. The findings of this phase informed the training intervention on empathy. The factors identified were compared with variables determined priori from secondary data sources. Phase two involved a quasi-experimental approach on implementation of a training intervention on empathy to nurses in nursing practice. This phase was used as to implement a training intervention towards an improved empathy status; to empower nurses in developing and sustaining empathy. The pre/post intervention score was used to measure the difference in knowledge attainment following training. The sample for trainees was purposively selected.

Setting of the study

The study area was Kenyatta National Hospital [KNH]. This study setting provided an opportunity to support the intended

empathy training intervention. The study sample was selecting using multistage sampling techniques. The first stage of the study involved determining the hospitals to be included in the study area. In this stage, a purposive sampling strategy was used. The purposive criterion was based on infrastructure, on the selected departments had the majority of nurses allocated due to nursing care demand. In the second stage, a stratified sample proportion per hospital was determined. Third stage involved simple random sampling without replacement was conducted to select the study sample. Purposive technique was applied to select the participants to be included in the focused group discussion.

Characteristics of participants

The population for the study was 189 participant nurses. Participants were enrolled on three policy criteria, proof of licensure by regulatory body, giving a signed consent and being an employee in KNH. The respondents' minimum age was 21 years.

Description of materials

The study involved instruments for quantitative and qualitative data collection. In the quantitative phase of needs assessment, a self-administered semi structured questionnaire was used to collect numerical data. The questionnaire had clearly stated instructions and two additional annexures: consent form and information for participants. The questionnaire was written in English and was not translated into any other language. The choice of the self-administered questionnaire was due to the fast that information collected by use of a self-administered questionnaire is easier to code, tabulate and analyze.

Treatment of the data

Quantitative data was organized and entered into a computer for descriptive and inferential statistical analysis using statistical package for social sciences [SPSS version 23]. The test statistics were conducted at 5%. Qualitative data collection involved the discussions being audio taped and short-hand notes taken. The audiotapes were transcribed and themes developed where emerging codes were systematically written down on notebooks. The emerging themes were compared to quantitative variables and repetitions were deleted. A pre-post analysis of knowledge scores was conducted using paired t test.

Ethical considerations

The approval to conduct this research was by [ERC-KNH/UON]; the reference number of the approval is P (311/05/2015). Research authorization and permit was by the National Commission for Science, Technology and Innovation (NACOSTI) whereby the authorisation refers to permit number NACOSTI/P/17/66076/19443. All the processes that took place throughout this study followed the guidelines of professional and scientific research as stipulated in the Declaration of Helsinki [20] as regards research involving human subjects.

Results

Introduction

The study recorded a 100% tool completion and return rates. All the respondents showed exemplary interest in participating in this study. The total number of the respondents in Kenyatta National Hospital was 189.

Demographic characteristics of the respondents

The demographic characteristics were analysed (Table 1). The analysis indicated that 25.4% (n = 48) were aged between 21 - 25 years, 15.3% (n = 29) were aged between 26 - 30 years, 19% (n = 36) were 31 - 35 years old, 25.9% (n = 49) aged between 36 - 40 years, 10.1% (n = 19) were between 41 - 45 years, 3.7% (n = 7) were 46 - 50 years old and 0.5%(n = 1) above 50 years old. The mean age of the respondents was 33.16 (0.89) years. The gender distribution showed that females nurses were more than males nurses (64.6%; n = 122, 35.4%; n = 67%). Results about marital status indicated that 30.2% (n = 57) were single, 12.7% (n = 24) were engaged, 55.6% n = 105) were married and 1.6% (n = 3) of the respondents were separated from partner or spouse. The relationship between gender and emotional load was statistically significant t(188) = -31.05, p = 0.00. The relationship between marital status of the respondents and their perception of empathy as an additional emotional load was statistically significant t(188) = -9.86, p = 0.00.

Reported self-concept on empathy

Respondents rated their own empathy alongside pre-determined components of self-concept (Table 2). The result showed that the relationship between empathy and public imagery was positively correlated and statistically significant: r(188) = -0.12, p = 0.02. the results showed that empathy provides justification for nursing actions; r(188) = -.19, p = 0.00. Social awareness did seem to promote self-esteem; r(188) = -0.01, p = . 0.08, however, it provided justification for nurses actions; r(188) = .-0.15, p = 0.02.

Demographic Variables	Freq	Percent	Statistic
21-25	48	25.4	
26-30	29	15.3	Mean: 33.16
Age (Yrs)			
31 - 35	36	19.0	± (0.89)
36 - 40	49	25.9	
41 - 45	19	10.1	
46 - 50	7	3.7	
> 50	1	0.5	
Gender			
Female	122	64.6	Gender and emotional load
Male	67	35.4	t(188) =-31.05, p=0.00.
Marital			
Single	57	30.2	
Status			
Engaged	24	12.7	Marital status and
Married	105	55.6	emotional load
Separated/widowed/divorced	3	1.6	t(188) =-9.86, p=0.00.
Religion			
Christian	189	100	
Emotional			
Minimal	7	3.7	Age and emotional load
Load			
Below average	8	4.2	t(188) =-2.11, p=0.36.
Average	112	59.3	
Above average	62	32.8	

Table 1: Demographic characteristics.

Qualities of empathy

Thematic analysis revealed a set of qualities that the respondents unanimously accepted that were associated with empathy (Table 3). The key words identified qualities while the aggregation of the keywords formed themes.

The themes revealed qualities of empathy as gentleness, understanding needs for empathetic concern, kindness and social awareness to the needs of those entrusted unto nurses' care.

Rationale for developing and sustaining empathy among nurses

The self-concept was high but the awareness of key principles of empathy was lower than expected. Having based the study on theories of self-determinism and emotional intelligence, it was necessary to allow the respondents to determine their preferred intervention based on how they feel about developing and sustaining empathy in their practice. Therefore, their autonomy was empowered such that rather than make blank recommendations, we considered implementing an intervention based on the respondents' recommendation. This conforms with a personified plan of action and immediate action towards empathy as an essential competence.

Rationale for developing empathy among the respondents

Rationale for developing empathy in nursing were analysed (Figure 1). Results showed timely planning for patient care (74%; n = 140), improve communication between nurses and patients (92%; n = 174), attain professional pride (78%; n = 148), improved patient outcomes (96%; n = 182) and acquire skills in relationship management (86%; n = 163).

Self-concept on empathy	Statistic label	Improved public image	Sense of social awareness	Promotion of self-esteem	Rationale
Improved public image for nurses	r	1			
	p				
Sense of social awareness	r	-.022	1		
	p	.660			
Promotion of self-esteem	r	-.119*	-.010	1	
	p	.019	.843		
Justification for nursing actions	r	-.187**	-.119*	-.081	1
	p	.000	.019	.112	
*p < .05. **p < 0.01; Pearson Correlation = r; df = N-2					

Table 2: Relationship between components of self-concept and empathy.

Category	Themes	Keywords
Qualities of Empathy	Gentleness	Reassuring communications, Gentle during nursing interventions, pre-medication, timely analgesia
	Under-standing	Active listening, accurate social imagination, positive gestures
	Kindness	Calm caring, ready, available, spirited and a forgiving
	Social awareness	Encourages unity, gender responsive, friendly, aware of healthcare needs, standards, and interventions

Table 3: Qualities of empathy.

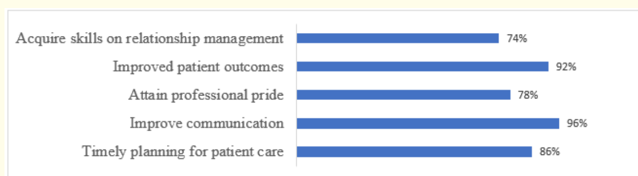

Figure 1: Rationale for developing empathy among the respondents.

Rationale for sustaining empathy among the respondents

Respondents indicated that the rationale for sustaining empathy in nursing were that the patients would have better health outcomes (82%; n = 155), nurses could have better team spirit towards nursing duties (8%; n = 169), empathy promotes gentleness towards strangers and colleagues (92%; n = 173), improve nurse-nurse/patient relationships (94%; n = 177) and improve therapeutic environments (100%; n = 189). The rationales for sustaining empathy are presented in figure 2.

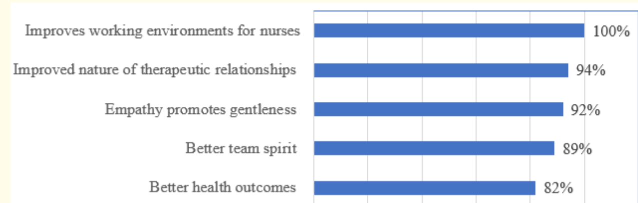

Figure 2: Rationale for sustaining empathy among the respondents.

Observable empathy-related characteristics

The awareness of observable characteristics related to empathy (Table 4) was analysed. The improvement on individual variables was substantive as indicated by the mean scores. The knowledge score means [baseline means (M_b) and end-line means (M_e)] were statistically compared using a paired samples t-test. Professional conduct score improved from low to high (M_b = 0.38, M_e = 1.00), t(188) = -25.02, p = 0.00). The knowledge on effective communication improved significantly (M_b = 0.42, M_e = 1.00), t(188) = -23.07, p = 0.00) after training. Knowledge on showing kindness to colleagues and clients improved from very low to high (M_b = 0.09, M_e = 0.96), t(188), = -47.69, p = 0.00). Similarly, knowledge on gender responsiveness had a significant improvement from very low to very high (M_b = 0.16, M_e = 0.90), t(188) = -30.98, p = 0.00). Knowledge about having a warm smile showed statistically significant improvement from very low during baseline to high (M_b = 0.10, M_e = 0.88), t(188) = -33.98, p = 0.00) after training. Knowledge on honesty improved substantively as indicated by the significant change in mean scores (M_b = 0.06, M_e = 0.64), t(188), = -20.96, p = 0.00).

Characteristic	M_b	M_e	t	p
Professional conduct	0.38	1.00	-25.02	.00
Effective communication	0.42	1.00	-23.07	.00
Being kind to others	0.09	0.96	-47.68	.00
Gender responsiveness	0.16	0.90	-30.98	.00
Having a warm smile	0.10	0.88	-33.98	.00
Honest to peers and strangers	0.06	0.64	-20.95	.00

Table 4: Observable characteristics related to empathy.

Factors influencing development of empathy among nurses

Factors and their influence size on empathy

The influence of individual variables (factors) on empathy were analysed (Table 5). The influence and sources of influences were as follows: patients' health benefits (direct; 0.30, indirect = 0.34 and total effect 0.72), nurses' professional benefits (direct; 0.36, indirect = 0.34 and total effect 0.70) professional mentorship (direct; 0.32, indirect = 0.21 and total effect 0.53), personal values (direct; 0.38, indirect = 0.24 and total effect 0.62) extrinsic motivation to empathise (direct; 0.41, indirect = 0.17 and total effect 0.58), opportunities to show empathy (direct; 0.41, indirect = 0.39 and total effect 0.80), extrinsic motivation (direct; 0.30, indirect = 0.22 and total effect 0.52), multiple intelligences (direct; 0.22, indirect = 0.29 and total effect 0.51) social awareness (direct; 0.36, indirect = 0.34 and total effect 0.70), relatedness (direct; 0.41, indirect = 0.39 and total effect 0.80).

Factor	Influence on empathy			Source of influence
	Direct	Indirect	Total	
Patients' outcomes	0.38	0.34	0.72	Self/Nurse
Nurses' outcomes	0.36	0.34	0.70	Self/Patient
Professional Mentorship	0.32	0.21	0.53	Peers
Personal values	0.38	0.24	0.62	Self/Other
Extrinsic motivation	0.41	0.17	0.58	Job/Other
Opportunities to empathise	0.41	0.39	0.80	Self/Other
Intrinsic motivation	0.30	0.22	0.52	Nurse/Other
Multiple intelligences	0.22	0.29	0.51	Nurse
Social awareness	0.36	0.34	0.70	Patient/ Nurse
Relatedness	0.41	0.39	0.80	Nurse/Other

Table 5: Factors and their influence on empathy.

Factors that favour development of empathy among nurses

The knowledge scores about factors that favoured development of empathy was analysed (Table 6). The baseline means (M_b) and end-line means (M_e) were statistically compared using a paired samples t-test. The knowledge regarding factors that favoured development of empathy showed a significant improvement following training. Knowledge on mentorship programs and activities improved from good to excellent (M_b = 0.64, M_e = 0.98), t(188) = -13.32, p = 0.00) following training. The knowledge on willingness to show empathy improved significantly from below average to excellent (M_b = 0.46; M_e = 0.90), t(188) = -15.43, p = 0.00) after training. Knowledge of empathy as a social norm achieved a significantly significant improvement from low to high; (M_b = 0.35, M_e = 0.86), t(188) = -17.36, p = 0.00). Showing friendly ways scores improved from low to very high (M_b = .048, M_e = 0.85), t(188), = -11.36, p = 0.00). Knowledge about positive attitudes towards empathy showed statistically significant improvement from baseline (M_b = 0.56) to end-line (M_e = 0.78), t(188) = -6.54, p = 0.00).

Factor	M_b	M_e	t	p
Mentorship role model	0.64	0.98	-13.315	.00
Willingness to show empathy	0.46	0.90	-15.426	.00
Empathy as a social norm	0.35	0.86	-17.359	.00
Showing friendliness	0.48	0.85	-11.361	.00
Positive attitudes towards empathy	0.56	0.78	-6.544	.00

Table 6: Factors that favour development of empathy among nurses.

Factors that hinder development of empathy among nurses

The knowledge on the factors that hinder development of empathy was analysed (Table 7). Knowledge about high workload and exhaustion score improved from good (M_b = 0.70) to excellent (M_e = 1.0), with the improvement showing a statistically significant relationship t(188) = -12.94, p = 0.00). The knowledge on exploitation of individuals by colleagues or dependants for showing empathy improved significantly (M_b = 0.48, M_e = 0.84) t(188) = 10.94, p = 0.00) after training. Knowledge on prejudice of the public towards nursing improved from low to above average (M_b = 0.42, M_e = 0.70) and the improvement was statistically significant t(188) = -7.83, p = 0.00). Knowledge about harsh working environment improved from average to excellent (M_b = 0.58, M_e = 0.98), t(188) = -14.76, p = 0.00) after training. Knowledge on vulnerability for social injury had a substantive positive change from very low (M_b = 0.14) to high (M_e = 0.82) the indicative scores were statistically significant t(188) = -24.20, p < 0.05). Knowledge attainment on lack of interest in developing empathy was statistically significant (M_b = 0.57 M_e = 0.96), t(188) = 14.13, p = 0.00)

Factor	M_b	M_e	t	p
High workload and exhaustion	0.70	1.00	-12.94	.00
Exploitation for showing empathy	0.48	0.84	-10.94	.00
Prejudice towards nurses	0.42	0.70	-7.83	.00
Harsh working environment	0.58	0.98	-14.76	.00
Fear for vulnerability for injury	0.14	0.82	-24.20	.00
Lack of interest to develop empathy	0.57	0.96	-14.13	.00

Table 7: Factors that hinder development of empathy among nurses.

Factors influencing sustainability of empathy among nurses

Factors that favour sustainability of empathy among nurses

The scores on awareness about factors that favour sustainability of empathy were analysed (Table 8). Analysis showed a statistically significant increase in the knowledge scores. Compassion among nurse colleagues increased from high to excellent (M_b = 0.88, M_e = 1.00), t(188) = -7.22, p = <0.05. Knowledge of maintaining a positive attitude on empathy improved from above average to excellent (M_b = 0.64, M_b = 1.00). The change was statistically significant t(188), = -7.22, p = 0.00. Scores indicating change of knowledge on contribution of continued professional development in sustaining empathy had a small increase from high (M_b = 0.70) to very high (M_e = 0.88). The change was actually statistically significant (t(188) = 6.30, p = <0.05. indicative scores for the knowledge about recognizing and rewarding empathy champions in nursing practice

had a minimal change from above average to good (M_b = 0.64, M_e = 0.72), but the change was statistically significant t(188) = 2.41, p = 0.02). Knowledge change on receiving empathy from peers showed statistically significant increase (M_b = 0.42 M_e = 0.64) t(188) = 5.50, p = <0.05).

Factor	M_b	M_e	t	p
Compassion among nurse colleagues	0.88	1.00	-7.22	.00
Maintaining positive attitude towards empathy	0.64	0.92	-9.70	.00
Continued professional development	0.70	0.88	-6.30	.00
Recognise and reward empathy champions	0.64	0.72	-2.41	.02
Peer oriented empathy systems	0.42	0.64	-5.50	.00

Table 8: Factors that favour sustainability of empathy among nurses.

Factors that hinder sustainability of empathy among nurses

The scores on awareness about factors that hinder sustainability of empathy were analysed (Table 9). Burnout syndrome was associated to mental and social fatigue among nurses as a factor that hindered sustainability of empathy. Respondents' knowledge scores on burn-out as a negatively influencing factor improved from below average (M_b = 0.44) to high (M_e = 0.84) and the improvement was statistically significant t(188) = 7.22, p = <0.05. The knowledge on lack of advocates for empathy or empathy champions improved from above average (M_b = 0.60) during baseline to moderately high (M_e = 0.72), t(188) = -33.54, p = <0.05 following training. Scores attained from knowledge on demotivation of individual respondents to develop empathy due to previous negative experiences from empathy improved from very low (M_b = 0.18) to above average (M_e = 0.60) and significantly significant t(188) = -12.79, p = 0.00. Scores on knowledge about negative attitude towards empathy received least improvement. Score recorded an extremely low baseline knowledge score (M_b = 0.15) which improved to below average (M_e = 0.48). However, the change was significantly significant t(188) = 10.59, p = 0.00.

Factor	M_b	M_e	t	p
Burn-out or mental and physical fatigue	0.44	0.84	-12.06	0.00
Lack of advocates for empathy	0.60	0.72	-3.54	0.00
Demotivation from negative experiences	0.18	0.60	-12.79	0.00
Negative attitudes towards empathy as an emotional burden	0.15	0.48	-10.59	0.00

Table 9: Factors that hindering sustainability of empathy.

Discussion

This study showed majority of the respondents were under the age of 40 years, the mean age was 33.16 years. Contrary to these result regarding age in AACN report that majority of nurses were 50 years or older [21]. Majority of the respondents had relatively high levels of self-concept. Research has found out that where caring for individuals or groups forms the core competence and reference, such high self-concept is expected from the professionals [22]. The gender results showed a ratio of 3 females to 1 male in nursing practice. This result is supported by Krieg [23] who revealed that men have a challenge in choosing nursing as a career because it involves values that are considered feminine. It is imperative that male nurses who decide to join nursing have a true conviction to the professional values required to succeed in nursing practice. This study presents a relatively young nurse workforce with individuals who have a high self-concept and a true conviction to the professional values. These findings indicate that this group of nurses has intrinsic motivation to pursue, show and offer empathy to colleagues and to their patients.

Qualities of empathy identified were gentleness, communication, kindness and sensitivity. These qualities were consistent to those earlier described in empathy factor analysis results; social self-confidence (gentleness and kindness), even temperedness, sensitivity and non-conformity. The study realized that the training curriculum for nurses did not explicitly identify empathy as a trainable competence. The respondents did not show consistency in demonstrating observable characteristics that are because of development of empathy due to challenges of workload and vulnerability. These findings are consistent with (Theodosius, 2008) that identifies empathy as a continuous variable that have qualities of being calm, gentle, understanding, availability and are ready to engage in an informative conversation with the patients. This observation is a frequent nonconforming gesture in developing empathy. Nonconforming is specifically responsible for accuracy in person's perception [24].

Rationalizing interventions is a good practice. It is not accurate to intervene for the sake of it. This study presented to the respondents an intention to engage them in an empathy empowerment process. Study results showed that the participants were aware of the rationale for an empowerment program in developing empathy through training. Majority envisioned that empathy would improve health outcomes for patients and promote professional success for nurses. These findings are consistent with study conducted to review rationales for effective interventions for empathy [25] which indicates that emotional self-management, interpersonal skills, so-

cial problem-solving and allied training approaches show mainly positive effects with a reasonably high degree of reliability. This result indicates that when an interventional program is intended, it should meet the needs of the target population. This study was supported by the rationale given by the nurses following a needs assessment. The training for developing empathy was in accordance to the professional commitment to improve empathy awareness and promote its ideology among nurses.

Empathy is a life skill with observable and non-observable characteristics. The more relevant of the characterizations are those observed. Professional conduct of nurses in their professional duties and giving clear communication to patients regarding their care was the highest-ranking observable characterizations that related to empathy. These findings are consistent to a study conducted among nursing students and found out that empathy is an observable and teachable skill that nurses possess [26]. It is imperative that empathy is sustainable when it is offered.

Awareness of conditions that favor development of empathy was initially below average. On a later re-assessment following training, the gain was substantially high. Available role models and willingness of the respondent to develop empathy. This finding was consistent to Ross and Hillborn [27] who found out that delivery of interventions involving role-play was the most widely used method to develop empathy. Further research showed that the tendency to automatically mimic and synchronize one's own emotional behavior with that of others, also known as the phenomenon of emotion contagion, facilitate the smoothness of social interaction and may even foster empathy. These results indicate that professional commitment to the avowal and promise of continuity of developing empathy as a personal ethical responsibility is a reality in nursing.

Conditions that favor or hinder development of empathy have been consistent across this study. Development of empathy was hindered by high workload assigned to the nurses; mentors and mentees, highly experienced and novices, males and females in nursing practice in Kenya. This result is consistent to recent findings of Hamilton (2008) who found out that experiential learning needs to revolve around the day-to-day work of the nurse and reflect the high demands that are placed on nurses. Although the best practice is to inculcate empathy within the schedules of nurses, the high demand on the nurse makes it almost humanly impossible to have consistency in empathy. Other factors that hindered development of empathy were lack of interest from participants due to possible exploitation and a sense of social vulnerability. Participants described that they had witnessed some incidences where those nurses that showed a lot of concern for patients were allocated more roles and received several requests from colleagues to cover for them. This was perceived as exploitative behavior that discouraged others from being comfortable in showing empathy.

Conclusion

Social diversity and individual autonomy do play a role in how empathy is developed. Giving rationale to interventions makes them consistent with the identified gap. However, realization of benefits of empathy and rationale for its development justifies pursuance of such a seemingly difficult task. Interventions that intended to change human behavior are complex undertakings. The intervention implemented in training empathy has shown positive change in behaviour. Empowering nurses on empathy faces challenges of work related pressure due to nursing staff shortage and other on-job training challenges. Including empathy training in the nursing curriculum would not be such a straightforward achievement either. Training entire population in Kenyatta national hospital on developing empathy is a very challenging endeavor. We wanted to start with little achievement and grow it exponentially. In the mix of the actual and potential challenges in empowering nurse on empathy, we need empathy champions who will push forth the agenda of empathy training in Kenya.

Ethical Approval and Consent to Participate in the Study

Approval to conduct the processes in the study was granted by the ethics and research committee of Kenyatta National Hospital and the University of Nairobi [ERC-KNH/UON] - approval number: P (311/05/2015). Both quantitative and qualitative phases were approved but at different time frames. Respective ethical clearance was obtained from the ethical committees of the participant hospitals. Informed consent was obtained from the participants before data collection exercise commenced. All responses remained anonymous and in confidence. No part of the research tools, raw data or analysis could bear identification of the participants. All the processes in this study followed the guidelines of professional and scientific research as stipulated in the Declaration of Helsinki [33] about research involving human subjects.

Competing Interests

Authors hereby declare that there exist no conflicts or competition of interests whatsoever.

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